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VOLUME I. FOR 1883.

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ORIGINAL LECTURES.

CLINICAL LECTURES
ON EMPYEMA IN CHILDREN AND ITS TREATMENT.

By JAMES F. GOODHART, M.D., F.R.C.P.,

Assistant-Physician to Guy's Hospital, and Physician to the Evelina Hospital for Children.

LECTURE I.

THE case selected for lecture is a case of chest disease, and probably one of localised empyema, in a child. It derives two of its points of interest from the fact that the empyema is localised, and that it occurs in a child.

The history of the case is as follows:—

The boy is four years old. Two years ago he had a bad cough and expectoration, from which, however, he got quite well.

The family history is good, and there is no history of previous fever or illness of any kind in the house.

Five weeks before his admission he was suddenly seized with severe pain in the left side and a cough. He took to his bed after two days, and seemed very ill, and he has rapidly got thinner.

He came to the Evelina Hospital, and, finding considerable dulness all over the left side, and that the child was pale and very thin, he was admitted into Guy's Hospital as a probable case of empyema.

Since he has been in the hospital Mr. Rolston has been carefully watching him, and from his report I gather these points, which seem to me to be important.

At the first examination, on May 1, no dulness or very little was detected on the left side; a little in the left axilla; but there was a good deal of coarse crepitation over the hinder part of both lungs, and there was a localised tender swelling below the left nipple in the ninth intercostal space.

May 3.—It is noted that there is now considerable dulness all over the left side, with crepitation as before. The swelling is still present and more red. It fluctuates on pressure; but there is no impulse in it on coughing. The temperature is always normal; pulse 120.

The subsequent conditions may be summed up thus:—His chest has presented hardly any dulness. The last time I examined him it was tympanitically resonant all over—almost musically so. His temperature has remained normal. He has had a little diarrhœa, and the fluctuating swelling on the wall of the chest has alternately receded and become prominent. The skin, however, is becoming more red, and it will no doubt point shortly.

But before going specially to the case in question, I think it will be well to say something concerning the general pathology of fluids in the chest, for there are one or two points in treatment, the right understanding of which is dependent upon these preliminary details.

An empyema is, as you know, where the pleural cavity is occupied by pus. If the whole serous membrane is affected, then it is an empyema simply; if part of the membrane only be affected, then it is called a localised empyema. But there may be other fluids in the pleura: blood sometimes—chiefly when there is some new growth in the neighbourhood; and serum often. And this serum may be either non-inflammatory, part of a general dropsy—when the disease is called hydrothorax; or inflammatory, as the result of inflammation of the serous membrane. It is the last-named condition to which I would direct attention. Inflammation of the pleura is a very common affection, and therefore you must all have had opportunities of noticing that sometimes it is shown by a mere film of lymph upon the surface of the lung; sometimes by thick coagula of yellow lymph; sometimes by material of a pasty consistence; sometimes by clear serum, with a little lymph; sometimes by turbid fluids; sometimes by milky fluids; sometimes by thick green pus,—so that, to speak correctly, at one end of the scale comes simple inflammation, at the other purulent inflammation, and between the two there are all grades of intensity. What, then, is the difference between a simple or serous inflammation and were quite distinct. Hunter calls them distinct species of inflammation. He says the suppurative species cannot be considered simply an increase of the action of the adhesive, as its effects are totally different; and this view has been upheld and taught down to quite recent times, in the doctrine that pus is an effete product incapable of absorption, and that it must be evacuated for a cure. Now, however, the more general holding is this: that all inflammations are characterised by the multiplication of the cellular elements of the inflamed part; and that if the cell formation is in excess, so the inflammatory product tends towards pus. And why? Because all cells which grow under conditions of forcing are delicate in their constitutions and die early. They are also liable to be produced in larger numbers than can be supplied with proper nourishment, and this of necessity leads to their decay; and I think that, for practical purposes, it would be better to consider that the essential difference between the two forms of inflammation is a difference in degree—in the one there is a development of corpuscles too active for the productive power of the tissues which produce and maintain them; in the other the corpuscles are not in excess of the producing power of the tissue. Now, it is obvious that the power of production and maintenance of cells may be great or small, according to circumstances. If great, then there will be a quantity of corpuscles in the effusion of a healthy form; and though the fluid may look something like pus it will still be lymph, and capable of undergoing the natural processes of healthy lymph comprised in the term "organisation." At other times, though few in number, yet the conditions of their existence are such that the corpuscles are much removed from a normal standard, in which case a serous-looking fluid may be quite incapable of resolution.

The conclusion from this is, that we must use the term "pus," at any rate in its relations with serous membranes, in a clinical sense rather than in a pathological, and remember that fluids which look purulent are not necessarily unorganisable; and conversely, that fluids which are more serous than corpuscular are not necessarily, on that account, of a harmless nature. The point of this will appear presently; but surely here is, in part, the explanation of the fact that empyemas are so very common in children—so common, indeed, that they form the majority of cases of pleurisy—and may occur in infants but a few weeks old. And perhaps this will be the best place to mention that fluid effusions which are serous at their onset are supposed by many to be liable to become purulent if treated improperly, that is to say, if the fluid is not promptly removed by the aspirator; and from this opinion comes one argument in favour of early tapping in pleuritic effusions. I can quite conceive that this may be so, but as a matter of practice there is but little evidence in favour of it; and, given a serous effusion, unless some exceptional conditions exist, I seldom consider it necessary to remove the fluid. Serum is very generally rapidly absorbed by natural processes, and these I prefer to the methods of art, however easy they may appear to be. If the chest is excessively full, and the child's life risked in this manner, perhaps if the pyrexia is excessive, as occasionally happens with simple serous effusion, it will be necessary to aspirate, but hardly in other conditions.

The causes of empyema are numerous. From the relation which the pleura bears to the lung beneath it and to the wall of the chest superficial to it, one would suppose that any affection of the adjacent structures would be liable to cause inflammation, and therefore sometimes a purulent form of inflammation of the pleura; and so it is. In many cases the disease is secondary to either tubercle of the lung, or pneumonia, or some dilated condition of a bronchial tube, or some suppurative inflammation extending through to the pleura either from the abdomen or the walls of the thorax—the latter not commonly. In adults it is very often an indication of something deeper; but in children it is not so. It sometimes, as in adults, arises from tubercle in the lung beneath; more often from pneumonia; but more often still it is a primary affection. It cannot be said certainly why this is so, but it is probable that the popular dictum that it is due to cold is not altogether incorrect. There can be no doubt that all the serous cavities—lymphatic sacs, as they are now known to be—are actively concerned in the elaboration of the various juices of the body. This being so, they will be naturally sensitive to changes in the body, inasmuch as their work will in some measure be correlated to that

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a purulent one? The old notion was that the two processes of other viscera. Let the skin or the gastro-intestinal tract be put out of order, or cease to act by the exposure of the surface to prolonged cold (as is often the case in childhood), and it is only rational to suppose that other parts must do the work necessary. Let this work be thrown upon a serous membrane, which is at any time a membrane peculiarly prone to run to seed as it were, and at a time of life when this is more particularly the case, and we can then understand how empyema should be one of the commonest diseases of childhood; and so it is. Perhaps from this it happens that it is not uncommon after the exanthemata, and particularly after scarlatina. And though I have said that it is often primary, still you must bear in mind that there is an intimate relation in childhood between the lungs and gastro-intestinal mucous membrane—that the stomach-cough of mothers is a very real thing, and frequent too; and one can thus understand that a very temporary pulmonary congestion might start changes in the lymphatics of the lung and pleura which might easily eventuate in empyema, while the lung would show no evidence of disease upon subsequent examination or inspection. In the case now before us we have been unable to assign any cause. Two years ago the child is said to have had a bad cough and profuse expectoration; but he got quite well of this, and remained so till five weeks ago, when he was taken ill with this attack.

Symptoms.—This boy was pale and very thin, and his mother stated that he had been quite well up to a certain date, when he suddenly failed, and since then he had had pain in the left side. A definite onset such as this is by no means always noticed. Then upon examination I found feeble movement and some dulness all over that side; and when he was admitted a small fluctuating swelling was found below the left nipple. The physical signs were not very distinctive, because the small fluctuating swelling need not have been connected with the pleural cavity—it might have been a small superficial abscess. But I am glad the case is not more pronounced, because it points this moral—that empyema in children is often distinguished by the absence of special symptoms; and unless you are alive to this fact it may be mistaken for something else. However, I would note that this child is emaciated; emaciation is often rapid and extreme in empyema in children. I once saw a child a few months old, wasted to the last degree, and with evidence of a moderate quantity of fluid in the chest. I did not then know so much about the subject as I do now, and concluded that there must be some visceral disease as well as the pleurisy, and therefore did nothing. The child died the next day, and the post-mortem examination showed that the left chest was full of pus, and there was no other disease whatever. I have observed the same thing several times since then; and it is a thing by no means surprising, that the presence of pus in the pleura should be detrimental to nutrition, when we remember what has already been alluded to—the lymphatic nature of the sac within which it is contained. The extreme pallor noticed in some cases, often associated with slight puffiness of the face so as to suggest the existence of Bright's disease, is a symptom of similar nature. Going into the emaciation, there is often an entire absence of any respiratory distress. You may some day find, as I have done, the whole of one side of the chest full of fluid, and the heart displaced, and yet nothing in the manner of breathing to indicate any chest disease whatever; and, with so little distress, one might be perhaps surprised to find that such a case had died, as occasionally happens, suddenly and unexpectedly. But freedom from distress is easy of explanation. A like phenomenon is present in many cases of phthisis—the body wastes as the lung becomes diseased, *pari passu*; and the lessening lung appears to be always just sufficient for the lessening work required of it. So here—the emaciation is liable to mask the extent of the mischief, or even to lead to a wrong diagnosis of phthisis.

Next, it is to be noticed that the temperature has been constantly normal; and this has excited the doubts of some of you as to the correctness of the diagnosis. But pus in serous cavities behaves erratically. The temperature-chart may present great fluctuations between the morning and evening observations, like the chart of suppuration in other parts; but it may do nothing of the kind; and where there is much emaciation and the disease is chronic, there may be no elevation of temperature at all. Still, you must remember that the temperature needs careful watching. Do not say, for instance, that there is no fever because the morning temperature alone is low. The temperature-chart of suppuration is one with a considerable evening elevation, and in this resembles the fever of tuberculosis and of typhoid fever. I am further inclined to think that if children were carefully watched from the onset of the illness, fever would in most cases be found in the first few days; but this must depend also in a measure upon the acuteness of the attack. Some empyemas appear to mature very gradually. The child is not noticed to be ill till his chest is full of fluid, and the pallor and emaciation are the symptoms first noticed. Others, again, are exceedingly acute, and in some of these the suppurative fever is registered very delicately.

In a case under my care some years ago, the chest filled with fluid in a few days, and displaced the heart into the upper part of the right chest, and the temperature ran up to 104°. The chest was tapped, and two pints of fluid withdrawn, and the same evening the temperature fell to normal. But the pus accumulated again, and as it did so the temperature rose, reaching 103°. The chest was then tapped, and arrangements made for keeping the cavity drained. The temperature fell again to normal, and remained so for six weeks, when the drainage-tube was withdrawn. The sinus closed up quickly, and pus began a third time to accumulate, and the temperature again rose and remained high for some time, during which an opening formed spontaneously in the old scar, and the pus evacuated itself. It then healed, and the child has ever since remained in perfect health. Similar cases have occurred to me since.

Then, again, the temperature may make occasional sudden jumps at night. An interesting case of this kind was some time ago under Dr. Wilks. A child was admitted for empyema on the left side, and tapped, and while the temperature had been many times normal, it occasionally ran up to 101° or 102°. Such an occurrence is very suggestive—in the absence of any evidence of disease of the lung—of the continuance of some pus in the chest.

Watch, then, the temperature. If there be a high evening elevation it is one point in favour of the fluid in the pleura being purulent; but it is not to be concluded because there is no such elevation that there is no pus; and, on the other hand, do not conclude because it is high that there is pus, for occasionally the temperature is very high with simple serous effusion of an inflammatory form.

Diarrhœa is also made mention of in this case, though it has not been of any severity. It is a not uncommon symptom of empyema in children, and is probably one of the most reliable when taken in conjunction with others.

Of physical signs there are few distinctive in this case. The dulness has much diminished since the boy has been in hospital, and has been replaced more or less by coarse râles all over the lung. There is no displacement of the heart, and but little impairment of movement of the chest; so that here again I must talk of empyema in children in general, and I would start with this—pay attention to slight deviations from normal conditions. The presence of fluid in a child's chest is often established by the concurrence of several slight indications. For instance, upon a careful inspection of the chest, one side moves a little less well than the other, it is a little flatter or appears generally contracted; perhaps the child bends a little to one side, and has been noticed to walk one-sidedly, and to be wearing one boot down more than the other. The contraction of the chest may sometimes be verified by measurement, and the altered shape may be shown by the cyrtometer. In books, on the other hand, you have the reverse of such a picture—you are told to look for *bulging* of the ribs and intercostal spaces. You should do both; but it is more common, I think, to find the affected side the smaller, or distorted in some way, than to find it obviously overdistended.

Next go to percussion; and now, of course, if the chest is crammed with fluid there must be complete dulness all over the affected side, and the case will present no difficulties. But these are not the common cases, and I think you will make fewer mistakes if, on the contrary, you expect to find resonance at the affected apex, not dulness. But on comparison with the other side it is not the normal deep resonance, but a high-pitched tympanitic resonance. Whenever this note is present in children our first thought should be—Is there any fluid in the base of the chest? and then by careful

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percussion at the base try to confirm or confute this. Pleurisy at the base is the most common cause of diminished or tympanitic resonance at the apex in children. Occasionally it is due to pneumonia or to some consolidation at the apex itself. But should there be any dulness at the base you should require stronger evidence than usual to convince you that there is really any disease at the apex.

The tympanitic note at the apex is a physical sign which has attracted much attention, and the mode of its production has been often discussed; you will hear it spoken of sometimes as the *bruit Skodique*, or Skoda's tympanitic resonance. I cannot now go into the question of its causation; it will be enough to say that it is usually attributed to, and therefore means to you as clinical inquirers, condensation of the apex of the lung. It is obvious that condensation—not total consolidation, mind—may be produced in various ways, and the meaning of tympanitic resonance by itself would have to be decided upon the balance of probabilities.

I must further say, with regard to percussion, that, as a rule, it is necessary to percuss gently. The chest-walls are yielding, and it is, I believe, easy in childhood to displace fluid, and get upon a healthy lung beneath, and so elicit resonance where there should be dulness. Also remember to keep the fingers flat.

You next betake yourselves to auscultate the chest. Now, here again, I cannot too strongly impress upon you that you must be careful in dealing with the chest of a child in applying what is taught in text-books. The auscultatory phenomena of fluid in the chest are—absence of the respiratory murmur; absence of the vocal resonance; absence of tactile vibration; and, if the compressed lung be near the surface, high-pitched distant tubular breathing will be heard. Of course, if all these signs are present, the case presents no difficulty; but such, I say, are exceptional cases in childhood. I will illustrate what is usually heard by a reference to the two most common mistakes which I find exist amongst students. I am generally told that there is bronchial breathing upon the *healthy* side, or else at the apex of the diseased side. It is quite common in these cases to hear all over the affected side a soft vesicular murmur of good quality, but *deficient* in quantity. If you had only the one side to judge from, the difficulty would be extreme to say whether disease were there or not, but on auscultating the unaffected side you are at once struck with the exaggeration of the inspiratory murmur—the so-called puerile breathing; but since "puerile" is applied to adult lungs as compared with child's lungs, when comparing the normal child-respiration with the abnormal the latter must be called "exaggerated puerile." The inspiratory murmur, mind, is very hoarse and harsh, and the expiratory is also rather longer than it should be; but if you gauge the length of inspiration and expiration, the latter is not out of proper proportionate length.

Again, on the diseased side, I am told, there is bronchial breathing at the apex, and the case is called phthisis. Here the observation is correct; the inference from it is wrong. There is often bronchial or tubular breathing beneath the clavicle in pleuritic effusion, and this is only what might be expected. The lung is more or less compressed by fluid, and therefore prevented from expanding; hence the more or less bronchial, nay, even sometimes loudly tubular respiration, just as there is the tympanitic resonance. Again, you have to judge not by the single sign, but by several combined. The tympanitic resonance has already put you on guard, and you have then further, by careful percussion, made out a comparative dulness on the same side at the base rather than the apex. You now can add to these another sign—bronchial respiration on the same side, and a soft distant vesicular murmur, with a diminution of the voice-sounds, not, as is often told me, bronchophony, on the other side. I take no note of tactile vibration, as it is very difficult to make out anything positive about this in many children, the voice giving but feeble vibrations on either side. You may often get no more pronounced physical signs than these, and with them you must be content and often take action. I have often heard good though deficient vesicular murmur all over the side which was full of fluid; and unless you remember this you will some day fail to draw off the fluid when such a course of action is necessary, and possibly with very unhappy results.

But if you have an opportunity of examining your patient day by day you will find another phenomenon that will puzzle you, and that is the variability of the signs: you will make an examination one day, and all will be dull, all bronchial breathing; another day there is much less dulness, and what you consider good vesicular murmur; one day the chest looks bulging, another retracted;—and these variations are apt to quickly follow each other. This is a feature of chest disease in children; we have observed it to some extent in this case. The explanation is perhaps not easy to give. I suppose it to be due to the difference of inspiratory power at various times.

With regard to the bronchial breathing there is this point I would urge upon you. Notice if there is any crackling or bubbling of mucous râles in the chest, particularly at the apex. I have noticed that in the bronchial breathing of condensed lung from fluid in the chest there is often for long an absence of crepitation; and such persistent absence of crepitation is a point, in children, in favour of the non-existence of phthisis, if there are other things which point to pleuritic effusion.

Now, I may perhaps be accused, when lecturing upon Empyema, of having wandered into Pleuritic Effusion in general. I have done so, and for this reason: that there are no certain distinctive features between serous and purulent pleuritic effusion. The signs of empyema are those of fluid in the chest *plus* certain additional signs, of which pallor and emaciation are the most constant, but fever, sweating, and diarrhœa are also frequent; bulging of the ribs and œdema of the thoracic wall have also been noticed, but they are not sufficiently constant to be of much value, and some have thought that a conclusion might be reached by observation of the mode of transmission of voice-sounds. Pus and serum being fluids of different densities, would conduct vibrations with different intensities. For myself I do not think that this is of much value; and in many cases, after giving your most careful consideration to the case, you may be in doubt, and the doubt you must settle by the exploring syringe. For this purpose you can use such a thing as a simple subcutaneous syringe with a steel needle-tube of greater length and larger bore than those in use for hypodermic injection. Some prefer to use at once a small aspirator, which has this advantage, that if pus is present a certain quantity can be withdrawn at once without a second operation. But in any case never be afraid of exploring. The prick of the needle never does any harm that I know of, and it has often done incalculable good by demonstrating the existence of what had been but doubtful before, viz., pus.

MR. SEYMOUR HADEN ON ALLEGED AMERICAN OVERWORK.—At the dinner given to him by the New York Lotos Club, Mr. Haden observed—"Strange to say, that very reputation for energy which has been found fault with by Mr. Herbert Spencer has been a great attraction to me in the visit which I am now paying you. I only wish that we had a great deal more of it on our side of the Atlantic. I disagree *in toto* with Mr. Spencer. It has been my business and my pleasure to see the effects of work and to judge of it, and I can honestly say that I never saw, in all my professional career, the least injury to life or health result from what Mr. Spencer calls overwork. Only the other day, I was met in consultation by one of the most eminent physicians in London—Sir William Gull. The case before us was that of a man said to be suffering from overwork. I asked Sir William Gull if he had ever met with a case of mischief or injury arising from this cause, and he said he had not. So for once, at least, the doctors agreed."—*Boston Med. Journal*, November 23.

WEIGHTS OF AMERICANS.—At the Exposition at Cincinnati, during the past fall, a record of the visitors' weights was kept. Taking the mixed crowd, the men averaged 154·92 lbs., and the women 130·87 lbs. This beats the Boston weights later in 1864. the men weighing there 141·5 lbs., and the women 124·5 lbs. The Kentuckians visiting Cincinnati averaged 158·43 lbs., and the Kentuckiennes 133·76 lbs.—a higher average than from any other State. Government statistics show the inhabitants of Kentucky and Tennessee to be the tallest people in the world. The climate and food in the two States are similar. Blood from the British Isles and abundant native beef and bread are the sources of this superior size, as well as of the extraordinary beauty of the women of these central States.—*Boston Med. Journal* (from *Louisville Med. News*), November 30).

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ORIGINAL COMMUNICATIONS.

ON CERTAIN DISEASES ALLIED TO ERYSIPELAS.(a)

By JONATHAN HUTCHINSON, F.R.S.,
Senior Surgeon to the London Hospital, etc.

I HAVE for many years felt much interest in asserting that erysipelas is simply a specialised form of inflammatory action, and not, as it is commonly defined, a specific fever. The pyrexia which attends it is, I contend, caused by the local inflammation, and in ratio with it, and never in any degree precedes the latter. It has, indeed, always appeared to me very strange that it should be possible to confuse erysipelas with the specific fevers. Everyday facts show that it has no appreciable period of incubation. Its duration is irregular, and it may easily be cut short by treatment. One attack does not prevent another, but rather increases proclivity; and, above all, it is capable of spontaneous origin. It seems impossible to believe, in the face of such facts, that the disease is due to a specific poison analogous to those which produce variola, varicella, and measles. Of late years I believe that the non-specificity of erysipelas is a creed which has much gained ground, but it is still far from being universal. It has occurred to me lately, that possibly some light might be thrown on the question of the real nature of erysipelatous inflammation by the examination of certain varieties of it, or perhaps I ought to say, allied affections. Some of these are also of very considerable clinical interest in themselves. The more fully we illustrate the fact that erysipelas does not always keep to one type, but permits of wide variability in its course, the more clearly we shall establish the pathological doctrine that it is not a specific fever.

It is necessary, to begin with, that we should try to define our terms. What do we mean by the term of erysipelas? There are certain forms of it, concerning which no one doubts. When the skin is red, with a definite margin to the redness, which margin advances from hour to hour, and is attended by soft œdema and a tendency to vesicate, then everyone will admit that the name erysipelas is applicable. We know well what to expect when we have made our diagnosis. Unless stopped by our treatment the red edge will advance indefinitely; and as it spreads to other regions, the parts which have been affected will quickly lose their redness and tumefaction, and return to their former state, to be attended, however, with peeling of the epidermis. A part which has been affected scarcely ever becomes red again during the same attack, and there is no such thing as persistence. Transitoriness is an essential feature of all erysipelatous action—it may travel anywhere, but it never dwells long at a place. As a rule, it is unattended by the formation of pus; exceptionally, however, diffuse suppuration may occur. If we ask as to the special tissue in the skin which is implicated in erysipelas, the reply is probably true that it is chiefly the lymphatic spaces. I do not know, however, that this opinion is much more than a plausible conjecture. Although congestion is such a marked feature in most cases, yet it is not absolutely invariable. I have witnessed on several occasions what has been named white erysipelas, a form of erysipelatous œdema in which there is no visible distension of blood-vessels. Sometimes this occurs even in traumatic cases. I believe it is not very infrequent when the disease originates without wound. In a case in which I once operated for femoral hernia (with Dr. Bryant of Hackney-road, many years ago), the patient, a thin, feeble woman, had an extensive attack of white erysipelas. The swelling began, as usual, at the wound, and was attended by œdema, pitting, and an abrupt spreading edge. It travelled over the whole abdomen and chest, but never at any part was there the slightest redness.

If, then, we are compelled to put aside vascular congestion as not being an essential element in erysipelas, we may next ask how it happens with the other three cardinal symptoms. Of these vesication is certainly unimportant, being more often absent than not. The abrupt margin is often not well marked, though perhaps never really absent. We have left, then, as the sole constant characteristic, œdematous swelling, and seem driven to the conclusion that any inflammation which travels and is attended by œdema is of the nature of erysipelas. I believe we shall find it convenient to keep this definition in mind, and that it will rarely mislead us, but in the sequel I shall have to contend that there are conditions essentially of an erysipelatous character in which even the tendency to spread and travel is very feebly marked, if it be not absent altogether.

Some of the features of difference between medical erysipelas and the surgical or traumatic form are so marked, that it has even been suggested that they should be considered as distinct diseases. I do not wonder at this wish on the part of those who hold that the disease is one of the specific fevers. It is so obvious that the medical form begins without contagion in many cases, and that it is very liable to recur repeatedly in the same individual, that I do not see how it can be regarded as other than autogenetic, and this admission puts aside entirely the idea of specificity. If it can originate spontaneously, then certainly it is not due to the introduction of a specific virus. Whilst, however, the facts just adverted to are not to be denied, it is to be distinctly asserted that between medical erysipelas and the traumatic form there exist only differences of degree. The traumatic form, like its congener, is in certain cases very prone to recur, and, like it, may, I feel convinced, originate spontaneously, so far as the absence of any virus introduced from without is concerned. Although, unquestionably, it is often caused by contagion, it is probably often also caused by the exposure of wounds to cold or to draughts of air. It originates a virus which is the cause of spreading in the patient, and may become the cause of contagion to others, but it is quite capable of being called into existence independently of such virus. Idiopathic erysipelas of the head and face, when severe, as it often is in first attacks, spreads at its edge indefinitely, just like the surgical form; it is attended by the same external phenomena, and may even, in some instances, cause suppuration. I do not see how anyone can seriously doubt that the two are really examples of the same form of the inflammatory process. We must admit, then, respecting both, that the local exposure to cold may set up the disease. Erysipelatous inflammations, when due to cold, are allied to the catarrhal ones, but we may draw a useful distinction between the two by remarking that, whilst catarrhal affections are always indirect and reflex, the part inflamed not being the part actually chilled, but one in relation with it, in erysipelas it is invariably the part chilled which is first attacked. Both in erysipelatous and catarrhal inflammations the law is observed that recurring attacks are less severe than the primary one. This law is so definite in respect to erysipelas of the head and face that the assurance, "I have had it before," is usually sufficient to remove all anxiety from the surgeon's mind. The greater the number of successive attacks, and the shorter the interval, the less the severity of each succeeding one. I believe that in most instances of recurrence the tendency to spread becomes suppressed, and the attacks at length restrict themselves abruptly to certain known localities. This remark leads to the consideration of a group of maladies which I had chiefly in mind when I undertook the preparation of this paper. I allude to certain cases in which erysipelatoid attacks occur so frequently on the face that the features become permanently altered by them; and also to others which do not lead to permanent changes, but which are characterised by abruptly margined areas of congestion, which vesicate, but do not spread at their edges. To these latter I have been accustomed to give the name "vesicating erythema," recognising, in the comparative absence of œdema and of tendency to spread, features of conspicuous departure from the type of erysipelas. I suspect, however, that the two conditions are allied, and such will be the suggestion respecting them which I now offer. Let me next ask your attention to certain

Cases of Recurring Erysipelas of the Face, leading to Elephantoid Hypertrophy of the Eyelids and Cheeks.

Of this malady I have seen many examples, and in both sexes. The history is always nearly the same. At some former period, perhaps years ago, an attack occurred which was called erysipelas, and which was attended by sharp illness, and all the usual conditions of the idiopathic form.

(a) Read before the Hunterian Society.

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The swelling on the first occasion probably showed a tendency to spread, and involved the scalp as well as the face. Subsequent attacks may have occurred once every few months, or oftener, and very probably have not been attended by any tendency to spread. In them there has been simply œdematous swelling of the eyelids and cheeks, with slight feverishness. The eyes usually become closed for a day or two, and the attacks last not longer than a week or ten days. After each successive attack the œdema subsides only imperfectly, and when the recurrences are frequent a condition of permanent swelling is produced. Mr. Waren Tay has kindly lent me a photograph which will illustrate this state. [Portrait shown.] Between the permanent solid œdema with hypertrophy of skin, which finally results, and true elephantiasis, the differences are, I would submit, only those of degree. The question is, have we any right to call this disease by the name of erysipelas? I rely upon the history of the first attack, upon the nature of the exciting cause in the subsequent ones, and upon the constant phenomena of œdema and congestion, when I say that I think we have.

From cases such as these to true elephantiasis it is but a few steps, and I avow my conviction that we shall make a definite simplification in our nosology when we class the latter disease as in the main a result of chronic and recurring erysipelas. These results are rendered peculiar, and become in all respects exaggerated, by the peculiarities of the part affected in reference to their circulation. As is well known, elephantoid hypertrophy is seldom seen excepting in dependant parts—the feet and legs, the scrotum and penis, the labia, etc.—and it is obviously helped by difficulties in the return of blood. But these difficulties do not explain the whole. There is inflammation as well as passive or venous œdema, and the lymphatic system is probably more especially concerned than the bloodvessels. All observers agree that elephantoid parts are prone to attacks of erysipelas; that they swell up and inflame for a time, with general febrile disturbance, and that each successive attack leaves them worse than before. Let us change the mode of expression, and say, not that elephantiasis is liable to erysipelas, but that it is in large degree a result of it. It is, perhaps, not the fact that in all cases the disease dates its beginning from an attack of erysipelatous swelling, but I am sure that in many cases such a statement would come very near the truth. There is some slight wound of the foot or leg, some sore on the genitals, around which inflammatory œdema has occurred, and from that œdema the elephantoid process takes its origin. I have seen several cases in which this has certainly been the case; and whilst I would by no means assert that such first attacks are always, or even often, conspicuously "erysipelas," I feel no doubt they are closely allied to that process. In saying this I by no means overlook the influence of climate, race, and diathesis as predisposing factors.

I show here the portraits of two cases of elephantiasis of the prepuce and skin of the penis. They are so alike that one might be taken for the early stage of the other, but really they are from different subjects. Their interest in reference to our present topic is this, that in both the disease was consequent upon the irritation of urinary fistulæ, which caused inflammatory or erysipelatoid œdema, which resulted in permanent hypertrophy. In both there had been subsequent attacks of temporary inflammation, with febrile disturbance. During many years I have had under observation at the London Hospital two cases—one a middle-aged man, the other a girl—in whom elephantiasis of one leg is slowly developing. Both are liable to attacks of inflammatory swelling of the kind described, which always leave the limb slightly larger than it was before. Excepting in differences which have to do with the part affected, I see no distinction between these cases and those of solid œdema of the cheeks resulting from recurrent attacks which are almost certainly of the nature of erysipelas.

A very interesting example of the recurring erysipelas of the face in an early stage has come under my notice during the last month. Its subject is a gentleman in good health, living at Bradford, who was sent to me by Dr. Meads of that place. He has been liable for some months to attacks of swelling of the face, which sometimes close his eyes, and are attended usually by swelling of the backs of his hands. The first attack, which was, he says, the most severe, was considered erysipelas, and was, he believes, brought on by walking in a cold east wind. His later attacks have been so frequent and so short in duration that the name erysipelas has not been thought applicable, yet I cannot but believe that they are of that nature. Curiously, they have almost always occurred on Sundays, though not every week. This is perhaps to be explained by the fact that our patient spends his Saturday afternoons at a garden out of town, where he is much exposed to wind, and is in and out of hothouses all the time. No conspicuous solid œdema has as yet resulted, but Mr. B. tells me that he notices a degree of thickening of his eyelids which he had not formerly, and that they and his cheeks feel stiff and tight. It is to be hoped that by careful attention and removal of the cause he may escape any permanent ill results. I have known several cases in ladies of such extreme susceptibility to the influences of air that the patient found it impossible to go out of doors even for a few minutes without getting an attack of inflammation of the face. In some these attacks were attended by œdema of the eyelids, and in others by large patches of erythema on the cheeks; whilst in others attacks of acute eczema were the result. When the local inflammation assumes the characters of an eczema, it still proves its alliance with erysipelas rather than with common eczema by showing a distinct tendency to spontaneous disappearance. If any part other than the face suffers, it is always, I think, the backs of the hands.

About a year ago I saw, with Dr. Alexander Morison of the Green-lanes, a very interesting example of the disease in question, in which great deformity of the features had resulted. It is only an example of a large class, but as such it may be of interest to read Dr. Morison's notes.

Miss M., aged nineteen years, has suffered for three years from a peculiar recurrent erysipelatoid swelling of the face. In December, 1877, while suffering from toothache, there was a little swelling over one cheek. Six teeth were extracted. In May, 1878, she had her first attack of general swelling of the face. The swelling developed itself very rapidly, and had much the appearance of swelling in consequence of a sting by a bee. After this date the attacks became increasingly frequent, sometimes occurring after an interval of three months; and again, two or more attacks have been known to take place within six weeks. They are usually preceded by shivering, after which the bridge of the nose, eyelids, and both cheeks, or one or more of these parts, become rapidly swollen; the skin being reddened, the subcutaneous textures hardened by infiltration, and pressure with the finger blanching the inflamed part as it does in any other cutaneous inflammation. Until May, 1879, a number of small blisters appeared over the inflamed part, and usually coalesced in one larger blister. This vesication was usually observed towards the end of the attack. Since the latter date (May, 1879) vesication has not accompanied the attacks, which have been less severe than previously; but whereas soon after the earlier attacks the facial swelling quickly subsided, *now* the face is always more or less swollen, and pits slightly on pressure over a resistant point. Exercise has been observed to diminish the swelling, but such a movement as stooping appears to flush the face.

Although such attacks are much more common in the face than elsewhere, yet they are not exclusively restricted to it. I have known several examples in which the tongue was the part affected, and have now under observation a girl in whom they recur periodically, cause great swelling, and seem likely to lead to a sort of elephantoid hypertrophy of the organ.

Exposure to cold or wind is the usual exciting cause, but sometimes fire-heat or a bright sun may produce the same. Sun-burn is well known as a not infrequent cause of attacks of erysipelas. The portrait which I have next to show is that of a lad who is the subject of a skin inflammation that certainly does not conform to the type of erysipelas, but resembles those I have been describing in that it occurs chiefly in the exposed parts, and is definitely due to exposure to sun. He is always well in winter, and begins to suffer with the first warm day of spring. His attacks are not transitory, like those of erysipelas, but persist with greater or less severity through the whole summer. The eruption consists of bullæ, which are surrounded by areas of erythema, and which occur chiefly on the face, ears, and backs of hands. It leaves scars, and is altogether of a very peculiar nature.

There remain several other points to which I should have liked to advert if time had permitted. Amongst these is the occasional occurrence of erysipelas as a consequence of

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chemical or mechanical irritation. From this fact another strong argument may be drawn as to the non-specificity of the affection. I believe that all who have employed carbolic dressings much will admit that they do not always prevent erysipelas, and on some occasions they even seem to cause it. The carbolic gauze varies much in its irritating qualities. It once happened to me to have a supply which irritated in several cases very much. In a group of breast cases one after the other had redness and vesication of the skin wherever the dry gauze had pressed. It was very difficult to say in what this local vesicating erythema differed from erysipelas, except in that it showed very little tendency to spread at its edge, and usually subsided quickly when the cause was removed. But in one instance there could be no doubt as to the name earned by the affection, for the redness and œdema spread widely, affected the scalp and face, and closed the eyes. In this instance the patient, a middle-aged lady, was never seriously ill. The redness began at several parts on her shoulders and chest where the bandages had pressed. It never interfered with the healing of the wound, which was rapid and quite satisfactory. It was after the patient had left her bed that the spreading to the face occurred, which proved the true nature of the affection. These forms of erysipelas, which are due to local irritation, are, I think, almost always mild. It is when the disease is due to contagion that it assumes its greatest severity. About the facts of contagion I presume there can be not the slightest doubt. It would appear that in whatever way the disease has been produced it generates a virus, probably particulate, which is capable of infecting not only adjacent tissues in the individual, but those of other recipients. Possibly this virus becomes intensified by transmission. The severity of some epidemics of erysipelas in hospitals and in the private practice of individual surgeons, and also that of puerperal fever when due to erysipelatous contagion, seems to point to this.

I should have liked also to have said a few words as to carbuncular inflammation and its affinities with erysipelas. We speak of boils and carbuncles as if they were wholly distinct affections, but in reality a carbuncle begins as a boil, and differs from it only in possessing the power of infection at its edge, and thus causing indefinite spreading. In this quality of infection and extension at its borders a carbuncle shows one of the most distinctive characters of erysipelas. It appears to be erysipelatous inflammation modified. It may perhaps be suggested that carbuncular inflammation always comes to an end spontaneously. But this is not true, for most of the fatal cases end before the extension has ceased, and at a period when it is impossible to say when it would cease. I think I may appeal to the experience of most surgeons that we not infrequently see large spreading carbuncles in which the characters of the margin are closely similar to those of erysipelas. There is dusky redness, œdema and pitting, and often vesication. Each morning a new area is involved, just as in erysipelas.

Here I must come to a close. My endeavour has been to prove that we ought to recognise a family of erysipelatoid affections rather than a single disease—erysipelas. Some of these are closely connected with the typical forms of common erysipelas, and others only remotely so. They are all of them specialised forms of inflammation, due originally to local causes, and are characterised by conditions indicating implication of the lymph-spaces, and they all show tendencies to rapid change. In all of them it is probable that a virus is produced, which enables the disease to spread by contagion; and whenever contagion to another person occurs, the disease is intensified. In all, if the disease occurs repeatedly in the same subject, it becomes much milder, little if at all contagious, and so far loses its distinctive characters that the diagnosis may be brought into doubt.

Whether I have succeeded in making it probable that there does exist a family group of such maladies, including erysipelas, both idiopathic and traumatic, white erysipelas and brown erysipelas, vesicating erythema, recurring œdema of face, elephantiasis, and some forms of carbuncle, I must now leave to the judgment of the Society.

SUICIDES IN NEW YORK.—The *New York Tribune* publishes some statistics of suicides in that city during the last twelve years. In that period 1687 persons took their own lives: 1326 were men, and 361 women.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

CASES OF EMPYEMA.

(Under the care of Dr. SANSOM.)

[For these notices we are indebted to Mr. R. J. OWEN, House-Physician.

(*Continued from page 692 of last volume.*)

Case 3.—Sero-purulent Effusion—Aspiration—Free Incision—Recovery.

EMMANUEL E., aged thirty-five years, a ship's carpenter, was admitted on June 9, complaining of pain in the left side, and of general weakness. Previous history was good; he had followed his present occupation for fifteen years; had had no previous illness. Present illness commenced seven weeks before his admission, with pain in the left side; this increased in severity; he then got shiverings, and had night-sweats, accompanied by cough and watery expectoration streaked with blood.

On admission, found to be much emaciated, reduced, and anæmic. Respirations 44 per minute; temperature 101° Fahr.; pulse 112. He lies on his left side. The heart's apex is felt a little below and internal to the right nipple. The left side is found to be larger than the right, and there is bulging of the intercostal spaces. From the level of the third rib in front, and from two inches above the angle of the scapula behind, there is absolute dulness; breath-sounds and vocal fremitus being quite absent. Above these levels the breathing is tubular. The right chest appears normal as regards percussion, but harsh sounds are heard all over on auscultation. He was ordered a mixture of cascarilla with squills and the compound tincture of camphor; and one ounce of brandy mixture three times a day.

June 11.—The chest was aspirated, and about eighty ounces of fluid were withdrawn; the fluid contained a large number of pus cells. Great relief followed the withdrawal of the fluid; the apex-beat was now felt behind the right edge of the sternum.

13th.—The line of dulness on the left side was considerably lower, and ægophony was heard at the angle of the scapula, with amphoric breathing, metallic tinkling, and a succussion splash over the upper part of the same side.

16th.—General condition improved, but evidences exist of a reaccumulation of fluid.

26th.—Patient complains of feeling very weak; has lost weight since admission. The line of dulness on left side extends, in front, from the level of the third rib; behind, from the angle of the scapula. Breath-sounds over this area almost absent. Above the line of dulness the breathing is amphoric; metallic tinkling very distinct. Below the angle of the scapula, ægophony is heard. Tubular breathing and bronchophony in interscapular region. Subcrepitant râles over scapular region on right side; puerile breathing. Quinæ sulph. gr. iij., fer. phosph. dil. ℥xx., aq. chloroform. ʒj., ter die; ol. morrhuæ ʒij. ter die—were ordered.

July 6.—A free opening with counter-opening made. Amount of pus let out about twenty-five ounces. Drainage-tubes put in. Antiseptic precautions and dressings used; general symptoms considerably relieved after the operation. Wounds dressed every other day. The discharge generally amounts to about four ounces.

13th.—Complains of some soreness in region of wounds. General condition improving. Upper part of left chest is tympanitic. Amphoric breathing and metallic tinkling are heard. Succussion splash easily obtained. Temperature from 102° Fahr. has come down to 98° Fahr.

21st.—Patient has much improved: there is no alteration yet in the contour of left chest. Breath-sounds heard near spine behind; over rest of left chest amphoric breathing; percussion note tympanitic; over right side the breathing is puerile; a few crepitations are heard over scapular region, and in clavicular region in front. He is gaining weight, and is looking much better.

28th.—Dressed every third day. Discharge about one to three ounces. Temperature in the evening rises occasionally to 102° Fahr.

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August 9.—Patient continues to improve; he takes nourishment well, and sleeps better; occasionally has attacks of coughing, but no expectoration; dressings are changed every third day; amount of discharge is diminishing.

20th.—Some soreness of skin, due to the irritation of the dressings; boracic lint used as a protective.

September 4.—There is now noticed some contraction of the left chest. The intercostal spaces are falling in. Percussion note tympanitic over whole of upper part of chest (left), with amphoric breathing and metallic tinkling over base posteriorly and in axillary region; the note is dull. Normal breath-sounds are heard near the spine posteriorly. Temperature 100° Fahr.

15th.—Patient is gaining flesh. Wounds dressed every third day. The discharge is very slight.

29th.—Antiseptic dressings discontinued. The drainage-tube from the posterior opening removed. Anterior tube still remains. The discharge is very slight. There is a marked falling-in of left chest. Normal breath-sounds heard over left chest near spine; elsewhere the breathing is amphoric. The crepitations heard over right chest have disappeared. Temperature up to 100° Fahr. in the evening.

October 15.—The patient still continues to improve. The discharge from the anterior opening is very slight; the posterior opening quite healed. Tenax dressings are now applied. The percussion note over left chest is not so high-pitched. At the base posteriorly and in the axilla the note is dull. Amphoric breathing heard over upper part of chest, but less distinctly. Temperature varies from 98° to 99° and 100° Fahr.

30th.—The anterior opening is still discharging about one ounce of pure pus daily. On measurement the difference between the sides is two inches. Normal breath-sounds heard only near the spine on left side. Over remainder of left chest breathing is amphoric. Breathing harsh over right chest. His general condition is excellent. Very trifling dyspnœa on exertion. Temperature normal. Patient was sent to the seaside.

Case 4.—Empyema from Suppurated Hydatid Cyst—Antiseptic Evacuation—Recovery.

William L., aged fifty-nine years, was admitted July 31, 1882. He complained of pain in right side, with cough and great dyspnœa. His occupation had been that of a sheep farmer in Australia, where he had lived for thirty-seven years. He had had no previous illness of any kind, except measles when very young. Present illness was attributed to a cold caught on board ship coming home from Australia; commenced with pain in right chest, cough, and shortness of breath.

On admission the right chest was found to be much enlarged and arched, with bulging of the intercostal spaces. There was very little expansion during respiration. The liver was displaced downwards to the extent of two inches. On the right side in front the dulness extended downwards from the level of the third rib; above this point the note was tympanitic. In the upper part of the axillary region the note was tympanitic; lower part, dulness absolute. Behind, the dulness extended downwards from the middle of the spine of the scapula. Amphoric breathing was heard over upper part of right chest, and a well-marked succussion splash, with metallic tinkling. Apex of heart was felt to beat in centre of left axilla. An exploring syringe was introduced, when the fluid was found to be purulent. He was ordered quinæ sulph. gr. ij., fer. sulph. dil. ♏v., dec. cinchonæ ℥j., ter die; ol. morrhuæ ℥ij. ter die.

August 1.—The chest was aspirated, fifteen ounces of fluid being drawn off. No appreciable diminution in the amount of fluid in chest.

4th.—Physical signs the same as on admission; the dyspnœa is very great. Aspiration again performed; needle first introduced near angle of scapula, and fifteen ounces drawn off. Needle was then introduced in mid-axillary line in sixth interspace, but no fluid could be drawn off. On shaking patient a very loud succussion splash was heard. Evidently the accumulation of fluid was large. The heart was still felt beating in the left axilla.

14th.—A free opening was made in sixth interspace in anterior axillary line, and eighty ounces of fluid let out. Great relief followed the operation. The wound was dressed antiseptically daily. Discharge very free. Immediately after operation, apex of heart was felt in nipple line on right side.

22nd.—For some days patient has been very delirious. Discharge from wound is getting less. Many whitish membranes have come away, as well as the remains of dead echinococci. On percussion the liver is found to reach the upper border of sixth rib and extend just below costal margin inferiorly. There is great improvement in the patient's general condition; his appetite, which has been very bad, is much better. Percussion note over whole of right chest is tympanitic. Amphoric breathing heard over back and front of chest.

30th.—Some more hydatid membranes came away to-day. Apex of heart is now felt in its normal position.

September 10.—Discharge from wound is very slight—less than half an ounce. It is now dressed every third day. He gets up daily, and looks much better.

He left for his home in Scotland on September 11.

THE PHILADELPHIA SICK-DIETS KITCHENS.—A correspondent of the *Boston Med. Journal*, November 16, states that there are now four of these in active operation, having been established by the Protestant Episcopal City Mission. Their object is to supply the poor sick with "extra diet" recommended by physicians, and which is prepared daily and given or sent to the sick poor. During the last year these kitchens have supplied 28,281 rations of nourishing and attractive food. Nearly 200 consumptives were regularly supplied with diet suited to them. The entire expense for the year amounted to $24,000, but this included also objects of general charity, as groceries, coal, wood, garments, etc. An idea of the scope of this valuable charity may be gained by a glance at the characters of the rations supplied during the year—viz., 25,717 quarts of soup, 10,058 lbs. of meat, 3779 pints of beef-tea, 16,967 pints of farinaceous food and puddings, 10,895 quarts of milk, 3749 pints of stewed fruit, 161 glasses of jelly, 105 dozen eggs, 339 loaves of bread; besides large quantities of other articles of diet. Physicians who have upon their lists the names of poor but deserving persons, whose limited resources are seriously straitened by sickness, can fully appreciate the advantages of being able to obtain the much-needed food properly prepared, as well as some of the delicacies which the sick and convalescent crave. It is intended to establish two more of these kitchens.

SWALLOWING COINS.—During a discussion on swallowing foreign bodies (when the general opinion seemed to be that the administration of active cathartics is unnecessary and injudicious), Dr. Bush observed that it was the custom of persons who attempted to pass spurious coins to swallow them to avoid detection. In such cases their diet was composed of hard-boiled eggs, they having found by experience that this diet rendered the foreign body harmless by enveloping it in a coat. In about three days the coin would be found in the fæces.—*Boston Med. Journal*, November 30.

BAD SHOEING AMONG THE POOR.—Everyone must have noticed how frequent deformities of the feet and toes are among the poor. That this is due to bad, and not tight, shoes is apparent. Some light upon this matter was recently given by Dr. Colonel Ziegler, Chief Surgeon of the Swiss Army, at the Geneva Hygienic Congress. He stated that every year 800 recruits—the strength of a battalion—are rejected for malformation of the feet, resulting from badly fitting shoes. The foot is in reality a bow so elastic that at every step it contracts and expands, lengthens and shortens, and a line drawn through the centre of the great toe intersects the heel. Shoemakers do not give room enough for the lateral extension of the great toe, confining it until it is forced against the other toes, giving rise to inflammations, corns, ulcerations, and sometimes true articular inflammations. Another evil is flat-footedness, whereby the arch of the foot is converted into a straight line, and prolonged walking rendered impossible. Another cause of this defect is the carrying heavy weights at an early age; but in most cases perfect shoes would restore the foot to its normal condition. A test of a perfect pair of shoes is that when placed together they should touch only at the toes and heels; the soles should follow the sinuosities of the feet, and to give room for their expansion should exceed them in length by fifteen to twenty millimetres.—*New York Med. Record*, November 4.

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Medical Times and Gazette.

SATURDAY, JANUARY 6, 1883.

A CHAPTER IN TRANSCENDENTAL PATHOLOGY.

In his address to the Pathological Section of the British Medical Association, on the occasion of its meeting at Worcester this year, the distinguished President of the Section, Dr. J. Hughlings-Jackson, threw out the suggestion that inflammation should be regarded as a process of dissolution. His meaning will be fully intelligible only to those who have some knowledge of the system of philosophy which Mr. Herbert Spencer has given to the world. It may be interesting, both to those who are familiar with Mr. Spencer's writings, and to those who are not, if we somewhat expand Dr. Jackson's hint, and inquire briefly how far inflammation corresponds to Mr. Spencer's definition of dissolution. If we find that it is included in that definition, it may enable us to trace relations between inflammation and other allied processes—mineral, vegetal, animal, psychological, and social—which cannot but enlarge and make clearer our views of it and them.

Evolution, our readers will hardly need reminding, is the process of growth and life; *dissolution* that of decay and death. The definition of inflammation which is given by one of the most eminent writers upon the subject, starts from the proposition that inflammation is the result of injury. We should therefore, *à priori*, expect that changes which are the result of injury would have their analogues rather in the processes of decay and death than in those of life and growth. The definition of evolution which Mr. Spencer formulates is as follows:—"Evolution is an integration of matter and concomitant dissipation of motion, during which the matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity, and during which the retained motion undergoes a parallel transformation." Dissolution is the reverse of this. We have, then, to see if inflammation corresponds to a definition running thus: Dissolution is a disintegration of matter and concomitant absorption of motion, during which the matter passes from a definite, coherent heterogeneity to an indefinite, incoherent homogeneity, and during which the retained motion undergoes a parallel transformation.

The first thing which our definition asserts is, that inflammation is a disintegration of matter. This proposition needs little defence. Do we not find that inflamed parts are always softened, and that when the process is severe and continued they become liquefied, converted into pus? Inflammation clearly is a process which tends to the disintegration of matter. We learn, next, that the disintegration of matter is accompanied with concomitant absorption of motion. This, on consideration, will be found equally true, although, perhaps, not so obvious. In the process of evolution the motion of units (molecular motion) becomes converted into the motion of aggregates (molar motion); and in dissolution the reverse takes place. The latter we shall find hold good of inflammation. An inflamed part is not only softened—which means that its component molecules move more readily upon one another—but it is swollen. The particles previously integrated into a solid mass, occupying a small space, have most of them moved further away from one another, and now occupy a comparatively great space. Beside this, it is hotter than natural, and heat is a mode of motion. There is thus an increase of molecular motion. With this, the functional activity of the part which, from our present point of view, is its motion as an aggregate (for all force is a mode of motion), is lessened. To take the most literal illustration: an inflamed muscle cannot contract with the force of a healthy one. Seeing, then, that there is an increase of molecular motion in an inflamed part, we might be content with pointing out that this motion must have been obtained from somewhere. But we may go further. There is one remedy, the potency of which, in checking inflammatory change, cannot be gainsaid. It cannot everywhere be efficiently applied, and it is not always decidedly for the patient's benefit that inflammation should be too rudely cut short; but, when circumstances admit of cold being brought into play, there is no doubt that it will arrest or suspend inflammatory change. We find throughout the universe that cold everywhere arrests molecular motion. It makes fluids into solids, vapours into fluids; checks chemical as well as vital change. The inflamed part to which cold is applied is surrounded by a medium from which it cannot absorb motion; and if motion cannot be absorbed, inflammation cannot go on. Inflammation, then, is a change attended with the absorption of motion as well as with the disintegration of matter.

Proceeding with our definition, we find it next informs us that the matter (in the present case the inflamed part) passes from a definite, coherent heterogeneity to an indefinite, incoherent homogeneity. It is a general assertion that holds good of inflammation in every part of the body, that from the first stage to the last it tends to blend and confuse together, to destroy the distinctive features of the individual structures of the part affected. In the beginning we have infiltration with leucocytes, replacing with cells of indefinite type the muscular, nervous, fibrous, and other naturally well-defined elements of the part affected. Finally, we have every trace of the latter lost; the definiteness of structure, its coherence and heterogeneity have gone, and we have in place simply a collection of fluid homogeneous pus. The progress is clearly from the definite, the coherent, and the heterogeneous, to the indefinite, the incoherent, and the homogeneous. The last part of the definition asserts that the retained motion undergoes a like transformation. This we have partly touched on already. The healthy body contains structures which absorb, transform, and give out force—that is, motion—in different ways. By the intestinal canal, force stored up by plants and animals is taken into the body. By the lymphatic and vascular system it is trans-

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ferred from the place where it is taken in to the place where it is wanted for use. By the nervous, muscular, and glandular apparatus it is converted into sensible motion of the organism as a whole, or into secretions capable of setting up various changes in the substances with which they come in contact, or of producing and nourishing a new being. We have, therefore, in the normal organism, motion given out in many heterogeneous forms, each form being definite, and each so related to the activity of the rest that the body forms a whole as coherent in function as it is in structure. When inflammation affects a part, these features of its dynamic activity disappear. Natural function is either lost, or performed only in an imperfect way. In place of the exertion of force in ways heterogeneous, but definite, we have the homogeneous molecular motion manifested by liquefaction, swelling, and warmth. Definiteness of function, as of structure, is lost; heterogeneity of tissue-changes, as of the tissues themselves, is altered to homogeneity; and in place of the part fulfilling its function to the advantage of every other part, that is, in a manner coherent with functional activity elsewhere, it exercises only a perturbing, injurious effect—its functional activity has become incoherent instead of coherent.

The subject is a very large one; and in the space that we are able to give to it we cannot do more than imperfectly indicate the analogies which inflammatory changes bear to those of dissolution generally. If our remarks should incite others to follow up the subject in a more exact and comprehensive manner, our object in making them will have been amply fulfilled.

THE HOUNSLOW TRAGEDY.

It would be difficult to imagine a more painful and lamentable domestic tragedy than that revealed—or perhaps we should rather say at present, shadowed forth—at the inquiry held by Dr. Diplock, at Hounslow, on Saturday last, into the circumstances attending the death of Dr. W. Whitfield Edwardes, aged thirty-two. It appeared, from the evidence given, that Dr. Edwardes had, fourteen months previously, entered into partnership with Dr. M. Whitmarsh, a practitioner of long standing and of considerable position in Hounslow, and had paid for a share of the practice the sum of £1800, and that he had for some time past been depressed and disappointed by the results of the practice, and had considered that he had been deceived as to its value; that very lately he had been threatened by a woman with a charge of immoral and dishonourable conduct towards her; that very early in the morning of Wednesday last week he returned to his wife in a state of despair after a long interview with his partner; that he declared he was hopelessly ruined, as his partner had said that not only he would not support him in facing the charge brought against him, but would go against him; and that shortly after Dr. Edwardes committed suicide by taking prussic acid. This is nearly all that has been proved as yet. It is true that the poor fellow left behind him a most piteous letter, which everyone will have read, bringing terrible accusations against his partner; but it must be remembered that the letter was written when the writer was distraught; and that Dr. Whitmarsh has not yet been heard in reply to it. It was also stated, at the inquest, that the letter containing the original charge made against Dr. Edwardes was withdrawn by the woman who made it, and the letter torn up, but that for some reason the pieces had been secured by Dr. Whitmarsh, and preserved. But before remarking in any way on these points, we must wait to hear what Dr. Whitmarsh has to say. His statement on Saturday last was, as reported, singularly guarded and colourless; but at the adjourned inquest, which is being held as we write, the story of poor Dr. Edwardes's last day will no doubt be more clearly and fully told. But what a tragedy it is anyhow! We medical men are all liable to such a charge as that with which he was threatened, and as a rule we should have no defence but character, and if we could not believe in and rely on our friends in such case, we should be utterly without hope or help. Poor Dr. Edwardes seems to have been so overwhelmed that he could not even remember that he had friends. Yet we happen to know that he had warm friends in London—one practitioner, whose assistant he was for several years, had, and retained, a warm regard for and belief in him,—and events have shown that he had already won wide-spread respect and esteem in Hounslow. Why did he break down so pitiably? Perhaps the inquiry now being held will give us some answer. We had rather a thousand times that Dr. Edwardes's tragic ending was due to his lack of staying and fighting power, than in any degree to the behaviour of a professional brother; but the ὁι πολλοι of Hounslow have very quickly, and in a very decided way, given judgment against D Whitmarsh.

SUPERINVOLUTION OF THE UTERUS.

A recent number of the *Zeitschrift für Geburtshülfe and Gynäkologie* contains an interesting article by Dr. Richard Frommel, of Berlin, on the ill-understood subject of puerperal atrophy of the uterus. This writer confines his attention to that form of simple atrophy of the uterus which comes on independently either of acute disease in the puerperal period, or of maladies which cause wasting of the body generally. The condition is best known in this country by the name given to it by Sir James Simpson, and which we have put at the head of our remarks, viz., superinvolution. Dr. Frommel's account is based upon cases observed in the out-patient department. Among 3000 out-patients he met with twenty-eight cases of superinvolution, showing that, as to frequency, they form a proportion of nearly 1 per cent. It might be expected that atrophy of the uterus would, like most diseases attended with mal-nutrition, be more frequent among hospital out-patients than in a *clientèle* composed of well-to-do persons. Whether this is so we cannot tell, as we have no figures to guide us to an opinion. Dr. Frommel, however, tells us that he has been informed by Professor Schroeder that in his private practice he has met with a series of such cases. And Dr. Frommel further remarks that the patients with superinvolution are not all cachectic or decrepit individuals; many of them have every external sign of blooming health. In this the experience of most gynæcologists will agree with that of our author; and here the natural history of atrophy of the uterus is quite parallel with that of deficient development of the organ. Nor does the affection under consideration most affect patients farthest advanced in life, or whose uteri have been functionally most active. Dr. Frommel's youngest patient was nineteen, his eldest forty. The average age was 29·6. Mostly, however, they have the aspect of being prematurely old. The reason which brings them to seek medical advice is usually not merely that, the patient having ceased to suckle, menstruation has not returned, but generally also a long series of different complaints is mentioned: pains in the abdomen, a feeling as if there were something alive in the belly, pain in the back and thighs, and a host of hysterical symptoms. Examination of the genital organs shows nothing at all abnormal except the smallness of the uterus. This organ may be diminished in all its dimensions, or its length may remain natural, the atrophy consisting in a great diminution in the thickness of the uterine wall. The latter form is

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obviously more difficult of diagnosis than the former, for the thinness and flabbiness of the wall of the organ is not a point easily made out by palpation. In such cases the examiner can antevert, anteflex, retrovert, or retroflex the uterus at will. The vaginal portion may or may not share in the atrophy. It is necessary to use the sound, if at all, with much caution, lest it should be pushed through the thin uterine wall. Dr. Frommel believes that the ovaries are in most cases atrophied as well as the uterus; but it does not appear from his paper that he has any better ground for thinking so than the fact that in only three of his twenty-eight cases did the ovaries seem to him, upon palpation, to be of natural size. It is so difficult to judge by the touch, through some thickness of soft parts, of the exact size of so small a body as the ovary, that we trust Dr. Frommel will pardon us if we suspend our judgment upon this point until more conclusive evidence is produced.

As to the etiology of superinvolution, Dr. Frommel believes that lactation has great influence. While a mother continues to suckle her child, the process of involution goes on well and thoroughly; the uterus returning to the size it had before pregnancy, and even, in a surprisingly large number of cases, actually becoming smaller. So certain is Dr. Frommel of this fact, that he has often, he tells us, correctly stated whether the patient was suckling or not, merely from the size of the uterus, without information of any other kind. By this influence of lactation, Dr. Frommel explains the frequency of superinvolution in young women. In his cases, he found that those who had many children were in the minority; while in nine out of his twenty-eight the labour followed by uterine atrophy was the patient's first. Of the two forms of uterine atrophy above mentioned, the first—that in which the uterus is small in all its dimensions—is the one met with in healthy young women who have had but few children. The second form—that of a uterus softened and thinned, but not shortened—is found in feeble subjects, who have had children rapidly, and look prematurely aged and bowed. In support of his view as to the influence of lactation, Dr. Frommel relates a case in which a patient who had had five children suckled the last of them for three months. Then she weaned it, and menstruation returned, and recurred regularly for three months. At the end of this time milk spontaneously began to flow from both breasts, in quantity so great as to soak her clothing; and menstruation ceased. On examination of the pelvic organs both uterus and ovaries were judged to be atrophic. Treatment was ineffectual in altering her condition.

The prognosis, if we regard the restoration of the uterus to its natural size as the end to be attained, is very bad. In only one of Dr. Frommel's cases did menstruation return. In this case, the treatment adopted consisted in warm sitz-baths, iron, and the recommendation to drink as much fresh milk as possible.

In treatment, the essential thing is to build up the patient's general health, which is often much below par. Well-to-do patients should be sent to the country. Poor people should be told to drink abundantly of milk, and, if they can get it, to eat plenty of meat, and drink wine. Warm hip-baths are indicated, to attract blood to the pelvic region; combined with which may be employed cold and friction to the rest of the body. Iron should be given if required. So far we can agree with Dr. Frommel. The kind of treatment hitherto mentioned can scarcely do anything but good. But he goes on to suggest frequent passage of the sound, and the introduction of vaginal pessaries. Intra-uterine pessaries he has not tried, upon which we congratulate his patients. These latter methods of treatment have unfortunately this in common—that they may do mischief: the last-named, from which our author has so wisely abstained, may kill the patient. There are some considerations which should make us pause before we undertake treatment to which such grave objections apply. First, that superinvolution, like deficient development of the uterus, may exist without any symptoms whatever, in perfectly healthy women. The proportion which such cases bear to others cannot be found out, because few of these patients come to hospitals; but they exist. Next, that, as Dr. Frommel states, there are no symptoms special to puerperal atrophy of uterus. The complaints associated with it are those of general ill-health, dyspepsia, and hysteria. Putting these two general facts together, is it not a rational inference that the connexion of superinvolution with the very varied groups of symptoms complained of by its subjects is one merely of coincidence? Puerperal atrophy of the uterus cannot be said to be the cause of symptoms until the nature of those symptoms has been defined, and it has been shown that there is some tolerably constant relation between the symptoms and the disease. As yet this has not been done. The present aspect of the matter is this. Puerperal atrophy of the uterus is probably commoner than is known. Most of its subjects are healthy, but some also suffer from hysteria, dyspepsia, etc., as do many others of both sexes and all ages, and for the relief of these troubles seek advice. Where, then, is the proof that the hysteric and dyspeptic symptoms depend on the atrophied uterus? We see none, and, until we do, must regard the attempt to relieve them by treatment of that organ with pessaries, sounds, etc., as maltreatment, dangerous to the patient and discreditable to the practitioner.

THE WEEK.

TOPICS OF THE DAY.

We have briefly to notice the fact that the past festive season was made as pleasant as circumstances would permit in most of the hospitals and infirmaries in the metropolis. At St. Thomas's Hospital the convalescent in-patients were provided with a substantial dinner, the fare consisting of over 650 lbs. of choice sirloins and ribs of beef, and 500 lbs. of Christmas pudding. At Guy's Hospital, Christmas was celebrated in the whole of the twenty wards by a substantial dinner to every patient who could take it, of roast beef and plum-pudding, while special gifts were distributed among the children. At the Great Northern Hospital, Christmas fare was liberally provided. Each of the adult patients had a Christmas card and a useful present of some kind, and toys were given to the children. The day was observed in a more or less similar way in all the general hospitals. Fitzroy House, Fitzroy-square, the first home-hospital opened in London, was extensively decorated. Among the gifts received by the Hospital were some valuable pictures sent from the gallery at Haddo House by Lord Aberdeen, a member of the committee of management. The floral decorations here were in keeping with the condition in society of the numerous patients, and it may incidentally be mentioned that the managers are desirous of opening another institution of the same nature for a poorer class of patients, and are now endeavouring to raise £10,000 for the purpose. Christmas-day was also fitly observed in all the asylums of the Metropolitan Asylums Board; where the inmates of the institutions were able to partake of festivities, they were afforded within due limits: but in the fever asylums, and in the presence of grave sickness, the officers acted in the spirit of the Local Government Board's letter to which we recently alluded. In the Homerton, Hampstead, Fulham, Stockwell, and Deptford Asylums, little could be done in the way of festivity; but it is gratifying to be able to report that the number of their inmates has considerably decreased since the

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last returns were published, and that in the five hospitals there are now only 560 fever patients, with thirty-six small-pox cases at Deptford, eight at Stockwell, and thirty at Homerton.

A recent decision of the Aston magistrates might, with much advantage to the public, be taken as a guide by the magistrates who preside at the Guildhall Police-court. William Henry White, who traded as a butcher and potted-meat manufacturer at Aston, in Birmingham, was recently summoned, at the instance of the local inspector of nuisances, for having in his possession a quantity of unwholesome rinds of bacon and pork in course of preparation for sale as potted meat, besides some tins of potted meat, intended, but unfit, for human food. The evidence adduced completely established the fact, and the Bench remarked that it was impossible to conceive a worse case than the present one, which was aggravated by the circumstance that the food which defendant sold was consumed chiefly by the poorer classes, who had a right to be protected against such filthy stuff. The sentence passed was the highest the Bench could inflict, viz., three months' imprisonment for each of the two offences specified in the summons, making six months in all.

It may be predicted, almost with certainty, that the substitution of Sir Charles Dilke for Mr. Dodson as President of the Local Government Board will eventually result in much benefit to the metropolis, the Metropolitan Board of Works, the Asylums Board, etc. Mr. Dodson seemed to have regarded the post as one of rest, to have therefore determined on a policy of inaction, and to have carried out the same with remarkable pertinacity. It may even be hoped, perhaps, that something will now be done to remove or replace those neighbourhoods in this great city, which are at the same time a danger and a disgrace—such, for instance, as Bishop's Head-court, Gray's-inn-lane, the condition of which was revealed in the course of a recent inquest held upon the body of one of the occupants who had died from excessive drinking. It was stated that the room in which the corpse was found was totally unfit for human habitation—a remark which would equally well apply to all the tenements in this court, since they are densely overcrowded, destitute of all sanitary arrangements, and in a most filthy and dilapidated condition, and that the district authorities have long been well aware of the existence of this state of things, without attempting to remedy them. As a contemporary remarks, if the authorities do not consider it advisable that such haunts of wretchedness as these in Bishop's Head-court should be taken down, surely something might be done to compel the owners to make the tenements water-tight, and provide them with proper sanitary requisites.

The important case of Milnes *v.* the Mayor and Corporation of Huddersfield was argued as regards the question of law, at the conclusion of last term, before Mr. Justice Mathew in the Queen's Bench Division of the High Court of Justice. It will be remembered (see *Medical Times and Gazette*, vol. ii. 1882, page 531) that the plaintiff sought to recover damages for injuries sustained by him through illness arising from impure and unwholesome water supplied by the defendants. The case was originally tried before Mr. Justice Mathew at Leeds, where the parties agreed that the jury should assess the damages, but that the question of the defendants' liability should be reserved for consideration. The jury assessed the damages at £2000, and the question of liability was recently argued before his Lordship, who now gave judgment. The chief point at issue was as to whether the defendants were responsible for the water becoming impure whilst passing through the service-pipes which connect their mains with the house of the consumer. The plaintiff admitted that the water was pure whilst in the defendants' mains, which are constructed of cast-iron, but held that it became contaminated whilst passing through the lead service-pipes, and was consequently unfit for consumption. In giving judgment, Mr. Justice Mathew said he was of opinion that it could not be successfully contended that the defendants were liable for contamination due to the material of the pipes, which was not selected by them. He regretted that the damages sustained by the plaintiff must remain without redress, but he was compelled to decide that the plaintiff had no cause of action against the defendants. Judgment must therefore be for the defendants, with costs.

In his "Sanitary Chronicles" of the parish of St. Marylebone for the month of October last, Mr. A. W. Blyth, the Medical Officer of Health, remarks that the mortality from pulmonary complaints was higher than usual, whilst that due to the other classes, including infectious fevers, was lower. Although scarlet fever had been remarkably prevalent in most other parts of London, the parish of St. Marylebone had been singularly free from anything approaching the magnitude of an epidemic, only two deaths from this cause having been recorded during the month under notice; whilst the number of cases reported had been rather less than in the corresponding period of even those years in which scarlet fever had not been considered unduly prevalent. The characteristic of October was one of almost unprecedented wet; out of the whole number of days, more or less rain fell on twenty-four. The effect of a wet season in cities is partly good and partly evil, Mr. Blyth remarks: the good effects are the washing of the streets and the flushing of the sewers, and the continuous purification of the air; the bad effects are more mental than constitutional. Those who read the daily journals cannot fail to have been struck with the number of cases of suicide which occurred during October: the exaltation of the animal spirits by sunshine and clear skies, and their depression in dark, gloomy weather, are phenomena far too well known to need pointing out or illustrating.

The Registrar-General for Scotland records, in his monthly return for November last, that during that period there were registered in the eight principal towns of North Britain the births of 3494 children, and the deaths of 2420 persons. Allowing for increase of population, the latter number is 52 under the average for November during the last ten years. A comparison of the deaths registered shows that during the period the mortality was at the annual rate of 20 deaths per thousand persons in Edinburgh, Aberdeen, and Greenock; 21 in Leith, 22 in Perth, 25 in Dundee, 26 in Paisley, and 27 in Glasgow. Of the 2420 deaths, 1000, or 41·3 per cent., were those of children under five years of age. The miasmatic order of the zymotic class of diseases proved fatal to 384 persons, and constituted 15·9 per cent. of the whole mortality. This rate was, however, exceeded in Glasgow, Dundee, and Perth. Whooping-cough was the most fatal epidemic, having caused 91 deaths, or 3·8 per cent. of the whole mortality; 57 deaths were caused by scarlet fever, 45 by diphtheria, 45 by croup, 43 by diarrhœa, 27 by measles, and 4 by dysentery. The deaths from inflammatory affections of the respiratory organs (not including consumption, whooping-cough, or croup) amounted to 644, or 26·6 per cent.; those from consumption alone numbered 223, or 9·2 per cent. Five males and five females were aged ninety years and upwards, the oldest of whom was a widow ninety-seven years of age.

At the West Riding Sessions, held recently at Leeds, Mr. W. S. Stanhope, in presenting the report of the Lunatic Asylum at Wakefield, remarked that it was matter for regret

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that there was an alarming increase in lunacy throughout the Riding, especially as they had every reason to believe that drunkenness—one great cause—was every year diminishing. It appeared, happily, however, from Mr. Stanhope's own statement that in reality the increase was not an increase of lunacy, but of lunatics sent to the Asylum. It amounted to 142 in excess of last year, and was due to the action of the Poor-law Guardians, who were pressing upon the asylums cases of chronic lunacy which might very well be treated in the union workhouses as long as there was room. In asylums, he pointed out, the committees had no power of peremptorily excluding such cases. The matter, he thought, was one that should command the attention of the magistrates and members of Parliament then present.

On the 29th ult. Mr. Campbell, M.P. for Glasgow and Aberdeen Universities, was accidentally shot in the eye during a *battue* at Stracathro. A pellet entered the side of the face over the eye, and, passing along the white of the eye, came out at the other side. Dr. Wolfe was immediately telegraphed for from Glasgow, and on his arrival an examination was made, but of course the exact degree of injury could not be accurately determined, though Dr. Wolfe was in hopes that the sight of the injured eye would not be lost.

COURT APPOINTMENTS.

Dr. Wilson Fox, who has for many years been one of Her Majesty's Physicians Extraordinary, has been made one of her Physicians-in-Ordinary, in the vacancy created by the death of Sir Thomas Watson; and the vacancy thus made among the Physicians Extraordinary has been filled by the appointment of Dr. Owen Rees. These appointments are fresh examples of the excellent judgment and care that has almost invariably been shown in the selection of the members of the Medical Department of Her Majesty's Household; and both will give satisfaction to the profession at large.

ROYAL COMMISSION ON IRISH PRISONS.

The warrant nominating the Royal Commission to inquire into the administration, discipline, and condition of Irish prisons, both local and convict, was published in the *London Gazette* of last Tuesday, January 2. The Commission will be presided over by Sir R. Cross, M.P., and will consist of the following:—The Hon. W. St. John Brodrick, M.P. (eldest son of Lord Midleton); E. R. Wodehouse, Esq., M.P. for Bath; Dr. Robert M'Donnell, Dr. George Sigerson, N. D. Murphy, Esq., late member for the City of Cork; and T. A. Dickson, Esq., M.P. Major A. B. M'Hardy has been appointed secretary to the Commission. The specific matters into which the Commission is directed to inquire are (1) the recommendations contained in the report of 1879, presented by the Commissioners appointed to inquire into the working of the Penal Servitude Acts, and the desirability of adopting and carrying out the same in the Irish prisons. (2) The working of the recent amalgamation of the administration of local and convict prisons in Ireland. (3) The independent inspection by visiting committees of local justices or otherwise. (4) Whether the safe custody of persons confined in local prisons is adequately and efficiently provided for. (5) The points of difference at present existing between the prison systems in England and in Ireland, and the desirability of rendering the two systems as nearly as may be uniform.

MOREHEAD MEMORIAL FUND.

We have pleasure in noticing that a committee has been formed in Bombay for the purpose of raising funds to endow a scholarship or exhibition in the Bombay University in memory of the late Dr. Morehead, C.I.E., whose eminent services as the first Principal of Grant Medical College—whose researches on Indian diseases—and whose successful labours in the cause of medical education in Western India are universally acknowledged. The movement has been hitherto known only to a few of Dr. Morehead's brother medical officers now in England, whilst many others, who might sympathise with it, have not been informed. It is thought, moreover, that not only members of the medical profession generally, but many former friends and contemporaries, who were acquainted with the valuable work Dr. Morehead performed, should have an opportunity of testifying their regard for his memory, and of joining in the only useful way now possible of perpetuating his name as a great benefactor to the natives of India. At the request of the Bombay committee, Dr. Giraud (Shanklin, I.W.) and Dr. W. C. Coles (Bourton-on-the-Water, Gloucestershire) have consented to receive and acknowledge subscriptions, and forward them to Bombay.

HYDROPHOBIA SUCCESSFULLY TREATED BY PILOCARPINE.

A case of hydrophobia which occurred in May last in the practice of Dr. Denis Dumont, of Caen, has been inquired into by a committee of the Academy of Medicine of Paris. In a shepherd, who had been bitten in the arm by a rabid dog on April 16, symptoms of hydrophobia manifested themselves on the night of May 21 and 22, and he was soon after admitted into the hospital, where, after morphia injections, bromide of potassium, and codeia had been employed without any result, Dr. Denis Dumont tried the effect of the hypodermic administration of pilocarpine in doses of one centigramme. Profuse perspiration and salivation set in, followed by almost immediate relief, and in a few days recovery was complete. The committee admit that they had not such positive evidence as they could have wished to enable them to determine whether the case were one of real or imaginary hydrophobia, but the entire course of symptoms was so characteristic of the genuine disease, and the improvement so clearly coincident with the physiological action of the pilocarpine after other remedies had proved useless, that they had no doubt on the question, and the Academy, without hesitation, in entering the report of the committee in their *Transactions*, accorded a vote of thanks to Dr. Denis Dumont.

THE METROPOLITAN WATER-SUPPLY FOR NOVEMBER LAST.

The report of the Metropolitan Water Examiners for the month of November last affords an incontestable proof that, where the supply is derived from rivers, the companies can never, under existing arrangements, regulate the quality of the water furnished by them to a given standard; but that, as is the condition of the water before filtration, so will its quality be after that operation is completed. The state of the water in the Thames was, according to Colonel Bolton's report, bad in quality from November 1 to 3, when it improved. On the 12th it again became bad, slightly improving on the 16th, in which condition it remained to the end of the month. The river was in a state of flood, Colonel Bolton adds, during the whole of the month, and was much polluted by the effluent waters bringing down from the land large quantities of marl and clay, as well as decayed vegetation and other impurities, which stained the water and rendered it exceedingly turbid. The impurities in suspension were, to a great extent, removed by filtration, but those in solution passed through the filter-beds, causing even the filtered water to be stained with a peaty brown colour. While these floods prevail, Colonel Bolton explains, water companies that are unprovided with sufficient storage

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reservoirs are compelled to take in dirty water. The water in the river Lea was no better than that in the Thames, and the official report returns it as in a bad condition during the greater part of the month. Turning to Dr. Frankland's November report, we find that the Thamas water supplied by the Chelsea, West Middlesex, Southwark, Grand Juction, and Lambeth Companies was of considerably worse average quality than that supplied during any previous month of the year. Excepting that of the Chelsea Company, the water was unfit for drinking, although all these supplies, except that of the Southwark Company, were efficiently filtered. Of the water drawn from the Lea, that distributed by the New River Company was much inferior to the supply of the previous month; whilst the East London Company's water was better than any of the Thames waters, and was efficiently filtered. The great deterioration since the previous month, Dr. Frankland remarks, in the quality of the river-waters was due to the heavy rain and consequent floods. But, undisturbed by causes of this kind, the deep-well water furnished by the Kent and Colne Valley Companies was of its usual excellent quality for drinking purposes.

VAGINAL CYSTS.

Dr. A. Lebedeff, of St. Petersburg, contributes to a recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* an account of a case of cysts in the vagina, on which he makes some interesting comments. The patient was aged seventeen, and complained of white discharge and abdominal pain. She was weak and anæmic. The vagina was small, but not virginal. In the *cul de sac* to the right of the cervix was a cyst of the size of a hazel-nut, and behind the cervix another as large as a hen's egg. The cysts were punctured, and colourless, tenacious fluid withdrawn. That from the small cyst was clear, and about one cubic centimetre in quantity; that from the large cyst was cloudy, and measured about five cubic centimetres. A bit of the wall of each cyst was cut out, and the interior rubbed with lunar caustic; and this treatment was successful in procuring their disappearance. Histologically, the examination of the larger cyst was of much interest, for it showed in places a transition from columnar to pavement epithelium; at one part ordinary columnar epithelium, and at others similar cells set obliquely, the obliquity gradually increasing, until the cells came to be first almost, and then quite, horizontally superimposed upon one another, as in pavement epithelium. Dr. Lebedeff remarks upon the origin of these cysts. *À priori*, one would think they were probably retention cysts, resulting from the stopping-up of the duct of a gland. This view has not been commonly held, for the reason that so many good observers do not believe in the existence of glands in the vagina such as could give rise to cysts like these. But while many, after careful search, have failed to find glands in the vagina, there are others who have been more fortunate, and have seen and described them; and in a question of this kind, of course, positive testimony outweighs negative. Preuschen, one of those who has found glands in the vagina, describes them as being lined with ciliated epithelium, but having their excretory ducts provided with pavement epithelium. Luschka, another observer who has been fortunate enough to find these glands, states that they are most abundant at the upper part of the vagina. The statements of these observers harmonise with the view that the cysts in Dr. Lebedeff's case were true retention cysts of pre-existing vaginal glands. Dr. Lebedeff's own conclusion as to the matter is the following:—"That now and again true glands occur in the vagina, although they are not constant. The rare occurrence of vaginal glands does not oppose the theory of the development of vaginal cysts from them, but rather supports it; because vaginal cysts are as rare a pathological occurrence as vaginal glands are rare physiologically."

THE LATE MR. C. M'IVHOR GOYDER, L.R.C.P., M.R.C.S.

We understand that at a meeting of the leading medical men of Newcastle-on-Tyne, held at the Infirmary on Friday last, it was decided that a clinical scholarship, to be called the Goyder Scholarship, should be founded in memory of Charles M'Ivhor Goyder, a young and already distinguished practitioner in Newcastle, who died in December last, from typhus fever, at the age of twenty-six. In 1874, Mr. Goyder gained a medical scholarship of the University of Durham, and then commenced his medical studies in the Newcastle-on-Tyne College of Medicine. All through his student career he showed very marked ability, as well as great and steady industry; and was the most distinguished student at the College. After becoming a member of the Royal College of Surgeons, he held successively the offices of Junior and Senior House-Surgeon to the Newcastle Infirmary; and only about a year ago he left the Infirmary to take a practice in Newcastle. That he had, though so young, won in a remarkable degree the warm regard and esteem of his medical brethren, is proved by the proposal to establish a scholarship to perpetuate his name in the Newcastle School of Medicine.

VITAL STATISTICS OF IRELAND FOR THE SEPTEMBER QUARTER OF 1882.

The quarterly return of the Irish Registrar-General for the three months ending September last, gives the number of births registered in Ireland during that period as 29,879, and the number of deaths as 18,354. The former was equal to an annual birth-rate of 23·1 in every 1000 of the estimated population, the latter representing an annual rate of 14·4 per 1000. In England, during the same period, the birth-rate represented was 33·1 in every 1000 of the estimated population, and the death-rate 17·7. The birth-rate in Ireland during this third quarter of 1882 was under the average rate for the corresponding quarter of the previous five years, to the extent of 1·4 per 1000 of the population, and it was also 1·4 per 1000 under the rate for the third quarter of the year 1881. The deaths, on the other hand, were above those registered in the corresponding quarter of the preceding year, to the extent of 396; the death-rate was 0·4 per 1000 above the rate for that quarter, but 0·8 under the average for the third quarter of the five years 1877-81. In the return under notice, separate statistics are given for the urban sanitary districts, which comprise a population of about one-fifth of the total of the country, and from these it will be found that the birth-rate was 28·0, and the death-rate 21·2 per 1000. The number of deaths returned by the registrars as having resulted from the seven principal zymotic diseases was 1759, or 9·6 per cent. of the total deaths; this number is 179 over the number for the corresponding quarter of last year, but 1298, or 42 per cent., under the number for the third quarter of 1880. Small-pox caused only 5 deaths against 33 in the preceding quarter; measles caused 259 deaths, being 39 under the number for the preceding quarter, but 224 in excess of the number for the third quarter of the year 1881. Of the 18,354 deaths registered in this quarter, 2542, or 13·8 per cent., were of children under one year old; and 6874, or 37·5 per cent., were of persons aged sixty years and upwards. The deaths of infants under one year old are equal to 86·5 per 1000 of the births registered. In the province of Leinster the number of deaths of children under one year old equalled 15·7 per cent., and of persons sixty years old and upwards 34·4 per cent. of the total registered there-

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in; in Munster, 12·8 per cent. and 41·4 respectively; in Ulster, 13·1 per cent. and 35·8 per cent.; and in Connaught, 13·6 per cent. and 41·5 per cent. In England during the same quarter the deaths of children under one year old formed 27·9 per cent. of the total mortality, and those of persons aged sixty years and upwards 22·8 per cent., the deaths of infants under one year old being equivalent to 150 per 1000 of the births registered. According to the returns of vaccination received for this quarter, there were 28,865 persons successfully vaccinated; in 2526 cases the operation was postponed, and 123 children were reported as insusceptible of vaccination. The deaths of 1397 unvaccinated children under three months old were registered during the period, making a total of 32,911 children with regard to whom particulars as to vaccination were ascertained. The notes sent in by the various registrars report the prevalence of the following diseases:—Measles in 56 districts, scarlet fever in 40, diphtheria in 4, and fever in 53 (typhus in 21, enteric in 15, and simple fever in 17). There were 549 inquests reported during the quarter, this number being equal to 1 in every 33 of the total deaths registered. The meteorological records for the quarter show a rainfall far above the average, rain having fallen on 29 days in July, 17 in August, and 21 in September.

THE PATHOLOGICAL SOCIETY OF LONDON.

THE annual meeting was held on Tuesday last, the 2nd inst., when the under-mentioned officers were unanimously elected for the present year, viz.:—*President:* *John Whitaker Hulke, F.R.S. *Vice-Presidents:* William Bowman, F.R.S., William Henry Broadbent, M.D., Thomas Buzzard, M.D., Andrew Clark, M.D., John Croft, *Arthur Edward Durham, Jonathan Hutchinson, F.R.S., *Samuel Wilks, M.D., F.R.S. *Treasurer:* George Johnson, M.D., F.R.S. *Honorary Secretaries:* *James Frederick Goodhart, M.D., Henry Morris. *Council:* Robert Barnes, M.D., John Cavafy, M.D., John Curnow, M.D., *Frederick Akbar Mahomed, M.D., *Joseph Frank Payne, M.D., *George Vivian Poore, M.D., R. Douglas Powell, M.D., *Frederick Thomas Roberts, M.D., George Henry Savage, M.D., Reginald Southey, M.D., W. Morrant Baker, *William Harrison Cripps, Alban Henry G. Doran, *Alfred Pearce Gould, Thomas Ridge Jones, M.D., John Langton, *R. Clement Lucas, Edward Nettleship, Robert William Parker, William Johnson Walsham. The gentlemen whose names are marked with an asterisk (*) were not on the Council, or did not hold the same office during the preceding year. The proceedings terminated with the usual vote of thanks to the retiring officers. We are compelled to defer our report of the meeting till next week, owing to want of space.

BETTER THAN DIGITALIS?

IN three recent numbers (44 to 46) of the *Wiener Medisinische Wochenschrift*, Dr. B. Stiller has reported twenty-one cases of heart disease treated by a Russian remedy which rejoices in the name of *Convallaria majalis*. The credentials with which Bogojawlensky sent the drug forth to the medical world were—that it affected animals in a manner analogous to digitalis; that it made an irregular pulse regular, diminished dyspnœa, and increased the amount of urine; and that it did not suffer from the failings of digitalis in the way of *cumulative* effects. Another set of observers, Bötkin and Troitzky, confirmed these claims, and further lauded the use of the drug in cases of nervous palpitation. At the end of last year other Russian physicians corroborated previous accounts, and, moreover, praised the remedy as of value in exophthalmic goitre. It would appear that convallaria contains two glucosides, one of which was pointed out as a heart poison by Marmé in 1867, and this, given in small doses to warm-blooded creatures, prolonged the cardiac stroke without raising the blood-pressure. It is further stated that the plant was formerly employed as a diuretic, and popularly also in epilepsy and neuroses generally. In the course of the present year Germain Sée (*Tribune Médicale*, No. 16) employed a watery extract, in experiments on animals and clinically, instead of the usual infusion; according to him the watery extract regulates the frequency and rhythm of the heart-beats, increases the strength of the contractions, raises the blood-pressure, lessens the shortness of breath, and causes polyuria. He prefers the drug to digitalis because it does not produce cumulative effects, does not upset the stomach, and its use is not hampered by contra-indications. Stiller used the infusion, and observed no unpleasant symptoms, *e.g.*, nausea, vomiting, diarrhœa. The taste is bitter, but not disagreeable, and, at all events, nicer than digitalis. Seventeen persons were treated by Stiller, some for relapses, making a total of 21 cases, 15 of whom were males; the ages varied from eleven to seventy years, and the diseases were 4 cases of mitral insufficiency with aortic regurgitation, 1 of pure mitral regurgitation, 5 of regurgitant and stenotic mitral disease, 4 of mitral stenosis, 5 of weak heart with dilated left ventricle, and, lastly, 2 cases of Graves's disease—altogether a motley group of cardiac diseases. Out of the 21 cases, 17 gave absolutely negative results with convallaria—there was not the least influence on the frequency or rhythm of the heart's action, etc. Some of these cases proving intractable to convallaria were subsequently benefited by digitalis; two individuals experienced a certain degree of the diuretic effect of the new drug without any of the other vaunted phenomena, not even the dropsy being diminished; two patients underwent decided improvement in most of the cardiac symptoms during the use of the new medicine, but these cannot outweigh the large balance of negative results. Stiller, therefore, is unable to echo the praises of the liliaceous drug sounded in Petersburg and Paris. The explanation of the conflicting experiences may be found in the quality of the medicament, or in the mode of its preparation, on which features we are unable to give further particulars owing to absence of such information in the papers to which we have referred.

THE HEALTH OF THE PORT OF LONDON.

IN his half-yearly report for the period ended June 30, 1882, Dr. Collingridge, the Medical Officer of Health for the Port of London, remarks that the system of inspection has been modified and re-arranged in such a manner as to make it more thorough and searching, and, so far as practicable, in accordance with the dictates of modern sanitary science. During the early part of the year rather a large number of cases of small-pox were discovered on board vessels within the limits of the port; these were almost all distinctly traceable to the epidemic of the disease then prevalent in the metropolis. On May 25 the *Persian Monarch* arrived in dock with a passenger suffering from typhoid fever; in this case the existence of any disease had been denied at Gravesend, the vessel reporting "all well." Although the medical officer on board informed Dr. Collingridge that the man in question had suffered from the disease during the whole of the voyage, this statement was withdrawn when the matter was taken up by the Customs, and therefore no further proceedings were taken; but it certainly does seem, Dr. Collingridge observes, that if definite and decided action be not taken in any case where disease is not reported at the boarding station, the questions put are almost useless, and unless such vessels can be detained at the entrance of the port until any cases have been removed to hospital, London

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cannot be considered as fairly protected against the importation of any infectious disease other than cholera, plague, and yellow fever, for which diseases special arrangements exist. On June 8 it was notified to Dr. Collingridge by telegram that the *Warwick Castle* was coming up the river with a case of scarlet fever on board; he at once proceeded to the docks, but the vessel had been in about twenty minutes, and, owing to a careless mistake, the man had been allowed to go to his own home. Notice was at once sent to the sanitary authority in whose jurisdiction he lived, and representations made to the owners of the vessel as to the danger and inadvisability of such a course of proceeding; the latter have, in consequence, made arrangements to prevent a recurrence of it. During the period under notice, the report says, the general health of the boys on the training-ships in the river has been remarkably good. With reference to the condition of the river Thames, a circular addressed to those having business near to or upon it has produced an almost unanimous expression of opinion that a serious nuisance is caused by the outflow of sewage. Owing, however, to the exceptionally low temperature during the early part of the last summer, and the large amount of rainfall, there has been less nuisance, Dr. Collingridge remarks, than is usual during the hot months of the year. During the last week of June, however, the water in the river began to assume what may be called its summer condition. Lastly, the report observes that a very noticeable feature, to those acquainted with the health of seamen in the port of London, has been the gradual increase in the number of outbreaks of scurvy. Since the compulsory issue of lime-juice to British vessels, Dr. Collingridge fears that owners and others have been too ready to rely mainly on its antiscorbutic properties, to the exclusion of other important and essential articles of food, and a compulsory and liberal diet-scale is, he thinks, much wanted.

GLASGOW HOSPITAL FOR SICK CHILDREN.

The Hospital for Sick Children in Glasgow, of which we gave a brief account a few weeks ago, was formally opened by Mr. A. Orr-Ewing, M.P., on Wednesday, December 20. This is the first institution especially devoted to children that has been opened in Glasgow; and it is evident, both from the remarks that fell from the various speakers, and from the large company that were gathered together at the opening ceremony, that it is likely to receive hearty support from the public. A debt of some £6000 has been incurred during the building, but it is thought that there will be no difficulty in raising, by subscriptions, this sum, and also an income of £3500 a year, which it is estimated will suffice to maintain the Hospital in full working order.

NEW REMEDY FOR SYPHILIS.

Professor Liebreich brought forward, at the last meeting but one of the Berlin Medical Society, a new drug for the treatment of syphilis by the subcutaneous method. This drug rejoices in the name of hydrargyrum formidatum, and is, therefore, merely a different form of the old cure for syphilis. The mode of its preparation was not stated; chemically, it belongs to the amide group, in whose structure the monovalent amidogen (NH_2) plays an important part. Liebreich was led to think of this new preparation from the notion that the ordinary amides of the body, of which urea may be regarded as the principal one, pass out of the organism in an undecomposed state; when, however, an amide is in combination with a metal, decomposition readily occurs, and the metal is reduced and deposited. Liebreich repeated his experiments before the Society, and showed that these conjectures were quite true for the metal mercury. It is supposed, therefore, that the formamide of mercury, after the hypodermic injection, undergoes disintegration; and so the mercury is set free, and is able to exert its well-known power over the lesions of syphilis. The preparation is easily soluble in water, is of neutral reaction, does not coagulate albumen, is not precipitated by caustic soda, and the presence of mercury can be demonstrated by means of sulphide of potassium. The drug, when injected under the skin, produces its effects very surely and rapidly. This is not regarded as a disadvantage, for the medicine is said to be easily borne, and has never produced salivation in Liebreich's hands. There is very little pain attendant on the injection, which has never excited any inflammation. From a half to a whole of a Pravaz syringeful (a 1 per cent. watery solution) may be injected twice or thrice daily. Liebreich looks on the preparation as the best we yet have or subcutaneous injection.

RESULTS OF LISTERIAN ABDOMINAL SECTION.

We understand that in 1882 Mr. Knowsley Thornton performed strict Listerian abdominal section at the Samaritan Hospital 57 times with 53 recoveries and 4 deaths. The recoveries includes 39 ovariotomies, 2 hysterectomies, 2 removals of uterine appendages, 4 exploratory operations, 2 nephrectomies, 1 hepatotomy for hydatids, 1 Porro, 1 removal of extra-uterine fœtation, and 1 herniotomy for omental hernia. The fatal cases include 2 ovariotomies and 1 incomplete ovariotomy (two of these were malignant cases, and the third died of obstructed intestine). The fourth death was in a case of hysterectomy, the patient dying of septicæmia on the fifth day. It is worthy of remark that Mr Thornton's esults in ovariotomy exactly correspond with those of his hospital practice in 1881, when he had also 41 ovariotomies with 2 deaths, both malignant cases. There were 4 hysterectomies in 1881, with 1 death. The total for the two years is 108 abdominal sections with 7 deaths, or a mortality of 6·48 per cent.

MORE ABOUT THE BACILLUS OF TUBERCLE.

We learn from the *Wiener Med. Woch.*, No. 51, that Professor Balogh, speaking recently before the Royal Medical Society of Buda-Pesth, stated that he had detected, in the marshes surrounding Buda-Pesth, a bacterium which behaves very like the bacillus of tubercle, but which he appears not to regard as such. He contends that neither the form nor the staining with dyes is sufficient to distinguish the varieties of Schizomycetes (fission-fungi). Experiments were conducted in which animals were allowed to inhale the fission-fungi of the marsh, with the result that, on post-mortem examination, little nodular growths were found in the lungs, heart, and kidneys; in the nodules the fungi were found in various stages of development, and the rod shapes stained with methylin-blue and vesuvin, just as do the bacilli of tubercle. Inoculation with bacteria from scarlatinal urine, and from ordinary sputa of bronchitis, gave rise to similar nodular growths which were not considered to be "tubercle." Professor Koryanyi mentioned a case of a phthisical patient suffering from syphilitic lupus, which had improved under the use of iodide of potassium. In the sputa of this case, which was regarded as one of pulmonary syphilis, the bacillus of Koch was detected; hence Koryanyi holds that the presence of this bacillus is not a sure sign of "tuberculosis." We know of no more difficult questions than those raised by such observations. They seem always capable of more than one interpretation. It is possible that the bacillus found in the fens is identical with that supposed to be the cause of tuberculosis. Again, the notion that morphological appearances are not enough to split the group of the fission

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fungi into varieties, has been upheld by eminent botanists. The remarks above reported raise again also the difficult question as to what is to be called tubercle. We may repeat here what we have elsewhere said, that various causes may give rise to products which to our senses are similar and indistinguishable.

PARKES MEMORIAL PRIZE.

THE triennial Parkes Memorial Prize of £100, with gold medal (value £15), has been awarded to Mr. R. J. Polden, B.A., M.B. Univ. Dub., Officiating Surgeon to His Excellency the Viceroy and Governor-General of India, for his essay "On the Effects of Hygienic Measures in arresting the Spread of Cholera." The subject for the next prize is the following:—"On the Prevention of Disease among Troops during Military Operations in Tropical and Subtropical Climates"; to be illustrated as far as possible from the personal experience of the author. Essays to be sent in to the "Committee of the Parkes Memorial Fund," care of the Secretary (Surgeon-Major G. E. Dobson, M.B.), Royal Victoria Hospital, Netley, on or before December 31, 1885. Each essay to have a motto, and to be accompanied with a sealed envelope bearing the same motto, and containing the name of the competitor. The competition is open to the medical officers of the Army, Navy, and Indian Services, of executive rank, on full pay, with the exception of the Assistant-Professors of the Army Medical School during their term of office.

THE PARIS WEEKLY RETURN.

THE number of deaths for the fifty-first week of 1882, terminating December 21, was 1202 (638 males and 564 females), and among these there were from typhoid fever 84, small-pox 9, measles 18, scarlatina 1, pertussis 5, diphtheria and croup 35, dysentery 1, erysipelas 9, and puerperal infections 9. There were also 45 from acute and tubercular meningitis, 197 from phthisis, 34 from acute bronchitis, 81 from pneumonia, 83 from infantile athrepsia (33 of the infants having been wholly or partially suckled), and 40 violent deaths (22 males and 18 females). The number of deaths registered this week exceeds the mean of the last four weeks. The deaths from typhoid fever have risen from 49 in the fiftieth week, to 84. The number of admissions to the hospitals in the week continues the same (172) as last week. For the last five weeks the deaths from this disease had been progressively diminishing from 120 to 79, 73, 62, and 40, and the admissions to the hospitals from 294 to 221, 171, 185, and 171, so that the increase of 35 deaths for this week is quite unexpected; as, however, it is not the result of an increased number of admissions, it can only be due to those accidents of convalescence which are so frequent and redoubtable in this disease, and should not give rise to alarm at aggravation of the epidemic. The births for the week amounted to 1208, viz., 630 males (461 legitimate and 169 illegitimate) and 578 females (421 legitimate and 157 illegitimate): 119 infants were either born dead or died within twenty-four hours, viz., 64 males (45 legitimate and 19 illegitimate) and 55 females (38 legitimate and 17 illegitimate).

LYING-IN AND SAMARITAN HOSPITALS, LIVERPOOL.

A NUMEROUSLY attended special meeting of the subscribers to the Ladies' Charity and Lying-in Hospital was held on the 29th ult., when it was resolved that £1500 be handed over to the Committee of the New Samaritan Hospital, on the understanding that the latter would in future undertake the treatment of the special diseases of women. The Committee of the Samaritan Hospital have now raised from all sources £3100, and they intend, as soon as a suitable house is obtained, to commence the treatment of the 13,000 patients that annually flocked to the old Dispensary. Provision is also being made for the treatment of a limited number of indoor patients. The medical staff has not yet been formally appointed. The Ladies' Charity and Lying-in Hospital will be devoted in future to lying-in cases, and it is contemplated to provide a hospital for the treatment of cases that have no suitable home.

RARE COMPLICATION OF ENTERIC FEVER.

ABSCESS in the liver, occurring in the course of typhoid fever, has been recorded once by Hudson, and pyæmic deposits have been noticed once each by Louis and Frerichs. Murchison has seen a yellowish substance in the liver, probably of the nature of an infarct. Von Sidlo has put on record a probable case of hepatic abscess. So far as we know, these are all the instances in which this affection has been observed as an epiphenomenon in the course of what the Germans call "abdominal typhus." A fresh example is afforded by the publication of a case (*Berliner Klin. Woch.*, No. 51) by Dr. Asch, late assistant at the Strasburg Clinic for Children. If the hepatic disease be uncommon in adults, it appears to be even more so in children. Von Sidlo's case affected a girl aged ten years. The present example occurred in a boy aged twelve years, who suffered from a fairly severe attack of enteric fever. The course of the affection was of the usual uninterrupted character until the twenty-first day, when vomiting occurred, and this symptom was repeated on the next few days. On the twenty-seventh day of the illness there was a sharp rigor with a high temperature (106° Fahr); this was followed two days later by severe pain in the right of the epigastrium; there was much tenderness just below the right costal margin, and here there was evidently a tumour whose characters it was not easy to diagnose owing to the hyperæsthesia. No fluctuation was felt; the spleen was not enlarged; there was no jaundice, nor any fulness of the epigastric veins. The rigor was not repeated. There was hectic fever with profuse sweats and faintings. Death happened on the thirty-fifth day of the disease. According to the reporter, the diagnosis lay betwen loculated purulent peritonitis and hepatic suppuration. The post-mortem examination revealed typhoid ulceration of the intestines which had healed; suppuration of the lymphatic glands in the neighbourhood of the ileo-cæcal region; and several (eight to ten) pyæmic abscesses in the right lobe of the liver, purulent infection having doubtless spread along the mesenteric veins into the hepatic ramifications of the portal system. Opponents of the doctrine of infection would probably interpret the suppuration as a spontaneous formation of pus due to general conditions, but we think the infective view much more likely to be the true one in this case.

THE CLINICAL SOCIETY.

THE following is the list of the officers and Council of the Clinical Society, proposed for election for the year 1883, viz.:—*President:* *Andrew Clark, M.D. *Vice-Presidents:* William Henry Broadbent, M.D., Frederick William Pavy, M.D., F.R.S., *Reginald Southey, M.D., John Croft, *Arthur Ed. Durham, and George Lawson. *Treasurer:* Christopher Heath. *Council:* John Cavafy, M.D., William Richard Gowers, M.D., *Robert Liveing, M.D., *Robert James Lee, M.D., *Frederick Akbar Mahomed, M.D., Wm. Miller Ord, M.D., George Henry Savage, M.D., *T. Gilbart Smith, M.D., Frederick Taylor, M.D., J. Burney Yeo, M.D., *Arthur E. J. Barker, Rickman John Godlee, M.S., Henry Greenway Howse, M.S., *R. Clement Lucas, F. Howard Marsh, *John Hammond Morgan, Herbert William Page,

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Robert William Parker, William J. Walsham, and Edwin T. Watkins, M.D. *Honorary Secretaries:* Sidney Coupland, M.D., and J. Warrington Haward. The gentlemen whose names are marked with an asterisk (*) were not on the Council or did not hold the same office during the preceding year.

Her Majesty has been graciously pleased to nominate the following gentlemen to be Companions of the Order of the Indian Empire:—Surgeon-Major James Edward Tierney Aitchison, M.D., Indian Medical Department, Bengal; and Surgeon-Major George Bidie, M.B., Indian Medical Department, Madras, Superintendent of the Central Museum at Madras.

Mr. Lawson Tait has been elected an Honorary Fellow the American Gynæcological Society.

We are informed that the eighth session of the International Medical Congress will be held at Copenhagen in 1884, commencing on August 10.

HEALTH OF SALFORD, 1881.

In October last Dr. Tatham issued his thirteenth annual report on the health of Salford, dealing with the year 1881. He congratulates the Health Committee on being able to show a lower death-rate, especially from preventable diseases, than on any previous occasion—viz., 22·5 per 1000 in 1881, against 28 as the mean of the preceding sixteen years, or a reduction of 5·5 per 1000 inhabitants, equal to a falling off of 19·6 on the annual mortality,—but he cautions them against attributing this entirely, or even chiefly, to their efforts at sanitary improvement, on the ground that a like reduction has occurred in most large towns, and has moreover been too sudden to be referred to other than meteorological conditions, ill understood though they may be. The death-rate of Salford is 17 per cent. less than in the years 1877-80, in which it was but 3·2 per cent. less than in the previous ten years. In Bradford the reduction has been 15·5, and in Sheffield 11·7 per cent., compared with the four years immediately preceding.

Dr. Tatham calls attention to the smoke nuisance from which Salford suffers in common with all manufacturing towns, and the little success that has attended such efforts as have been made for its abatement. Its effects on the health of the town may be judged from the fact that while in the Combined Sanitary District of Mid-Cheshire, the inhabitants of which are not more prosperous or better fed, and who are subject to the same climatic influences, the mortality from diseases of the lungs is 334 per 100,000 living, that in Salford is no less than 598; and he insists on the necessity of appointing a smoke inspector who shall devote his whole time to the work.

Dr. Tatham dwells at some length on several abuses in which Salford holds an unenviable position among the twenty large towns, viz.: the large proportion of uncertified deaths, and the corresponding fewness of inquests; the high infantile mortality—28 per cent. of all deaths; and the enormous number of infants buried as still-born, 200 out of 299 being accompanied by certificates from midwives only. He considers that many of these were suspicious; indeed, in one case a midwife was convicted of giving such a certificate on account of an infant who died in consequence of hæmorrhage from an imperfectly secured funis.

In an epidemic of scarlatina great assistance was afforded by a schoolmaster who voluntarily informed Dr. Tatham whenever a pupil was absent, thus enabling the Sanitary Authority to detect many cases which would have escaped notice—the patients belonging to the better class of artisans, and being attended by private practitioners, who, however, gave very little assistance in securing the isolation of the cases.

Seven deaths from small-pox, and the same number from typhus, occurred in the year 1881; but the epidemics were soon stamped out. Measles and scarlatina were less fatal than usual, the deaths having been 38 and 84, against a corrected decennial average of 160 and 196 respectively. Enteric fever and diarrhœa showed a like falling off, numbering 42 and 160 deaths against an average of 84 and 347 in former years. But the lower infant mortality of 28 per cent. of deaths at all ages, high though it be, was partly owing to the low birth-rate, viz., 10 per cent. below that of the last ten years. It would be much more satisfactory if the infant mortality were always calculated on the mean number of *births* in the same year, and in that immediately preceding, instead of on the total *deaths* at all ages. An obvious source of fallacy would thus be avoided.

Dr. Tatham's tables, following the improved classification of the causes of death recently issued from the Registrar-General's Office, maintain their usual excellence. And we would again call attention to the coloured graphic representation of the mortality at different ages from diarrhœa, along with the meteorology of the year, on the plan first suggested by Dr. George Buchanan, as deserving of general imitation.

In compliance with 2868 notices issued to owners of property, 7256 separate nuisances were abated without the imposition of a single fine. Nearly eleven tons of unsound meat were confiscated, which was about the same quantity as in former years; but the working of the Adulteration Act showed its fruits in a considerable reduction in the percentages of samples of milk, butter, groceries, etc., found to be falsified. No drugs were examined, although an average of 25 per cent., and in one year (1878) not less than 51 per cent., had been formerly found to be adulterated.

The cases of infectious diseases removed to the Fever Hospital were 171 in the year. Pauperism in Salford has nearly doubled in ten years.

THE METROPOLITAN ASYLUMS BOARD HOSPITAL REPORTS.

A very interesting report was presented to the Committee of Management of the Fulham Small-pox Hospital by Mr. Sweeting, the Medical Superintendent, on the working of the institution during the year 1881; some of the details of which were noticed in our issue of August 26. The year in question was, he says, far more important than any other since the establishment of the Hospital—a statement which is proved by the fact that about five-twelfths of the total admissions since 1877 occurred last year, also five-twelfths of the total deaths since the same period. On the last day of 1880 there were 52 patients remaining in the Hospital, 37 being convalescents; on January 7, 1881, the number had reached 100, and on February 4 exceeded 200. On April 2 there were 250 patients; and it was during this month that the greatest pressure was felt, 296 being admitted from twenty-one parishes, and 355 being refused admission. The maximum number during the year (309) was reached on April 26, the surplus 9 consisting for the most part of infants with mothers, and small children sleeping with each other. On May 14 the scheme of drafting convalescents to the camp at Darenth came into operation, and relieved the great pressure; but, in spite of constant drafting of these convalescents at the rate of 35 a week, the number in hospital remained above 250 until July 6. The total number of cases admitted during 1881 was 1952; of these 255 died, and 1745 were discharged, leaving 4 uncompleted cases under treatment on December 31 last. As an instance of the reckless manner in which small-pox is spread, Mr. Sweeting relates that 3 cases presented themselves at the Hospital in public hackney cabs, and 38 walked in. The total percentage mortality on completed cases was 14·18; of the 1752 acute cases of small-pox, 1355 were vaccinated, 187 were "doubtful," and 210 unvaccinated. The mortality per cent. was 7·30, 31·01, and 44·28 in the three classes respectively. The report calls attention to

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the small number of well-vaccinated persons met with, and to their immunity from death; and the necessity for some improvement in the present vaccination system is likewise suggested. During 1881 an outbreak of scarlet fever occurred in the Fulham Hospital, both amongst the staff and the patients, 10 of the former being attacked, and 3 of the latter. The first case was an assistant night-nurse; but how she contracted the fever was scarcely satisfactorily explained. She was immediately transferred to the Stockwell Fever Hospital, as were the other nine members of the staff, and all recovered. As might be expected to result, Mr. Sweeting observes, from the numerous vaccinations and revaccinations that would take place during the panic of an epidemic, numerous instances of concurrent variola and vaccinia were noted, due to the performance of vaccination during the incubation period: 31 such cases were noted during the year; in 18 the vaccination being primary, and in 13 a repetition.

The annual report of the Stockwell Fever Hospital for the year 1881, presented by Mr. P. H. McKellar, the Medical Superintendent, shows that during this period 1223 persons were admitted, 1108 were discharged, 156 died, and 8 were transferred to the neighbouring small-pox hospital; these latter included 7 persons suffering from small-pox who were admitted on certificate before the nature of the illness had fully declared itself. Of the 156 deaths, 10 occurred within twenty-four hours after admission. Two persons also expired during removal; in each instance the dead body was taken in, but the two cases are not included in the foregoing statistics. Three of the persons admitted are described as being in usual health: these include a woman who was admitted for the purpose of suckling her infant suffering from scarlet fever; a suckling infant whose mother, though suffering from scarlet fever, insisted on keeping it with her, and, as it happened, without any untoward result; and an infant born in the Hospital, which remained with its mother until she was discharged in the usual course. The general death-rate, calculated by the method authorised by the Board, was 12·5 per cent. Several cases of simultaneous scarlet fever and whooping-cough were admitted; and in this way two other children, admitted with scarlet fever only, contracted whooping-cough, but eventually recovered. Ten female officials of the Fulham Small-pox Asylum were transferred to this Hospital suffering from scarlet fever: they all recovered. In addition to these cases a few inmates of the same Asylum were admitted suffering from small-pox and scarlet fever simultaneously; they were placed in isolated wards, and not in the general scarlet-fever wards, and all recovered.

MEDICAL REPORTS TO THE LOCAL GOVERNMENT BOARD.

Dr. Barry on the Sanitary Condition of Galgate, near Lancaster.

In the month of October last, Dr. Barry was commissioned by the Local Government Board to furnish a report upon the sanitary condition of Galgate—situate in the Rural Sanitary District of Lancaster—and on the prevalence of enteric fever in that village. Galgate is situated about four miles to the south of Lancaster, and has, as ascertained by Dr. Barry during his inspection, a population of 743 persons, chiefly engaged in either silk manufacture or agriculture. Dr. Barry's experience would appear to have convinced him, at the outset of the inquiry, that the water-supply was to be suspected. This throughout the village is obtained from surface wells, estimated to vary in depth, according to their site, from six to eighteen feet. There are seventeen of these wells in present use in Galgate proper, four having been closed by inhabitants themselves on account of their foulness; but regarding many of the others, the report says, there can be little doubt that from their surroundings they are equally subject to pollution. In dangerous, and often in close, proximity to many of them, are placed—besides heaps of general refuse, manure, and undrained pig-sties—large cesspit privies, the wet contents of which soak into the surrounding soil, these sources of nuisance being situated at a higher level than the wells. Enteric fever had been prevalent in Galgate for some time prior to Dr. Barry's inspection, nineteen cases, of which two proved fatal, having occurred in seven households. Previously, however, to this outbreak, it was stated that occasional cases had occurred in the village since the end of 1881, when the disease was apparently introduced from Ulverstone, where it was epidemic at the time. Unfortunately, both the medical man who attended some of the earlier cases, and the persons themselves who were first affected, had left the district before Dr. Barry's arrival on the spot, and it was therefore found impossible to trace any connexion between the outbreak of the present year and that which occurred in the previous December. The milk-supply of the affected households was inquired into, and found to be beyond suspicion; but an investigation into the water-supply showed that all the patients, with the exception of one, obtained their water from one particular well. An analysis of the water from this well showed that it was unfit for domestic use, whilst, from its surroundings, there could be no doubt as to its pollution by excremental filtration. The exact manner in which it became contaminated could not, however, be ascertained, owing to the fact before mentioned, that all the persons who suffered from the earlier outbreak had left the locality. The view that this particular well was the cause of the latest outbreak was further corroborated, the report remarks, by the fact that, after its disuse by the inhabitants, no further case of the fever occurred in Galgate. Before leaving the neighbourhood Dr. Barry had an interview with the Rural Sanitary Authority, and pointed out to them the urgent necessity which existed for at once carrying out the following recommendations, viz.:—The provision of a wholesome water-supply to those of the inhabitants of the village who are at present drinking from polluted sources; the immediate removal by the Authority of the present accumulations of ashes, manure, vegetable and other refuse, due precautions being taken for their efficient disinfection, before removal, under the advice of the Medical Officer of Health; and the provision of temporary means for the isolation of fever patients who cannot be isolated in their own houses, in anticipation of any extension of the present outbreak.

ASIATIC CHOLERA IN HOIHOW.(a)

With reference to the diseases that have occurred among the native population in Hoihow during the period under review, the most important thing that I have to report is that there has been an epidemic of Asiatic cholera. In the middle of July a steamer direct from Bangkok, where cholera was at the time prevalent, arrived here, and landed 270 passengers. Soon after I was informed by the Chinese that several natives were dying of a disease which they believed to be cholera, and this information was subsequently confirmed by myself. Though no information was given to anyone here of the fact, the newspapers reported that two deaths had occurred on board from cholera during the voyage; and as cholera showed itself near Pochin, where several of the passengers went to reside, the presumption is that cholera was brought to the island by the passengers conveyed here by the steamer from Bangkok above referred to. Though I feel sure that there had been several deaths from Asiatic cholera previous to August 8, it was not until that date that I was called in to see any well-marked case and was able to speak with certainty as to the nature of the epidemic.

At four o'clock in the afternoon of August 8, I visited a woman, aged forty-six, who up to 1 p.m. had been in good health, at which time she first complained of pain in the abdomen, which was followed by vomiting, diarrhœa, and cramp in the legs. I found her lying on the ground, speechless; she was, however, quite conscious, and made motions with her hands for me to give her something. The surface was cold, the eyes shrunken, cheeks hollow, lips and nails

(a) Extracted from Dr. E. A. Aldridge's Report on the Health of Hoihow, in the *Medical Reports of the Imperial Maritime Customs of China* for the half-year ended September 30, 1881.

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blue, skin at tips of fingers shrivelled, colour of body dark; pulse imperceptible at wrist, and could only be freely felt at the carotids; temperature 95°; the breath was very cold; there had been fifteen motions, principally composed of large quantities of fluid, in which were floating numerous white flocculi. The patient died at six o'clock, five hours from the onset of symptoms. Though the cases I saw afterwards differed little from this, I report this as being most typical of the disease.

On the same day that I saw the above case I found one of the Custom-house coolies in a state of semi-collapse; he was much emaciated, and when questioned answered with a feeble voice. He complained of headache and great thirst; there was abdominal pain with retraction of the abdomen, pulse feeble, temperature 97°, conjunctivæ yellow. I was informed that the diarrhœa and vomiting which were present when I saw him had commenced two days previous; the motions were of a very watery character. Upon visiting him the following day the pulse was 68, temperature 97·2°, the vomiting had been checked by dilute hydrocyanic acid, and the diarrhœa by astringents. Two days after this his temperature was normal, and he made a good recovery. When first taken ill this man was suffering from mumps.

To give an idea of how quickly fatal the disease was in some cases, I may state that within twenty-four hours three persons in one house died—a boy, seven years old, in four hours after the first symptoms; a man, aged thirty, in six hours; and a woman, aged twenty-five, in five hours. The day after, I saw another woman in the same house, who was attacked with diarrhœa; she, however, recovered. Upon making inquiries I found that the water these people had been in the habit of drinking was obtained from a well situated alongside the drains of one of the main streets. Water fit for drinking cannot be obtained in Hoihow; but though this is so, many of the Chinese prefer to drink the foul water close to their houses, rather than take the trouble of bringing drinking-water from the springs a short distance from the town. Considering the way the natives here neglect the most simple sanitary precautions, it is not to be wondered at that a disease like cholera should spread among them; in fact, I think it is surprising that the ravages of this epidemic have not been of a more serious character. I found that most of those who died had obtained their drinking-water from wells situated either in their yards or within a short distance of the street drains; I also heard that the disease proved fatal to many who had over-fatigued themselves by being up most of the night, sitting or standing exposed to the night air in front of the Chinese theatres, and who had afterwards returned home, and after drinking large quantities of water and eating unripe fruit, such as pineapple and water-melon, had then gone to sleep in the open air, only scantily clad. I cannot say that I found diarrhœa a symptom that could guide one in giving a favourable or unfavourable prognosis; though the motions were in fatal cases mostly very numerous, I found that this was not always so, death in some cases taking place after only two or three.

H.B.M.'s Consul, upon receiving information from me that Asiatic cholera had shown itself here, reported the circumstance to the Hong-kong Government. The epidemic here was, however, not considered of sufficiently serious a character to require the subjection to quarantine of vessels arriving from this port, though I believe vessels from Bangkok were for a short time quarantined.

The filthy condition of the town was brought under the notice of the Taotai, who issued a proclamation ordering the natives to clean their streets and not to let them get into the same condition again; he also instructed the police to go round and see that his orders were obeyed. In addition to the recommendations that I issued to the foreign residents, I warned the Chinese against drinking the Hoihow well-water, and advised that during the epidemic the excreta should not be used to manure the fields, as is usually done, but that they should be buried. I further suggested that as earth acts somewhat as a deodoriser, they should keep some in their houses and put some in the buckets after use; also, that should a death occur, the corpse should be buried as quickly as possible.

I have been unable to obtain any accurate information respecting the mortality from cholera, as the authorities do not keep any returns. I am, however, informed that there have been about 400 deaths from this cause. The population of Hoihow is estimated at about 12,000, so that, giving ten as the average number of persons to each house, though this is probably under the mark, it may be said that there has been on an average one death from cholera in every third house. It is worthy of remark that only one death from cholera occurred among the numerous Cantonese residents, whose mode of living is more cleanly than that of the natives. They do not eat so much unripe fruit, and are more particular respecting the place from which they obtain their drinking-water. During the epidemic, diarrhœa and vomiting were prevalent; the diarrhœa being peculiar not only on account of its very watery character, but also because of the great prostration it quickly caused. After trying different astringents, I came to the opinion that sulphuric acid and opium gave the best results, and I believe that it is not improbable that some of these cases might have run into cholera had they not been so treated. In August another vessel arrived with passengers from Bangkok, but on boarding her I found that there had been no sickness during the voyage. Cholera spread from here to Kiungchow, but its course there was very mild. The average number of deaths per diem here was about ten; this number gradually decreased during September, and at the latter end of that month the deaths from cholera were only about three daily.

FROM ABROAD.

Dr. Formad on the Pathology of Tubercle.

Dr. Formad, the Lecturer on Experimental Pathology and Demonstrator of Morbid Anatomy in the University of Pennsylvania, read the first of a series of papers before the Philadelphia Medical Society, bearing this title: "The Bacillus Tuberculosis and some Anatomical Points which suggest the Refutation of its Etiological Relation with Tuberculosis." In this he stated his intention of demonstrating Koch's bacillus, and at the same time to bring forward some points from researches of his own, which should check the acceptance of the doctrine of the parasitic origin of tuberculosis. The whole paper is published at length in the *Philadelphia Medical Times* for November 18. It is far too long for us to deal with, except by transcribing the propositions it is intended to illustrate. Its character may be judged of by an editorial note which accompanies it from the pen of Prof. Horatio Wood. "We make no apology," he says, "for occupying so much space in to-day's issue with the paper of Dr. Formad, to the exclusion of other matter; but desire to direct attention to it as the result of very much labour, and as affording the most plausible explanation of tuberculosis recently offered. The parasitic theory of Koch does not accord with the well-known clinical facts of the disease, and is therefore improbable, and, we believe, will be eventually disproved. It has been accepted with a rush, and probably will continue its meteoric flight until it passes out of sight. The paper and specimens of Dr. Formad have been referred to a carefully selected committee by the County Medical Society, which committee owes to its Society, to itself, and to the subject a very careful consideration of the matter. If Dr. Formad's statements and observations are correct, his theory is fairly proved; if they be confirmed, foreign pathologists will have to look well to their laurels, lest they be transferred to the New World."

The following are Dr. Formad's propositions:—

"My researches clearly show the following points:—1. The predisposition to tuberculosis in some men and animals—the so-called scrofulous habit—lies in the anatomy of the connective tissue of the individual; the peculiarity being a narrowness of the lymph-spaces, and their partial obstruction by cellular elements. 2. Only beings with such anomalous structure of connective tissue can have primary tuberculosis, and such animals do invariably become tuberculous from any injury resulting in inflammation, or from repeated injuries. 3. Scrofulous beings can have no other than a tuberculous inflammation, although it may remain local and harmless. 4. Non-scrofulous men or animals may acquire the predisposition to tuberculosis through malnutrition and

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confinement, the latter bringing on the above-mentioned anatomical peculiarities in the connective tissue. 5. No external etiological influences are necessary to cause tuberculous disease other than those which ordinarily produce inflammation, and even scrofulous beings will not become tuberculosis unless local inflammation is set up—no inflammation, no tuberculosis. 6. Non-scrofulous animals, so far as can be established now, may acquire tubercular diseases through injuries of serous membranes—viz., peritoneum, pleura, etc.,—and even here without any special virus whatsoever. Clinical observations on the post-mortem table show similar conditions, and prove the same in man. (Koch's own experiments are also in favour of this proposition, as will be shown hereafter, but he has overlooked this.) 7. The bacilli—which it is the merit of Koch to have first proved to infest tissues affected by tubercular disease—are not necessary for its causation, even if a special organism exist and be really possessed of such property. The presence of bacilli (so far as our present research goes) is secondary, and appears to *condition* the complete destruction of the tissue already diseased and infested by them, and this destruction is in direct proportion to the quantity of the organisms which thus regulate the prognosis. The tubercular tissue seems to serve merely as a nidus for the growth of the bacillus. 8. From the results of microscopic examination, from numerous observations upon the post-mortem table, and on clinical grounds, I have come to the conclusion that phthisis is not a specific infectious disease, but that the individuals suffering from tubercular disease are specific themselves originally, and form a special species of mankind—the scrofulous. 9. Scrofulosis is a condition which may arise from malnutrition and seclusion in any being, and thus may be produced artificially. It always depends upon the demonstrated anatomical changes in the connective tissue. 10. An analysis of Koch's experiments shows that he has not proved the parasitic nature of phthisis, or that there exists a special Bacillus tuberculosis, so that the infectiousness of tubercular disease is still *sub judice*."

Dr. Formad, in the following passage, describes the differences of the results of inflammation in non-scrofulous (*e.g.*, the cat) and scrofulous animals (*e.g.*, the rabbit):—

"When a part in a non-scrofulous normal subject or animal is the seat of acute inflammation, it is solely in the connective tissue, with its pertaining lymph-spaces and bloodvessels, that the inflammatory process makes its active display. Under the microscope all the lymph-spaces of the affected area are seen filled with cells; often they are enormously distended by them, so that the whole appears like a sponge soaked with a corpuscular liquid. Whether the cells invading the tissues are desquamated and proliferated endothelium of the lymph-spaces, or whether they are wandered-in corpuscles, or both, we will not discuss here. They do not stay there long, however, under ordinary circumstances; they are bound to leave the tissue they invaded (resolution), or they must die together (suppuration), forming loss of substance. In either case, particularly in resolution, it is the office of the lymph-spaces to relieve a part of the exudate, and they are the means which promptly, and in due time, effect the carrying-off of the mischievous and intruding cells—thus accomplishing the return of the tissue to the normal state. This will only occur, however, if, and as long as, the lymph-spaces are not obstructed and will allow the free intercommunication of serum between the bloodvessels and the lymphatics, which is so essential to the well-being of the organism.

"If, on the other hand, a part in a scrofulous subject or animal becomes the seat of inflammation, the termination will be an entirely different one. The connective tissue is here at fault. Its lymph-spaces, which are narrow and obliterated, do not permit the reabsorption of the exudate, and the tissue of the affected area lingers under the voluminous pressure of the imprisoned cells, which form tubercles. There is no other issue here, and it must die—*i.e.*, undergo cheesy degeneration. The cheesy mass thus formed may become encapsuled by inflammatory overgrowth of connective tissue, and frequently this is the case. I have often seen in rabbits that the development of tuberculous disease is stopped in this way for some time. Ultimately, however, the animal will succumb to tuberculosis, when the inflammatory process is renewed, and extends in the manner to be described later.

"The above statements are based upon direct observation from experiments many times repeated. It is distinctly seen that one and the same process, induced in both cases similarly, terminates so differently in the cat and the rabbit. The experiments were made exactly under the same conditions, and the animals being of the same age, and equally in good health, it proves clearly that the inflammation is not specific, but that the animal is specific, and that this lies in the above-mentioned peculiar anatomy of the connective tissue of the animal in question."

FOREIGN CORRESPONDENCE.

THE MEDICAL PROFESSION AT NICE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In several journals, some of them medical, I have seen the following paragraph:—

"The French doctors in Nice are, it appears, up in arms against their English and other foreign brethren established in that favoured health-resort, etc."

Now, as this gives a very incorrect notion of what has actually occurred, I beg leave, with your permission, to explain the real state of the case.

There exists in France a Mutual Provident Medical Society—or, to give it its proper name, "Association Générale de prévoyance de Protection, et de Secours Mutuel pour tous les Médecins de France"—which has branches throughout the whole country, and at Nice as elsewhere. In addition to its functions as a provident society, giving help to distressed members of the medical profession and their families, it occupies itself with all questions that concern the interests of the profession in its relation with the public.

Accordingly, at the last general meeting, four important papers were read, which were published in the annual report or "Annuaire":

1. How best to reconcile the duty of the accoucheur, which obliges him to give notice of the birth of a child, with shielding the reputation of the mother when that child is illegitimate.

2. On the duty of the doctor with reference to testamentary dispositions in his favour.

3. On the degree in which the State should have the right to compel a doctor to take part in a medico-legal investigation.

4. On the regulations with reference to the interment of prematurely-born children.

A question certainly of no less importance than these was that which occupied the attention of the Nice branch of the Society, namely:

How best to deal, in the interests alike of the public and of the profession (not "with their English and other foreign brethren," but), with a set of men—many of them having no qualification to practise in any country—a set of Bedouins, a kind of medical pirates; who, in defiance of the law, come to a place during the season, advertise themselves as doctors, and, after a stay of a few months, go to exercise their trade elsewhere. Against these people the law provides a remedy, as it does in England, but it has been laxly administered. The Medical Provident Society considered how best to insure its more effectual exercise.

The law requires that every medical practitioner shall, on settling in a place, take or send his diploma, or other qualification recognised by the French law, to the office of the Prefect for verification, and to have it there registered.

The best means of enforcing the law was the question before the meeting; and in the resolutions then adopted I, who was present, and am a member of the Society, most cordially concur.

I will just add that there are three ways open to anyone who desires to practise medicine in France—1. To undergo all the required examinations, and to take the degree of Doctor of Medicine, for which anyone holding a *bonâ fide* English qualification is eligible. 2. To pass the minor examinations as *officier de santé*, which rank qualifies only for practice in one department of the country, but which authorisation, on complying with some formalities and passing a very simple additional examination, would be transferred to another department in the event of change of

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residence. A large number of foreign practitioners in France hold only the qualification of *officier de santé*, but are not on that account in the least looked down on by their French colleagues. The reputation which a man brings with him from his own country is the standard by which he is judged. 3. To have the direct authorisation of the Minister of Public Instruction, which is now very rarely given, and which I owed to the fact of my having some years ago received the exceptional honour of being nominated a Foreign Correspondent of the National Academy of Medicine of Paris.

Compelled to pass my winters at Nice, I should make but a poor return for the kindness with which I have been received by my French colleagues if I did not give a true version of the incorrect statement which has been widely circulated, and which certainly could not have originated with any real member of the medical profession.

I will merely add that in what passed at the meeting there was no question of any English practitioner.

I am sending a copy of this letter to the *Daily News*, in which I first saw the statement, and also to the *Lancet* and the *British Medical Journal*.

I am, &c.,

Nice, December 27, 1882. CHARLES WEST, M.D.

REVIEWS AND NOTICES OF BOOKS.

Legal Medicine. Part I. By C. MEYMOTT TIDY, M.B., F.C.S. London: Smith, Elder, and Co. 1882. Pp. 630.

To undertake to write a complete treatise on such a subject as Legal Medicine is not a task to be lightly regarded in these modern times; but probably few men living are so wel qualified by personal experience for such an undertaking as is Dr. Tidy.

We have seen it stated, though there is no mention of it in the author's preface, that the work before us is to be completed in six volumes. If all the subjects are to be dealt with as exhaustively as those in the present volume, we can readily understand that the work will extend to that length. It is perhaps not fair to speak of the arrangement of the subjects at so early a date, but if they have been grouped upon any definite plan we have failed to discern it.

We may say at the outset that the book is well printed. A very full index of contents is given at the beginning; and, besides the ordinary index, there is at the end an index, after the fashion of law-books, of cases referred to, which will be of great use.

The first chapter consists of an introductory lecture addressed to students at the close of their career, pointing out what the relations and duties of the medical man are in respect of the law; the coroner's court, magisterial inquiry, the grand jury, and trial before a judge, are successively explained in a clear and simple manner. The chapter is full of good advice to the medical man as to what he should do, and (which is equally important) what he should avoid doing, when in the witness-box. In dealing with the subject of expert evidence, Dr. Tidy expresses himself in the following emphatic manner:—"Nothing is more horrible to contemplate than a traffic in evidence either for gain or notoriety. Hence we lay down this definite rule, that, in our judgment, should always guide the scientific expert—viz., that no one is justified in giving evidence in support of a case, or in support of that part of a case upon which he may be specially retained to give evidence, that he does not believe to be right and true. Any evidence offered by the expert in the witness-box should be as honestly and truly his scientific belief, influenced by reasons as definite and as accurate as if he were arguing the points in dispute before a scientific tribunal, competent to weigh his arguments and pronounce on his opinions with accuracy and precision. Guided by this rule, expert evidence is far from the worthless thing that some would affect to regard it." This is admirably said, and we would endorse every word of it. So long, however, as expert witnesses exist, we fear there will be a tendency to cast a slur upon their opinions in certain quarters. We are sanguine enough to hope to live to see the day when the "witness by profession" has ceased to be, in other matters as well as in matters medico-legal; and we think that there are already indications of the commencement of such a change. The mere use of the word witness suggests the idea of the expert taking one side or the other. We have no wish to see the experts die out,—far from it, we would raise them to a higher position. In our view, they should be summoned by a judge to attend at a trial as his assessors. Should this much-to-be-desired result ever come about, we think it will be a step towards raising the status of the medical profession to its proper level.

There is one other point we would wish to touch upon suggested by this introductory lecture, and that is, that at several of our medical schools the lectures on forensic medicine are given to second year's men. Now, can anything, we would ask, be more absurd than this? We might as well try to teach pathology to men who had not learnt anatomy and physiology. If there is one subject which ought to be undertaken last of all, it is certainly the study of forensic medicine. For, after all, what is forensic medicine but the application of a knowledge of anatomy, physiology, chemistry, botany, materia medica, therapeutics, medicine, and surgery, to certain legal quesions? It follows, then, that its study will be most advantageously commenced after a competent knowledge of these subjects has been acquired. We need hardly say that these remarks are not applicable to Dr. Tidy's class.

"The Signs of Death" is the first subject treated of, which includes, of course, the consideration of the subjects of rigor mortis and putrefaction. As regards the former, we are pleased to find that Dr. Tidy rejects altogether the term "cadaveric spasm." As he points out, no physiological distinction has been suggested between this state and rigor mortis; and as there is no interval before the supervention of the latter, the distinction between them is merely an imaginary one dependent upon the time of onset. At the end of the chapter, in which the whole subject has been treated of in an able manner, Dr. Tidy gives a concise summary of the points which would enable us to arrive at an opinion as to the probable period of death from the inspection of the dead body.

The next chapter, on Personal Identity, treats of many important topics—human remains, congenital peculiarities, scars and tattoo marks, hairs, teeth, blood-stains, and questions relating to vision being the chief ones. The section on blood-stains strikes us as being especially well worked out. In this chapter the author takes the opportunity to express himself very strongly upon the subject of cremation, as follows:—"Cremation, as suggested by certain unpractical enthusiasts, will put an undoubted barrier, at long intervals after death, to the dead body itself furnishing evidence to assist justice (as earth-burial so often permits) either in clearing the innocent or in punishing the guilty." Without expressing any opinion as to the desirability or not of cremation, we cannot help feeling that its adoption would probably have exactly the opposite effect: for if prejudice should ever be so much overcome that cremation becomes the law of the land, there would be no difficulty in instituting a compulsory post-mortem examination; whereas, if cremation becomes only voluntary, surely it is unlikely that those who would permit the bodies of their friends to be burned would object to a post-mortem examination: so that, in this point of view, cremation would very greatly further the ends of justice, instead of creating insuperable difficulties. Dr. Tidy is not at his best when he comes to speak of the more purely professional matters; thus, what, we would ask, is the ordinary "medical machine" alluded to on page 54? Again, on page 187, we find the following:—"A scar in the inguinal region suggests a *syphilitic abscess*" (the italics are our own). We would also take exception to the word "*guiacum*" as spelt by Dr. Tidy, the proper spelling being *guaiacum*. We admit that it is not an easy word to spell, but in a work of this magnitude such an error ought not to be allowed to creep in. Whilst on the subject of spelling, we may observe that the name of a distinguished living surgeon and professor of anatomy is incorrectly spelt throughout the book.

The succeeding chapter, on the Causes of Death, deals with coma, syncope, and apnœa. The question of how to make a post-mortem examination is fully treated of in the following chapter, but we think sufficient stress is not laid upon the fact that it is all-important that the medical man should be familiar with the normal appearance of the various organs and tissues of the body, and with those occasional departures from the normal which nevertheless are not to

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be accounted abnormal. A case illustrative of this point will probably be fresh in the minds of most of our readers.

The chapter on Sex does not call for any special comment from us. We quite agree with the author in his remarks about suicide when he says—"It appears to us that if a person is clearly proved to be of unsound mind, and in that condition commits suicide, it is fair and reasonable to regard the suicide as one of the results of a diseased and unsound mind, and not as an act which is the exercise of an intention, or in any respect whatsoever of a felonious killing. It would no doubt be right to require that the onus of proof that the man was insane at the time should be thrown on those who would benefit by the death." The insurance offices should not, however, be bound by the verdict of a coroner's jury any more than they are at present.

The remaining chapters treat of Heat and Cold, Burns and Scalds, Lightning, Combustibles and Explosives, and Starvation. Each of these subjects is dealt with methodically, and will amply repay perusal.

The plan of giving illustrative cases at the end of each chapter, instead of in the text, is one that has much to recommend it, but we cannot help thinking that in a good many instances this portion of the work might have been condensed without diminishing from the value of the book, and notably so in the case of the record of anomalies of sex and monstrosities (pp. 337-8).

There is one blemish which more or less pervades the book, and it is one which, unfortunately, is becoming more common every year, and that is the indiscriminate use of the first and third persons by the author in referring to himself. This is so glaring on pages 192-3 that we cannot pass it by without a protest against such careless revision.

In conclusion we would express the opinion that if the succeeding volumes are as thorough as the present one, Dr. Tidy's "Legal Medicine" will become the standard work on the subject in this country.

A Dictionary of Medicine, including General Pathology General Therapeutics, Hygiene, and the Diseases peculiar to Women and Children. By various Writers. Edited by Richard Quain, M.D., F.R.S. London: Longmans, Green, and Co. 1882. 8vo, pp. 1816.

In noticing a work like that before us, the first question that suggests itself is whether a work on medicine written in this form was really required? and next, supposing that the work does in form supply, according to the popular phrase, a felt want, is it well supplied? Regarding the first question there will probably be considerable difference of opinion, and the test will be supplied only by the lapse of some time. The tendency of the day seems unquestionably to be in the direction rather of compact manuals on defined subjects by those specially acquainted with these subjects, than of cyclopædic works by one or many writers. And we must confess to feeling somewhat sorry that some of the monographs on leading subjects which form part of this work will, for a considerable number of readers, be entombed out of sight. Having said this much, however, we must admit that there are certain advantages in a book of the kind in question. The monographs and the shorter definitions and descriptions of which it consists have been brought together under the influence of the editor and sub-editors, and have been subjected to their revision. This undoubtedly gives the work a homogeneity of statement and reference which is not possessed by a series of manuals from independent authors. A story is told of a noted wit and literary man, who was asked to contribute to the pages of a well-known serial. He consented to become a contributor, provided he were allowed to sign his article, but to this the editor objected that all the articles in his serial were anonymous. Turning over the pages of the serial, each of which was headed with the name of the editor, the wit rejoined, "Yes, I see—*very* mononymous." We are glad, with all respect for Dr. Quain, that the Dictionary is neither mononymous nor anonymous. Signed by the contributor, each article carries its due weight; anonymity would have added weight to none,—would have very considerably diminished the weight of many. One of the greatest advantages, however, of the dictionary form lies in the fact, that the constant sense of a limitation in the space allowed him has acted upon each writer as a stimulus to terse, clear statement, and a due apportioning of space to importance. The result has been that the monographs are singularly free from the diffuse verbosity which so disfigures much of the German writing of the present day, and is not by any means wholly absent in English work. As an authoritative synopsis of the present state of fairly established medical opinion, the work possesses considerable value—a value which is both present and prospective.

A general criticism of the work is of course impossible. The list of contributors and the names of Dr. Richard Quain, the editor, and Drs. Frederick T. Roberts and J. Mitchell Bruce, the sub-editors, give *primâ facie* ground for expecting the work, as a whole, to be worthy of every confidence; and a close scrutiny will, we believe, in no way disappoint this expectation. The editor tells us in his preface that the object he proposed to himself was to bring together the latest and most complete information in a form which would allow of ready and easy reference. These are tolerably high pretensions: still, while the articles have inevitably unequal merit, the editors have every reason to congratulate themselves on the result of their labours.

Deferring any detailed criticism to a subsequent notice, we shall here simply state the names of the writers to whom some of the principal subjects have been entrusted. In the great subject of the Heart and its diseases, the Editor himself takes a considerable share, but special portions have been handed over to other writers. Dr. Bristowe writes on Dilatation, and Dr. Wardell, of Tunbridge Wells, on Hypertrophy of the Heart; two subjects so closely associated that we think both space would have been saved and clearness gained by their being treated under one head, and by the same writer. This criticism would apply, we think, in other cases also, although we are quite aware that it would defeat the object of the work were grouping carried too far. Dr. Bruce treats of Displacements of the Heart, the late Dr. Peacock of Congenital Malformations, Dr. Shapter of Functional Disorders, and Dr. Foster of Valvular Diseases of the Heart; while Dr. Balfour has the Pericardium and its Diseases. In Diseases of the Lungs the Brompton staff are naturally strongly to the front. Dr. Green and Dr. C. T. Williams, Dr. Powell, and Dr. Symes Thompson, take the large bulk of the work, and we need not say it is well done. Dr. Green writes on Inflammation of the Lungs—a long article, but not a line too long,—and the same may be said of Dr. Williams's article on Phthisis. Besides numerous other subjects, Dr. Powell writes the article on Physical Examination, Dr. Allbutt has the important subject of Pleurisy, and Dr. A. T. H. Waters that of Emphysema. Sir Risdon Bennett writes on Malignant Disease of the Lungs, and also on Mediastinal Tumours. In Diseases of the Abdomen, Dr. Roberts has naturally a considerable share. Dr. Wickham Legg, the late Dr. Stephen Ward, and Mr. Johnson Smith divide Affections of the Liver between them; while Dr. Macpherson takes those hepatic disorders arising specially in tropical climates. In Diseases of the Digestive Organs, Dr. Allchin has the main part of the work, along with Dr. S. Fenwick. Professor Grainger Stewart takes Kidney Diseases, while Sir H. Thompson occupies his own special territory, and Mr. Arthur Cooper writes on Venereal Diseases. Dr. Barnes, Dr. Matthews Duncan, and Dr. Braxton Hicks are each well represented; and Mr. Spencer Wells treats of Diseases of the Ovaries. In the Nervous System, Dr. Bastian and Dr. Gowers have the largest share. Dr. Ferrier writes on the Convolutions, and Dr. E. Long Fox on Cerebral Tumours. Dr. Bastian and Dr. Brown-Séquard deal with Diseases of the Spinal Cord, Dr. Bastian taking by far the larger part; while Mr. William Adams treats of Diseases and Curvatures of the Spinal Column. Dr. Brown-Séquard discusses Epilepsy, Dr. Buzzard, Hysteria, and Drs. Blandford and Sibbald, Insanity. What may be called the surgical diseases and injuries of the brain have wisely been entrusted to Mr. Hutchinson. In general diseases, Drs. Broadbent, Beveridge, and Squire discuss the Fevers, while Dr. Collie, of the Homerton Hospital, discusses Small-pox. Dr. Bruce takes the subject of Acute Rheumatism; Dr. Eustace Smith takes Diseases of Children generally, including Rickets and other diseases; Mr. Nettleship and Mr. Carter have the Eye; Mr. Dalby the Ear; and the other specialties are also represented—the Skin by the veteran Sir Erasmus Wilson. The work is not meant to give an account of materia medica, but

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general Therapeutics is ably treated by Dr. Lauder Brunton, and Toxicology by Dr. Stevenson. In the list of contributors are the names of several whose work has been ended by death, and among these assuredly not the least regretted is the able and gentle writer on Public Health, Dr. Edmund Parkes.

The work was commenced several years ago, but has been fully revised up to the time of publication, so as to prevent any of the items becoming out of date; and in order further to prevent this, an appendix has been added, in which we find the latest information regarding Filaria sanguinis hominis, and the ptomaines.

A Practical Treatise on the Diseases of Children. By J. F Meigs, M.D., and Wm. Pepper, M.D. Seventh Edition, revised and enlarged. London: Henry King Lewis. 1882. Pp. 1055.

It is with some disappointment that we have perused this new edition of a well-known text-book on children's diseases. We had hoped to find in a "revised and enlarged" edition the results of recent work in this important branch of practical medicine; but are only partially satisfied. There is much quotation from the writings of other authors; but this is generally from the earlier editions of their works, and therefore does not give their riper and more matured opinions. In such a work as this, it seems to us essentially necessary, in using the work of other physicians, to give their latest expressed views on any subject, not necessarily to the exclusion of former views, but in such a way that contrasts may be drawn. All departments of medicine have undergone great changes, but few have undergone such extensive changes—and improvements, we may add—as the subject before us.

In the chapter on food (which appears in this edition for the first time in its present form) the authors discuss the artificial feeding of infants, without making any mention of the so-called malted foods, which Liebig first introduced—many years ago, by the way—into practice; nor is anything said of the value of peptonised milk, as suggested by Dr. Roberts, of Manchester. Both these methods have been the means of saving many infants who have had to be fed artificially, as well as many children reduced by disease so low that ordinary food could not be digested. The amount of harm done by farinaceous food in early infancy is not, in our opinion, sufficiently insisted upon, nor are the physiological reasons which explain this unsuitableness sufficiently emphasised. We could have wished also for more complete paragraphs on the morbid condition of the diseased organs than we find in the work before us. As regards treatment, many judicious alterations appear to have been made. Thus, we are pleased to find that emetics are no longer advised as routine treatment in pseudo-membranous laryngitis, and that when they appear to be required, some other than tartar-emetic is advised; alum is strongly recommended for the purpose. Speaking of antimony, our authors say—"It prostrates many children to a dangerous degree, and is, we fear, in some cases, itself one cause of death"; and "Ipecacuanha is a much safer remedy than tartar-emetic, but its operation is often too mild." We have no hesitation in commending this advice, but it is not new. In speaking of tubercular meningitis, our authors say—"These miliary tubercles precede the occurrence of the inflammatory changes in the meninges." This is rather a dogmatic statement: we can only regret that they have not explained how the tubercles get into such a position. As regards the effects of this deposit in the meninges, they see no difficulty in attributing all the symptoms of the disease to their mere presence—a view we cannot accept. We feel almost sure that these authors would modify such a view if they were to carefully examine the cerebro-spinal centres under the microscope. Let them specially choose cases in which there is little naked-eye evidence of disease, and they will be all the more struck with the extensive deposit of tubercle throughout the nerve-centres, which, as far as our own experience goes, invariably exists, even when there is but little to suggest it in the naked-eye appearances on the surface. We have never been able to reconcile the minute pathological anatomy of this terribly fatal malady with the name under which the disease is generally known, and for our own part would much prefer the term tubercular encephalitis.

The causes of congenital atelectasis, we are told, have not been satisfactorily ascertained. Among the most frequent they give "the use of too heavy or tight clothing." We fail to see how the clothing of an infant after its birth can account for *congenital* atelectasis. That tight clothing is injurious to young infants, especially weakly ones, and that it may do, and frequently does, harm by impeding the respiratory movements, we should be willing to admit. For us, however, congenital *atelectasis* and *collapse* are not identical lesions.

"It is doubtful," say our authors, speaking of empyema, "whether the admission of a small quantity of air is very objectionable, although West believes that it almost always converts the previous healthy pus into a highly offensive sero-purulent discharge." Since the causes of decomposition have come to be better known, we very much question whether West does hold such views. Nothing was said by him at the recent International Congress in support of such a view, when the subject of empyema was discussed.

Though we have ventured on these criticisms, we are far from thinking that there is not much that is good in the book. We can only regret that in this, the last edition, the work has not been more carefully revised and brought up to date. The volume is handsomely bound, and printed on good paper; it is in every way creditable to the publishers.

The Alienist and Neurologist. October, 1882.

The number of this quarterly journal now under notice sustains the high character of the previous issues. The first article is another of those accounts, of which so many have been published lately by American physicians, of the nature and working of the lunacy laws, and the methods of treating the insane, established in this country. The second article is an account of a very interesting case of so-called "moral insanity," related by the mother of the patient. It appears transparently evident from the account given, that the intellect of this patient was greatly disordered, and the term "moral insanity," is therefore more than usually inapplicable. Apart, however, from hypothesis, the facts of the case are very valuable. Reports of several other cases follow, the editor observing what appears a somewhat inconvenient practice of interspersing reports of cases among the original articles. The most important of the cases is that of an experimental trial by Dr. H. A. Hutchinson of the effect of a quarter of a grain of hyoscyamine on himself. Briefly put, the effect was to throw Dr. Hutchinson into a state of profound coma, lasting eleven hours, to the great danger of his life. Such an experience is certainly unusual, but it renders necessary the greatest caution in beginning the administration of this powerful drug, since it is impossible to tell beforehand how far a particular individual may be specially obnoxious to its effects. The preparations of the drug appear to differ more in strength than, considering its enormous price, might be reasonably expected. Two articles upon Guiteau show that that well-worn subject is not yet exhausted, but they indicate by their dignified, calm, and dispassionate tone that the violent and unseemly feelings that raged round the miserable being while he lived, are at length giving way to a more philosophic temper. "Katatonia"—which is the name given by Kahlbaum to a rather vaguely characterised form of insanity—forms the subject of a long article by Dr. James Kiernan, and is followed by a very full and detailed report of the annual meeting of the Association of Medical Superintendents of American Asylums. The book concludes with an excellent *resumé* of the additions to our knowledge during the preceding quarter. We beg to acknowledge very cordially the courteous terms in which this journal is referred to by the *Alienist and Neurologist*.

The Fees of President Garfield's Medical Attendants.—The Garfield Board of Audit have allowed the following claims for professional services:—Dr. Bliss, $6500; Dr. D. H. Agnew, $5000; Dr. Frank Hamilton, $5000; Dr. Reyburn, $4000; Dr. Boynton, $4000; Dr. Susan Edson, $3000—total, $27,500. This is $8000 less than the amount especially appropriated for medical attendance.—*Boston Med. Journal*, December 7.

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REPORTS OF SOCIETIES.

ACADEMY OF MEDICINE IN IRELAND.

Medical Section.

The first meeting of this Section was held at the College of Physicians, on Friday evening, December 15, 1882.

Dr. William Moore, President of the King and Queen's College of Physicians, Ireland, occupied the chair as President of the Section.

Dr. A. N. Montgomery, Sectional Secretary, and Mr. William Thomson, General Secretary, were present.

The President delivered an inaugural address. Having alluded to the absorption of the Medical Society of the King and Queen's College of Physicians into the Academy of Medicine of Ireland as its Medical Section, he reviewed at considerable length the advances made in the diagnosis of disease, particularly within the last twenty-five years. He referred first to affections of the chest, the differential diagnosis of which was now well-nigh perfect. In certain cases, clinical observations of the temperature had proved of great use; and the most recent advance was the demonstration by Professor Robert Koch of the germ origin of pulmonary tuberculosis. To Laennec was due the elucidation of cardiac diseases, and to Traube in great measure the knowledge of the relations which may exist between these and renal affections. The diagnosis of valvular diseases had become very exact; but the precise value of murmurs as regards diagnosis and prognosis was apt to be over-estimated. Nor was the diagnosis of abdominal aneurism always an easy matter. Great advances had also been made in the study of specific fevers, especially of the endemic fever of this country, enteric or typhoid fever. Again, much had been done in the localisation of cerebral and spinal diseases, among the more interesting of this class of maladies being hysteria, hystero-epilepsy, and hemianæsthesia. As regards the treatment of some of these affections, he mentioned some remarkable instances in which good results had followed the practice of metallotherapy.

Mr. Arthur Benson exhibited a case of well-marked Retinitis Albuminurica in a boy aged sixteen, without constitutional disturbance.

Dr. Charles F. Moore exhibited a case presenting Neuralgic Symptoms in a man having remarkable patches of white hair, some of which were congenital.

Dr. J. W. Moore exhibited (by card) specimens of Diphtheritic Inflammation of the Throat.

Mr. P. S. Abraham exhibited microscopic sections showing (1) Diphtheritic Deposit in the Muscular Tissue of the Pharynx, (2) Mycelium of Fungus, and (3) Degeneration of Muscular Fibre in Diphtheria.

Dr. Wallace Beatty read a paper on the Causation of Left-Side Pain, drawing special attention to a form not sufficiently recognised, which was due to fæcal accumulation, and removed by getting rid of the accumulation. The pain was felt over the lower few ribs on the left side, was associated with extreme tenderness on pressure upwards of the tenth or eleventh rib, scarcely any pain being felt on pressure of these ribs downwards, and was relieved when the side was pressed inwards with the flat of the hand. He explained its occurrence by the drag of a loaded colon on the pleurocolic ligament, this constant drag setting up a state of extreme irritability in the nerves of that ligament, so that a painful impression was carried upwards along the left lesser splanchnic nerve to the spinal cord, and was transferred by the law of irradiation of sensations to the tenth and eleventh left intercostal nerves.

Dr. Walter Smith related two cases of Paralysis of the Left Half of the Velum Palati, and raised the question whether palatine paralysis was invariably to be regarded as a characteristic sequela of diphtheria, or whether it may not occasionally supervene upon non-diphtheritic forms of angina. Case 1 occurred in a young lady aged twenty-four, and the paralysis developed six weeks after an apparently simple ulcerated sore throat, for which she had been treated by Dr. Smith. Case 2 occurred in a young lady aged twenty-six, who was affected with what was considered to be a simple relaxed sore throat, unattended with ulceration. She remained in a weak and nervous condition, and shortly afterwards the left half of the palate was found to be paralysed. In each case the symptoms were similar—viz., difficulty of swallowing, nasal twang in the voice, and regurgitation of fluids through the nose. Both cases recovered completely. Dr. Smith submitted that it was not unreasonable to hold that catarrhal sore throat may now and then give rise to slight motor paralysis through partial implication of the nervous system, or otherwise.

A discussion followed, in which several Fellows took part; but no clear additional light was thrown on the subject.

THE OBSTETRICAL SOCIETY OF LONDON.

Wednesday, December 6, 1882.

Dr. J. Matthews Duncan, President, in the Chair.

Deciduous Membrane.

Dr. Cleveland exhibited a fleshy, finger-like sac, passed forty-eight hours after labour by a patient who after a former labour had passed a similar substance, which he had then exhibited to the Society. After careful search he had found no trace of a double uterus.

The President could think of no other origin for such an unbroken decidua than that it came from a uterus bicornis.

Dr. Wynn Williams described a case of double uterus at present under his own care.

Microscopic Sections of Carcinoma Uteri.

Dr. Edis showed microscopic sections illustrating his case of malignant disease of the cervix complicating pregnancy. The amount of stroma was small compared with that of the cells, the appearance thus resembling that of medullary cancer.

Perimetric Abscess.

Mr. Griffith showed a specimen of perimetric abscess, situated behind the uterus and left broad ligament, displacing and obstructing the rectum, and opening at three places into the cervix uteri, vagina, and rectum.

The Directions of Uterine Contraction.

Dr. Godson showed a uterus removed by Porro's operation, which demonstrated well the wrinkles on its peritoneal surface caused by the contraction of its muscular fibres underneath.

Dr. Routh had heard the uterine souffle per vaginam or over the sacrum in cases in which he had failed to hear it by auscultating the abdomen.

Retained Placenta.

Dr. Wynn Williams exhibited a placenta retained for three months after abortion, and removed by him.

Fibroids removed by Abdominal Section.

Dr. Bantock exhibited five specimens of uterine fibroids, weighing respectively 3 lbs., 8 lbs., 13½ lbs., 3 lbs., and 2 lbs., removed by abdominal section. One patient died, four recovered. In each case the pedicle was secured by Kœberlé's serre-nœud, upon the value of which Dr. Bantock remarked. He thought that, whatever might be the future of oöphorectomy for the cure of fibroids, it could not compete with hysterectomy in cases such as those exhibited, in each of which there were substantial objections to the former operation.

Dr. Robert Barnes thought fibroids such as Dr. Bantock had shown better dealt with by hysterectomy. At present he inclined to think Battey's operation best suited for hard fibroids in the wall of the uterus and projecting inwards. Malignant and myxomatous tumours it was better to extirpate. He could speak from clear observation of the remarkable effect of Battey's operation upon fibroids. Within a year after this operation he had found a tumour, the size of the fist, practically gone.

Mr. Knowsley Thornton did not think hysterectomy should be performed for fibroids until oöphorectomy had been tried and failed. He had done the latter operation ten times; all the patients had recovered, all had been benefited, and in all the uterus had diminished in size—in some to a surprising degree. Not merely the ovaries, but the tubes,

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and the large vessels in the broad ligament, ought to be removed.

Dr. GODSON corroborated Mr. Thornton's statement as to one of the cases operated on by him.

Dr. CHAMPNEYS asked Mr. Thornton in what cases he thought the operation should be done.

Mr. THORNTON thought only in cases in which life was threatened.

NEW LAMP.

Dr. AVELING exhibited a modification of Swan's incandescent carbon lamp, so made that it could be introduced into cavities of the body for operative or endoscopic purposes.

RUPTURED PERINEUM—NEW METHOD OF OPERATING.

A paper upon this subject by Dr. WYNN WILLIAMS was read. In this operation the sides of the rent were first denuded in the usual way, then a flap of elastic tissue, about two-thirds of an inch in width, about two lines in thickness, and long enough, when on the stretch, to reach as high as the denuded surface on the labia, was dissected up from the floor of the vagina. Sutures were then passed through the denuded surfaces in such a manner as to keep the edges, as well as the flat surface of this flap, in contact with the raw surface. This being done, the sutures were secured in the usual way. When the rupture involved the sphincter ani, the flap was made, and the sutures passed through it in the same way as in the simpler cases, but the rent in the wall of the rectum was sewn up with sutures made to terminate within the bowel, and the deep sutures secured before those bringing the flap into position were tied.

Dr. AVELING asked what was Dr. Wynn Williams's practice with regard to the action of the bowels after operation?

Dr. BANTOCK objected to the practice of tying the knees together, and also to the use of vaginal injections after operation. He had performed Dr. Wynn Williams's operation once, but was not much impressed by it.

Dr. CLEVELAND thought that rupture of the perineum could often be prevented by restraining the too rapid emergence of the child's head, which could be done by judicious counter-pressure.

Dr. SAVAGE thought the difference was overlooked between mere tegumentary lesions, and rupture extending through the perineal body. In Dr. Williams's operation a narrow tongue of tegument was reserved in the course of denudation, and plastered over the crevice left after bringing the raw surfaces together. No additional strength resulted from this, because the tongue was merely tegumentary. Early operations were tegumentary, and failed altogether. The perineal body was the centre of attachment of the perineal muscles, and the mainstay of the floor of the pelvis.

Dr. ROUTH thought that rupture of the perineum could not always be prevented, and sometimes a slight laceration was not so great an evil as prolongation of the labour. He had, in early practice, succeeded completely with ordinary sewing needles and thread. He concurred with Dr. Savage's remarks as to the perineal body; but had seen that the perineum made by Dr. Williams's operation was remarkably strong and effective.

Mr. KNOWSLEY THORNTON thought this mode of operating gave remarkably good results; but it was not new, having been described by Mr. Teale, of Leeds, and practised by many American surgeons.

Dr. MURRAY had seen the operation now described, and thought it gave a firm perineum. It was not always prudent to retard the progress of the head. Laceration of the perineum might often be prevented by making one or two lateral cuts.

Dr. CAMPBELL POPE said that primary union might often be obtained by applying a broad strip of plaster to hold the nates together.

Dr. EDIS said that rupture might often be prevented by straightening the legs while the head was emerging, and also by making a nick on either side of the perineum. Union might be obtained by operation twelve or twenty-four hours afterwards. It was unnecessary, and rather jeopardised healing, to keep the bowels constipated after operation.

Dr. CULVER JAMES had in one case operated immediately after labour with a rather large common household needle, and obtained union.

The PRESIDENT had seen the results of many methods of operating, and could not say that one was better than another. He had stitched up a perineum two weeks after delivery, without denudation or cutting of any kind, and it healed sufficiently.

Dr. WYNN WILLIAMS did not confine the bowels after operation. The perineum made without the flap he had described was apt to be too thin. He was not aware that his operation had been described before. It certainly was not alluded to in any work on gynæcology.

PREGNANCY COMPLICATED WITH CANCER OF THE CERVIX—CÆSARIAN SECTION—RECOVERY.

This paper, by Dr. EDIS, was then read. The patient came to the Middlesex Hospital in November, 1881. She had begun to suffer from pain, hæmorrhage, and discharge eleven months previously. She presented the signs of six months' pregnancy, and there was epithelioma involving nearly the whole circumference of the cervix and the greater part of the posterior vaginal wall. Palliative treatment was adopted until February, 1882. Labour pains then came on, and the os dilated to the size of a five-shilling-piece. It being judged impossible for delivery *per vias naturales* to take place, Cæsarian section was performed by Mr. Morris. The child was born in a state of suspended animation, but recovered. The mother recovered, and when seen in September the disease had made but little progress.

TWO CASES OF LABOUR COMPLICATED BY CANCER OF TH CERVIX UTERI.

These cases were related in a paper by Dr. HERMAN. In the first case the diseased tissue was freely cut away with scissors, and the actual cautery, and delivery effected with forceps. A vesico-vaginal fistula subsequently was formed, then phlebitis, and the patient died on the eighteenth day. The fistula occurred at a spot which the cancer had invaded. In the second case, masses of diseased tissue were removed with the écraseur, the fingers, and scissors, with only trifling hæmorrhage, and delivery effected with forceps. The mother recovered well. The author thought that in the management of labour obstructed by cancer, the first alternative to be considered should be whether it was not possible to break down, and tear or cut away (the former preferably) the obstructing diseased masses.

Dr. BATE had had a case of labour with commencing cancer, in which delivery was effected by natural efforts, but the patient died from septicæmia.

Dr. CHAMPNEYS said that in these cases it was perhaps most important that there should be healthy tissue at the sides of the cervix, for it was there that lacerations most often occurred.

Dr. GALABIN inquired as to the method of suture of the uterus adopted in Dr. Edis's case. He had in four cases of cancer delivered *per vias naturales*, in only one there being great difficulty in doing so; but two of the mothers died. In one of the latter the disease was almost entirely removed with the galvanic cautery.

Mr. JENNINGS thought that rupture of the bladder during parturition was not so rare as might be supposed.

Dr. FANCOURT BARNES thought that in these cases Cæsarian section offered a chance of probable recovery to the mother and certain safety to the child. An important point was that in this operation healthy tissues were cut through, while in natural delivery diseased tissues were torn, thus favouring blood-poisoning.

Dr. EDIS said that in his case interrupted sutures of silkworm-gut were used.

THE ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, DECEMBER 4, 1882.

Mr. S. LEE RYMER, L.D.S., President, in the Chair.

THE greater part of the evening was occupied with the discussion of the paper read at the previous meeting by Dr. A. Carpenter, of Croydon, on "The Causes of Dental Decay."

It was begun by Mr. OAKLEY COLES, who said that Dr. Carpenter's statement that so-called "dead teeth" were more liable to decay than others, did not agree with the ordinary experience of the dental profession. Nor did his

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assertion that the subjects of inherited gout were very liable to caries: such people generally had large, strong teeth, which were but little liable to caries, but which were liable to be cast off by recession of the gum, or as the result of chronic congestion of the alveolo-dental membrane. Dr. Carpenter apparently had not observed any connexion between rheumatism and caries; but it was well known in the dental profession that acute rheumatism was liable to be followed by the worst form of decay—that known as "soft caries."

Mr. HENRY SEWILL said it seemed to be implied in the paper that the causes of dental decay were doubtful or unknown, whereas there was no mystery whatever about them. The predisposing causes were such as led to structural defects in the teeth; there was no doubt that syphilis was a cause of defective teeth, but he was strongly of opinion that gout had no predisposing influence whatever. Caries itself was wholly due to the action on the teeth of the acid products of decomposition formed in the mouth, which permeated the porous enamel and acted on the dentine. It had also been lately shown that the progress of the disease was assisted by the proliferation of micro-organisms in the canals of the dentine—these organisms having themselves the power of producing an acid secretion. It was not in any sense a constitutional, but a purely local disease.

The discussion was continued by Mr. REDMAN, who suggested that Dr. Carpenter had omitted to mention one predisposing cause of caries, viz., the use of carefully cooked and soft food, it being a well-known physiological law that any organ not fully used would deteriorate; and by Mr. HENRY, who asked whether it really was an established fact that dental caries had become more prevalent? No doubt it came under observation more, but might not this be due to the fact that more attention was now paid to the preservation of the teeth?

Mr. COLEMAN and Dr. WALKER both gave it as their opinion that the increase of caries was an undoubted fact. The latter dissented from Dr. Carpenter's statement that gout was a cause of caries. He thought that improper food in infancy was one common cause of defective teeth, and agreed with Mr. Redman that their comparative disuse in mastication was another.

Mr. HUTCHINSON also thought that the artificial life led by mothers, and the injudicious feeding of infants, were two of the chief causes of the prevalence of bad teeth.

Dr. CARPENTER then replied at some length, saying that his statements, particularly with regard to gout, were founded on careful personal observations made in the course of forty years' experience of medical practice. He admitted that rheumatism had an influence on the teeth, but thought that this part of the subject required carefully working out. He quite agreed that the improper feeding of children was a very common cause of bad teeth, but could not admit that the etiology and pathology of dental diseases were as yet quite as satisfactorily explained as Mr. Sewill claimed that they were.

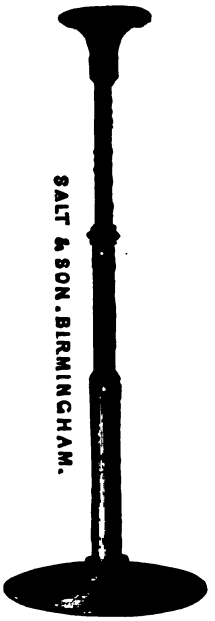
Mr. CHARTERS WHITE afterwards read a paper on "The Salivary Glands of Insects."

PRINGLE AND ZYMOTIC DISEASES.—In Sir J. Pringle's work, "Diseases of the Army," which is now about 140 years old, the idea was most distinctly enunciated that disease-germs of certain classes of disease introduced themselves into the blood, and produced a fermentation of the blood, which was the cause of a particular type of disease. He further gave the results of some obervations which showed that he believed in the convertibility of certain forms of zymotic disease to other forms—diseases which they were accustomed to regard as of a different type.—*New York Med. Record*, November 4.

A BACILLUS OR A FAT CRYSTAL?—At a meeting of the Pathological Society, at the Charity Hospital, New Orleans, November 21, an important microscopical demonstration was made by Dr. H. D. Schmidt. He stated that beyond doubt the bacilli were fat crystals. Dr. Schmidt succeeded in finding crystals which were similar in appearance to the bacilli discovered by Koch, and apparently the same. To determine their nature, Dr. Schmidt subjected the crystals to the action of boiling ether, when they disappeared, proving, as he claims, that they are not germs or organisms.—*New York Med. Record*, December 2.

NEW INVENTIONS AND IMPROVEMENTS.

PORTABLE STETHOSCOPE.



MESSRS. SALT AND SON, of Birmingham, have introduced to the notice of the profession a new form of stethoscope, which is figured in the accompanying illustration. The chief recommendation of the instrument is its portability, its minimum length when closed being only three inches and three-quarters, which makes it very easily carried; while, when drawn out, its length is six inches. This convenient arrangement is arrived at by means of telescopic tubes, which, when extended, are locked by a simple turn of the hand. The tubes are so accurately fitted as to be entirely air-tight, so that the acoustic properties are not impaired. The stem is of aluminium, and the ear and chest pieces are of celluloid in imitation of amber, tortoiseshell, or coral. The instrument is certainly an ingenious one; it is neat in appearance; and it is, in addition, an efficient conductor of sound; but how the telescopic arrangement of the metallic tubes will stand the wear and tear of frequent use, remains to be seen.

SOAP-LEAVES.

MESSRS. REITHOFFER AND NESSE, of Vienna, have brought out a very ingenious invention, that very happily and completely meets the inconvenience caused to travellers by the absence of any supply of soap in foreign hotels. It consists of "soap-sheets," or rather "soap-leaflets," made up in neat little books of the size of a miniature almanac, which can easily be carried in the waistcoat pocket. Each leaflet, when detached and wetted, forms in itself an independent piece of soap, and is sufficient for once. It must be well wetted, and then rubbed between the hands like a piece of ordinary soap. The patentees supply also "Carbolised Soap-Sheets," which contain carbolic acid, and from their disinfecting, as well as cleansing properties, will be found very useful and convenient by medical practitioners. These can be had in neat leather cases, with additional packets for refilling the case.

"OLD HIGHLAND WHISKY."

FROM Messrs. Turnbull and Wood, of West Grainger-street, Newcastle-on-Tyne, we have received samples of their "Old Highland Whisky." It claims to be absolutely free from any extraneous substances, such as are too often added to give flavour, body, or apparent age; and it certainly seems to be of excellent quality. It possesses marked softness and delicacy of flavour, and cleanness on the palate. In short, it pleases the senses of smell and taste, and is, we believe, a pure and safe whisky for dietetic or medicinal purposes.

REDUCTION OF A LUXATED JAW WITHOUT REDUCTION OF THE FEE.—The late Prof. Gibson used to tell a good story in regard to luxation of the jaw. An old and wealthy man came into the office of a surgeon with a luxation of the jaw, and made motions to have it reduced. It was reduced, and on being asked his fee the doctor mentioned an amount which the man regarded as far too much, and insisted on its being reduced by one-half. The surgeon said no more about his fee, but began to talk, and pretty soon told a laughable anecdote. The man laughed heartily, and out went the jaw. He again made signs to have it reduced, but the doctor exclaimed, "When you pay down my fee I will put in your jaw!"—*New York Med. Record*, December 9.

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OBITUARY.

RICHARD RUGG, F.R.C.S.

THIS well-known and highly respected member of our profession died on the 26th ult., at Chichester, in the seventy-sixth year of his age. After a good preliminary education, he was apprenticed to his uncle, Thomas Hodson, of Lewes, one of the best lithotomists of the day, who had thirty successful cases consecutively. On the completion of his apprenticeship, Mr. Rugg came to London, and entered at St. George's Hospital, where he prosecuted his studies with great diligence, becoming a Licentiate of the Society of Apothecaries in 1829; immediately after which he was urged to take the sole charge of a large practice in Berkshire, to enable the principal to attend the necessary hospital studies in London to qualify himself for the membership of the Royal College of Surgeons. At the expiration of three years Mr. Rugg returned to St. George's to resume his studies, and became a Member of the College on May 10, 1833, and a Fellow on May 14, 1868. He commenced the practice of his profession at Brighton; was appointed House-Surgeon to the Dispensary, which post he held for four years, when the poor patients presented him with a piece of plate. On the establishment of a new parochial infirmary, he competed for the surgeoncy, and obtained the appointment, which he held for thirty years. Then his large and increasing practice, with corporation duties, compelled him to resign it, when the magistrates, clergy, and others presented him with a rich testimonial of plate. When the charter of incorporation was granted to Brighton, Mr. Rugg was elected a member of the Town Council with his old friend, another member of our profession, the late Sir John Cordy Burrows. The deceased gentleman, who retired some years ago from the practice of his profession, and was twice married, leaves a widow, five daughters, and two sons, one of whom, Mr. J. Foster Rugg, is in practice at Brighton. Mr. Rugg was a most genial, kind-hearted, and deservedly popular man.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following is a list of the candidates who passed the recent Honours Examination:—

B.S. EXAMINATION.

SURGERY.

First Class.—Frederick Rufenacht Walters (Scholarship and Gold Medal), St. Thomas's Hospital; Samuel Walter Sutton (Gold Medal), St. Thomas's Hospital.

Second Class.—Mary Ann Dacomb Scharlieb, Madras Medical College, London School of Medicine, and Royal Free Hospital; Dudley Wilmot Buxton, University College.

UNIVERSITY OF DUBLIN.—WINTER COMMENCEMENTS.—At a meeting of the Senate, held on Wednesday, December 20, 1882, in the Examination Hall of Trinity College, under the presidency of the University Caput—the Right Hon. J. T. Ball, LL.D., Vice-Chancellor—the Rev. the Provost of Trinity College, and the Rev. Mr. Barlow, Senior Master, Non-regent, the following degrees and licences in Medicine and Surgery were conferred:—

Baccalaurei in Chirurgid.—Gulielmus Hallaran Bennett, Josephus Bulfin, Gulielmus Alexander Carte, Franciscus Ricardus Cassidi, Arturus Wellington Fenton, Johannes Gulielmus Gowland, Georgius Laurentius Marshall Lloyd-Apjohn, Franciscus Albertus de Thierry Mouillot, Henricus Gulielmus Peard, Augustus Mayberry Whitestone.

Baccalaurei in Medicind.—Johannes Armstrong, Franciscus Ricardus Cassidi, Eugenius Cormack, Ricardus Georgius Hanley, Arturus Wellington Fenton, Johannes FitzGerald, Dionysius Gulielmus Freeman, Augustus Mayberry Whitestone.

Magister in Chirurgid.—Carolus Gorman.

Doctores in Medicind.—Carolus Gorman, Edvardus Gordon Hull.

Licentiatus in Medicind.—Josephus Patricius Finegan.

Licentiatus in Chirurgid.—Josephus Patricius Finegan.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners held on December 11, 1882, and following days, the undermentioned gentlemen passed their final examination for the Letters Testimonial, and, having taken the declaration and signed the roll, were admitted licentiates of the College:—

Arthur Cottew, Michael Cleary, Thomas B. Clune, Walter W. S. Corry, John Craig, Francis J. Cruise, Cornelius Daly, Michael O'F. Dolphin, Percy J. Drought, James E. Fitzgibbon, John W. Gormley, Francis B. Hawes, George B. Heffernan, David W. Kennedy, Richard T. King, Thomas Lane, Edward E. Lennon, John J. Lyons, Hercules S. Miles, Henry J. O'Brien, Denis M. O'Callaghan, John J. O'Hagan, Peter J. O'Reilly, Francis F. Peet, Francis E. Pim, Alfred E. W. Ramsbottom, George P. Ridley, James D. Ryan, George P. Firney, George A. Walpole, William H. Waterfield, and Robert Wright.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, December 28:—

Baber, John James Yarrow, 121, Brompton-road, S.W.
Cock, Frederick William, 1, Westbourne-park-terrace.
David, Evan Thomas, Upton-road, Downham-road.
Hitchcock, Alfred John, St. Helier's, Jersey.
Hunter, Mitchell, Marghera, co. Derry.
Sarzana, Ettore, High-street, Kensington.
Smith, Henry Strade, Axbridge, Somerset.
Tilly, Alfred, Gilbert-terrace, Wes: Hampstead.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Foot, Ernest George, Middlesex Hospital.
Gittings, Alfred, Middlesex Hospital.
Robertson, James Sprent, Middlesex Hospital.
Wingrave, Thomas, London Hospital.
Walter, Walter Ernest, Charing-cross Hospital.

BIRTHS.

GARRETT.—On December 31, at Southsea, the wife of Charles Frederick Garrett, M.B., M.R.C.S., L.S.A., of a son.

MCDONAGH.—On December 29, at Mornington Villa, Hampstead-road, N.W., the wife of James S. McDonagh, M.R.C.S., of a son.

PAUL.—On December 27, at Loughborough, the wife of Reginald Paul, M.R.C.S., of a daughter.

TREVOR.—On December 28, at Plymouth, the wife of F. W. Trevor, M.B., Army Medical Department, of a son.

MARRIAGES.

HENDERSON—BARROW.—On December 7, at Calcutta, William Robert Henderson, Surgeon Army Medical Staff, to Ada May, daughter of Francis Barrow, Esq., of Calcutta.

LLOYD—WATHEN.—On December 26, at Guarlford, Great Malvern, Albert Eyton Lloyd, L.R.C.P., M.R.C.S., of Rhyl, Flintshire, to Bertha, eldest daughter of the Rev. J. B. Wathen, Rector of Guarlford.

MEAD—MCPHERSON.—On December 29, at Kidbrook, Herbert Rimmington Mead, M.R.C.S., L.R.C.P., to Louisa, youngest daughter of the late Innes McPherson, Esq., of Upper Norwood.

ROBIN—POLLOCK.—On December 23, at Hanover-square, the Rev. Percival Carteret Robin, to Fanny Margaret, second daughter of J. E. Pollock, M.D., of 52, Upper Brook-street, Grosvenor-square, and The Postern, Tonbridge.

SKERMAN—SHAW.—On September 28, 1882, at Palmerston, North Manawatu, New Zealand, Sidney Skerman, M.R.C.S., of Marton, Rungitikei, New Zealand, to Cecilia Marion, second daughter of George Shaw, Esq., of Whit Hern, Cheshunt, Herts, England.

WALKER—BENNETT.—On October 17, at Redcar, William Walker, M.R.C.S., to Margaret Louisa, third daughter of J. H. Bennett, M.D.

WOLFENDEN—JARDINE.—On December 27, at Chorley, Cheshire, Richard Norris Wolfenden, B.A., M.B. Cantab., of 64, Welbeck-street, W., to Jessie Stuart, youngest daughter of James Jardine, Esq., of Alderley Edge, Cheshire.

DEATHS.

BARRATT, ARTHUR NEWTON, L.R.C.P., M.R.C.S. (late of 10, St. James's-street, Brighton), at 60, Ditchling Rise, on December 28, aged 42.

CORNFOOT, JAMES, M.D., late H.M.I.S., at Leven, Fife, N.B., on December 26, aged 73.

CULLIMORE, JOHN R., L.R.C.P., M.R.C.S., at Yole Grove, county Wexford, on December 23, aged 31.

DAVISON, ANTHONY, L.R.C.S., at Hastings Cottage, Seaton, Delaval, Northumberland, on December 27.

ELLIOTT, ROBERT, M.D., F.R.C.P., at Carlisle, on December 31, in his 72nd year.

HART, ADOLPHUS DANIEL, M.R.C.S., at 32, Great Coram-street, Russell-square, on December 27, aged 49.

LARKINS, THOMAS BROOKS, F.R.C.S., late of the Indian Medical Service, on December 30, aged 70.

MURPHY, ADELAIDE HARRIETT LUCRETIA, wife of James Murphy, M.D., at Holly House, Sunderland, on December 29, aged 27.

OTTLEY, DREWRY, M.D., M.R.C.P., at 93, Ladbroke-grove, on December 31.

SLEDDALL, THOMAS W., M.R.C.S., at Blake Hill, Idle, on December 13.

SNELL, EDWARD, M.R.C.S., at 89, Casenove-road, Stamford-hill, N., on January 2, in his 70th year.

WILSON, JAMES ARTHUR, M.D., for many years Senior Physician at St. George's Hospital, at Redlands Bank, Holmwood, Surrey, on December 29, in his 88th year.

VACANCIES.

OWENS COLLEGE, MANCHESTER.—Demonstrator and Assistant Lecturer in Zoology. Salary £150 per annum. Full particulars of the office may be obtained from the Registrar. Applications, accompanied by testimonials, received up to January 6.

UNIVERSITY COLLEGE, LONDON.—The Jodrell Professorship of Physiology will be vacant at the close of the session. An endowment (which is at present of the value of £164 per annum) is attached. Applications will be received by Talfourd Ely, M.A., Secretary, on or before January 24.

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UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Beverley Union.—Dr. George Hudson has resigned the Sixth District: area 16,924; population 3199; salary £37 10s. per annum.

Bolton Union.—The Lever District is vacant by the death of Dr. Gregory: area 3043; population 11,608; salary £40 per annum.

APPOINTMENTS.

Alnwick Union.—Edward P. Thew, B.M. and M.C. Edin., to the Alnwick District and the Workhouse.

Cannock Union.—John C. Maddever, M.D., M.C. Glasg., to the Brownhills District.

Llanfyllin Union.—Wm. R. P. Jones, L.R.C.P. Edin., L.R.C.S. Edin., L.S.A., to the Llanfair District.

Northleach Union.—John Ryan, L.R.C.S. Ire., L.K. & Q.C.P. Ire., to the First District.

Prescot Union.—Edward Casey, M.B., C.M. Aber., to the Sutton District.

Weymouth Union.—Henry Tizard, M.D., M.R.C.S.E., L.S.A., to the Melcombe Regis District. John N. Ryan, M.D. Ire., L.R.C.S. Edin., to the Weymouth District.

APPOINTMENTS FOR THE WEEK.

January 6. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, "On Light and the Eye."

8. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Sansom, "On the Treatment of some forms of Vascular Diseases of the Heart—Endoaraditis."—First Lettsomian Lecture.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 p.m. Annual General Meeting. Valedictory Address by President. Casual Communications: Mr. Savill (Discussion on "Theory of Caries"). Messrs. Stevenson, Storer Bennett, Vandessart, etc.

9. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ANTHROPOLOGICAL INSTITUTE (4, St. Martin's-place, W.C.), 8 p.m. Mr. W. S. Duncan, "On the Probable Region of Man's Evolution."

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, "On Light and the Eye."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Colcott Fox, "On Two Cases of (so-called) Erythema Gangrænosum." Dr. Percy Kidd, "A Contribution to the Pathology of Diphtheritic Paralysis."

10. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

HUNTERIAN SOCIETY (Royal Institution) (Council Meeting, 7½ p.m.), 8 p.m. Dr. Charlewood Turner will show a Heart of Two Cavities. Mr. J. McCarthy, "On Cases of Fracture of the Skull."

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Specimens will be shown. The following papers will be read:—Mr. Knowsley Thornton, "On a Case of Extirpation of Uterus and Appendages for Epithelioma of the Cavity." Mr. W. S. A. Griffith, "Notes of a Specimen of Anteflexion of the Uterus." Mr. C. E. Jennings, "On Transfusion." Dr. Galabin, "Notes on Two Cases of Transfusion of Blood."

ROYAL MICROSCOPICAL SOCIETY, 8 p.m. Mr. A. D. Michael, "Notes on the Anatomy of the Aribatido."

11. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

OPHTHALMOLOGICAL SOCIETY, 8½ p.m. Mr. Priestley Smith, "On the Growth of the Crystalline Lens." Dr. David Lees, (1) "On a Case of Paralysis of Third Nerve in a Child." (2) "On a Case of Paralysis of Sixth Nerve in a Child." Dr. Hughlings-Jackson, "On the Movements of the Eyes in a Case of Ear Disease." Dr. E. Maddox (communicated by Dr. Greenfield), "On a New Method of determining the Relation between Convergence and Accommodation." Mr. Rockliffe, "On a Case of Epithelial Tumour growing from a Hair in the Anterior Chamber." Living Specimens at 8 p.m.

12. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

CLINICAL SOCIETY OF LONDON, 8½ p.m. Annual General Meeting. Report of Council. Election of Officers and Council, 1883. Dr. Coxwell, "On the Case of a Child with Symptoms resembling Myxœdema." Mr. Davies-Colley, "On a Case of Enormous Enlargement of the Lower Lip cured by Operation." Dr. Southey, "On Symmetrical Gangrene."

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 23, 1882.

BIRTHS.

Births of Boys, 1455; Girls, 1272; Total, 2728.
Corrected weekly average in the 10 years 1872-81, 2535·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	995	1024	2019
Weekly average of the ten years 1872-81, corrected to increased population ...	942·3	954·9	1897·2
Deaths of people aged 80 and upwards ...	...	...	89

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	6	2	3	6	...	5	...	9
North ...	905947	...	27	18	4	7	...	7	...	3
Central ...	282238	...	5	1	...	3	...	...	...	2
East	692738	...	8	19	3	3	...	7	1	...
South	1265927	3	20	8	2	10	...	6	...	8
Total	3816483	3	66	48	12	38	...	25	1	22

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·697 in.
Mean temperature	43·1°
Highest point of thermometer	50·5°
Lowest point of thermometer	29·7°
Mean dew-point temperature	38·8°
General direction of wind	...S.E. & S.W.
Whole amount of rain in the week	0·11 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Dec. 23, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1882.	Births Registered during the week ending Dec. 23.	Deaths Registered during the week ending Dec. 23.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.): Highest during the Week.	Temperature of Air (Fahr.): Lowest during the Week.	Temperature of Air (Fahr.): Weekly Mean of Daily Mean Values	Temp. of Air (Cent.): Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	Rain Fall. In Centimetres.
London	3893272	2728	2019	27·1	50·5	29·7	42·1	5·62	0·11	0·28
Brighton	109595	53	46	21·9	50·3	34·8	43·7	6·50	0·23	0·58
Portsmouth	129918	91	53	21·3	...	...	...	...	...	...
Norwich	83821	65	48	27·0	...	...	...	...	...	...
Plymouth	74449	46	46	32·2	52·2	40·0	46·5	8·06	1·64	4·17
Bristol	210184	139	86	21·4	49·2	37·0	43·6	6·45	0·68	1·45
Wolverhampton	76756	61	37	25·2	48·6	32·8	41·1	5·06	0·29	0·74
Birmingham ...	408532	286	181	23·1	...	...	...	...	...	...
Leicester	126275	107	51	21·1	...	...	...	...	...	...
Nottingham ...	193573	149	89	24·0	48·3	35·9	42·4	5·78	0·21	0·53
Derby	83587	48	32	20·0	...	...	...	...	...	...
Birkenhead ...	86592	61	42	25·3	...	...	...	...	...	...
Liverpool	560377	391	431	40·1	...	...	...	...	...	...
Bolton	106767	88	47	23·0	46·4	36·0	41·2	5·11	0·70	1·78
Manchester ...	340211	195	204	31·3	...	...	...	...	...	...
Salford	184004	120	82	23·2	...	...	...	...	...	...
Oldham	115572	81	66	29·8	...	...	...	...	...	...
Blackburn	106460	82	48	23·5	...	...	...	...	...	...
Preston	97656	53	60	32·1	...	...	...	...	...	...
Huddersfield ...	83418	42	59	36·9	...	...	...	...	...	...
Halifax	74713	41	38	26·5	...	...	...	...	...	...
Bradford	200158	143	89	23·2	48·0	34·0	40·7	4·83	0·57	1·45
Leeds	315998	217	186	30·7	...	...	...	...	...	...
Sheffield	290516	217	153	27·5	47·0	34·0	41·2	5·11	0·69	1·75
Hull	158814	107	90	29·6	45·0	30·0	39·3	4·06	0·19	0·48
Sunderland ...	119065	102	65	28·5	49·0	35·0	42·7	5·95	0·11	0·28
Newcastle	147626	122	93	32·9	...	...	...	...	...	...
Cardiff	88724	72	41	24·7	...	...	...	...	...	...
For 28 towns ...	8469571	5907	4480	27·6	52·2	29·7	42·2	5·67	0·49	1·24
Edinburgh	232440	139	95	21·3	46·3	33·7	39·3	4·06	0·28	0·7
Glasgow	514048	355	371	37·7	49·0	33·5	41·2	5·11	0·75	1·90
Dublin	348293	198	254	38·1	50·5	31·5	41·5	5·28	0·75	1·90

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·70 in. The highest reading was 30·14 in. on Wednesday morning, and the lowest 29·30 in. on Friday evening.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, December 30, 1882.

BIRTHS.

Births of Boys, 1082; Girls, 1050; Total, 2132.
Corrected weekly average in the 10 years 1872-81, 2292·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	838	881	1719
Weekly average of the ten years 1872-81, corrected to increased population ...	960·9	976·1	1937·0
Deaths of people aged 80 and upwards ...	...	...	97

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	7	7	1	3	...	5	...	4
North ...	905947	1	23	9	3	5	1	4	...	4
Central ...	282238	...	7	4	1	...	...	...	...	1
East	692738	1	6	17	3	...	...	2	1	4
South	1265927	...	13	10	4	12	...	4	2	6
Total	3816483	2	56	47	12	20	1	15	3	19

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·473 in
Mean temperature	48·8°
Highest point of thermometer	56·9°
Lowest point of thermometer	29·8°
Mean dew-point temperature	45·4°
General direction of wind	W.S.W. & S.W.
Wholeamount of rain in the week	0·99 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Dec. 30, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1882.	Births Registered during the week ending Dec. 30.	Deaths Registered during the week ending Dec. 30.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3893272	2132	1719	23·0	56·9	29·8	48·8	9·34	0·99	2·51
Brighton	109595	57	36	17·1	52·2	32·2	45·8	7·67	1·05	2·67
Portsmouth ...	129916	64	42	16·9	...	...	...	...	...	...
Norwich	83821	48	39	22·9	...	...	...	...	...	...
Plymouth	74449	45	40	28·0	54·2	35·0	49·3	9·61	1·47	3·73
Bristol	210134	96	83	20·6	54·8	33·0	47·8	8·78	1·42	3·61
Wolverhampton .	76756	46	31	21·1	54·8	30·0	44·0	6·67	1·61	4·09
Birmingham ...	408532	218	206	26·3	...	...	...	...	...	...
Leicester	126275	75	48	19·8	...	...	...	...	...	...
Nottingham ...	193573	109	108	29·1	54·8	28·8	43·1	6·17	1·24	3·15
Derby	83587	55	33	20·6	...	...	...	...	...	...
Birkenhead ...	86582	72	38	22·9	...	...	...	...	...	...
Liverpool	560377	326	385	35·9	...	...	...	...	...	...
Bolton	106767	64	45	22·0	51·5	30·1	41·5	5·28	2·00	5·08
Manchester ...	340211	218	195	29·9	...	...	...	...	...	...
Salford	184004	135	72	20·4	...	...	...	...	...	...
Oldham	115572	54	58	26·2	...	...	...	...	...	...
Blackburn	106460	79	50	24·5	...	...	...	...	...	...
Preston	97656	78	62	33·1	...	...	...	...	...	...
Huddersfield ...	83418	43	40	25·0	...	...	...	...	...	...
Halifax	74713	54	40	27·9	...	...	...	...	...	...
Bradford	200158	119	95	24·8	53·2	30·8	42·4	5·78	1·17	2·97
Leeds	315998	192	168	27·7	55·0	31·0	41·5	5·28	1·01	2·57
Sheffield	290516	191	134	24·1	54·5	30·5	43·4	6·33	1·65	4·19
Hull	158814	108	66	21·7	...	...	...	...	...	...
Sunderland ...	119065	69	86	37·7	55·0	31·0	41·5	5·28	0·67	1·70
Newcastle	147626	123	75	26·5	...	...	...	...	...	...
Cardiff	88724	51	42	25·3	...	...	...	...	...	...
For 28 towns ...	8469571	4921	4033	24·9	56·9	28·8	44·5	6·95	1·30	3·30
Edinburgh	232440	...	...	...	...	...	...	...	...	...
Glasgow	514048	...	...	...	...	...	...	...	...	...
Dublin	348293	...	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·47 in. The highest reading was 29·71 in. on Sunday evening, and the lowest 29·19 in. on Tuesday morning.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Corrigenda.—In Dr. Norman Chevers's "Notes on the Ordinary Diseases of India," at page 747, vol. ii. 1882, head of first column, *transpose* the sentences commencing "Richard Bright," and "Within the last few days." Also, in fourth line of second column, *for* "is not liable," *read* "is liable."

Sewers in Mining Districts.—The Town Council of Wigan have resolved to obtain Parliamentary powers in reference to the support of the sewers lying over coal-mines. Neighbouring local authorities are co-operating with the Corporation in the promotion of a Bill with that object, which is one of vital importance to all mining districts.

Professor Owen.—We understand that the health of this distinguished gentleman is such as to cause great anxiety to his many friends.

M.R.C.S., Ireland.—The competition for the prizes of the London College of Surgeons is confined to the members of that institution. The Astley Cooper Prize is open to all. Write to the Secretary of Guy's Hospital for the particulars.

Sanitation, Fiji Islands.—The Fiji Government have published a special number of a native journal, *Na Mata*, which they issue from time to time, to acquaint the native population with the actual sanitary condition of the islands. During the year 1881 there was an increase of births over deaths of 204. The statistics are of a detailed character. The attention of the natives is called to the excessive mortality which still exists among the children, and much useful advice is given to parents. In districts where this advice has been acted on, the increase in the population has been most striking.

Dr. Good.—Your distinguished namesake, Dr. John Mason Good, died January 2, 1827. He was a Fellow of the Royal Society.

Mr. Johnson.—You will find the paper by the late Professor E. A. Parkes, "On the Formation of Crystals in Human Blood," published, with the illustrations you mention, in the *Medical Times and Gazette*, vol. xxvi., page 103 *et seq.*, for July 31, 1852. You will find a complete set of the journal in the library of the College of Surgeons.

Longevity.—Touching the extreme limit of human life, as proved by authentic records, Dr. Farr, in his tables of the expectation of human life at various ages, not only accepts one hundred as a recorded age, but estimates the average duration of life beyond that limit as, in the case of females, about one year nine months and three and a half days, and in the case of males at about one month less than that time. Of the extent of the data on which these exact calculations are based, no account is given; nor are Dr. Farr's investigations on vital statistics carried beyond the case of centenarians.

A Prize Essay.—The International Hygienic Congress at Geneva has offered a prize of £80 for the best essay on the "Cause of Blindness and the Care of the Blind." The prize will be given at the Congress to be held at the Hague in September, 1884.

Lodging-Houses for Tramps.—An effort is being made in Southwark to effect a much-needed reform in the cheap lodging-houses for homeless tramps. A large pile of buildings, known as St. Olave's Chambers, has just been completed and opened close to St. George's Church, in Tabard-street, with accommodation for 500 men. The beds are fitted up in large airy rooms, the sanitary arrangements being on the most approved plans. In the basement there is an enormous kitchen for the free use of the lodgers for their meals, and conveniences for washing and drying clothes, lockers, etc., are provided. The charges range from 4d. to 6d. per night. The local police authorities have pronounced the establishment to be admirable in all its details.

Compulsory Vaccination, Switzerland.—A correspondent writes: "I have just received information that the city of Basle, after six months' agitation, and the most vigorous efforts on the part of the medical faculty, voted, on Sunday, the 17th ult., in favour of the suppression of compulsory vaccination by a majority of 3539 against 716, or five to one, being about the same proportionate excess that made an end of the despotic Federal Vaccination Bill on July 30 last."

Lady Strangford's Hospital at Cairo.—We understand that the recent appeal made through the columns of the press on behalf of this institution has brought contributions from all parts of England, amounting to a considerable sum.

Human Skeletons.—The Chicago correspondent of the *British Trade Journal* writes:—"Curiously enough, foreign skeletons of the genus *homo* are largely imported into Chicago, and are sold at less cost than they can be scraped, dressed, and mounted here—this notwithstanding that we have no lack of pauper subjects buried at the expense of the county of Cook, and on which our medical colleges largely depend for their cadavers. Still, will it be believed?—these foreign skeletons are loaded down by a tariff of 35 per cent.! This too in the face of the fact that the laws against 'resurrectionists' are extremely stringent in this and other Western States."

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An Old Subscriber.—The 25th of December, 1852, concluded the first year's incorporation of the *Medical Times* with the *London Medical Gazette.*

Dr. Gilbert, South Lambeth.—The College cannot do anything in the matter. The handbills sent are simply disgraceful; and the imitations of railway return tickets left in carriages on the South-Western Railway and distributed in the neighbourhood are unprecedented for cool impudence.

Overcrowding, Glasgow.—Dr. J. E. Russell, the Medical Officer of Health reports upon "night inspection for overcrowding during the last eleven years in Glasgow" The conclusions at which he arrives are, that overcrowding is on the increase, and that the punishments are growing more and more lenient; and he adds—"The sanitary evils of such overcrowding require only to be recalled to mind. While it aggravates every disease, and promotes general ill-health, these houses, comparatively few in number, are the forcing-bed of all forms of infectious disease."

Farinaceous Food.—Mr. Scougall, Medical Officer for Fulstone, reports to the Huddersfield Board of Guardians, after experimenting for six months in the administering of farinaceous food to patients in place of alcohol, that, having tried malt extract, Lloyd's food, and similar preparations, he found that the patients improved with the use of such articles more than they did when ordered brandy and wine.

Illegitimacy in Scotland.—Mr. G. Seton, advocate, in a paper on this subject, read to the Royal Society of Edinburgh, stated that for many years there has been going on in England, and also in Scotland, a perceptible improvement in the number of illegitimate births. During the thirty-four years ending in 1879 the proportion of illegitimate children in England had fallen from 6·7 to 4·7 per cent. Of the births in Scotland during the two decades ending 1870 and 1880 there was a diminution of nearly 1 per cent., the fall being from 9·7 to 8·8 per cent.

Unregistered Dairy Farmers.—At Nantwich a farmer was summoned by the county police authorities for being an unregistered milk-seller. The defendant was in the habit of sending milk to Manchester, and it was necessary that he should be registered. The defence urged was an entire ignorance of the Act of Parliament compelling dairy farmers to register. Fined 20s. and costs.

Public-Houses in Nebraska.—By the new law the price of a licence is fixed at £200 for places with more than 40,000 inhabitants, and £100 for smaller towns. Omaha makes £18,000 per annum by the sale of licences, all of which is added to the school fund. Not only does the school fund benefit, but "there are not more than one-third as many drinking-places in the State as there were before the new law came into effect, the general result in small towns being to replace a dozen small and ill-conducted saloons by two or three well-kept establishments."

Polluting the River Tame.—In consequence of the Birmingham Corporation having threatened to commence legal proceedings against several sanitary authorities, under the Rivers Pollution Act, for polluting this river, the Wednesbury Local Board has decided to apply to Parliament for powers for a united sewerage scheme to comprise four districts in South Staffordshire, the estimated cost of which is £70,000.

"Entertainments" in the Metropolitan Pauper Infirmaries and Asylums.—Touching the circular letter sent by the Local Government Board to the different union officers, taking exception to these entertainments, the St. George's (Hanover-square) Guardians have resolved that, for the following reasons, the Board was unable to concur with the views of the central authority on the subject:—"1. That there is no expense entailed on the funds of the Union, the whole being supplied by private subscriptions. 2. That, as there have been no irregularities at the entertainments in the infirmary, there is no valid reason for depriving the officers of the establishment of what is looked forward to by them as a great pleasure. 3. That, in the opinion of the medical officer, these entertainments are not in any way prejudicial to the health and comfort of the patients in the infirmary. And in support of these views they beg to forward a report on the subject from the medical superintendent, Dr. Webster."

Baby-Farming in France.—The French Act, passed in 1874, for the protection of children of tender age placed under care of "baby-farmers" (a numerous class in France), and other persons, who, for a consideration, undertake the charge of one young child (likewise a large class), has worked sluggishly. The funds allotted for the purpose have been insufficient, and the work has been indifferently seconded by the local boards. But ministers have by degrees improved the service by additional remuneration to different functionaries already existing, and good results are expected.

"Neither Decent nor Creditable."—Mr. Longe, the Government inspector, thus characterised the overcrowding of the imbeciles at the Dudley Workhouse, on addressing the Board of Guardians last week on the subject:—"This overcrowding had gone on too long, and had become a public scandal: the beds of these patients touched each other in the wards—which was neither decent nor creditable." A Government architect suggested plans to remedy the evil, and intimated that no extension of the present infirmary would be allowed. A special meeting is to be held to consider the matter.

Publicity in Dorsetshire.—A board of guardians in this county lately discussed the question, whether or not representatives of the press should be admitted to their meetings. The guardians objected to their profound utterances being made public, and one of them declared, with an emphatic thump of the bucolic fist, "We don't want them 'ere short*horn* writers here!"

Brighton Water-Supply.—The Town Council have resolved upon promoting a Bill to enable them to raise £150, 00 for the extension of the Corporation Waterworks, which are now producing a profit of £4000 a year.

"Highly Censurable."—At the adjourned inquest at Sheffield on the body of a pauper, an inmate of the workhouse hospital, who had been poisoned by an overdose of laudanum, it appeared that verbal instructions were given by the medical officer to a nurse that she was to administer ten drops of laudanum in some castor oil. An ounce of laudanum was sent up from the dispensary, and was placed above the deceased's bed. The nurse was away from the hospital for some hours, and in the meantime the deceased drank the laudanum. The jury considered the nurse highly censurable.

Stopping the Beer Supply.—The visiting justices of the Devon County Asylum at Exminster have decided that, after the close of the year just ended, the ordinary supply of beer to the patients shall be discontinued, and none given except on medical certificate. The attendants and officers are to receive money in lieu of the usual allowance.

Female Brain-work.—Referring to much that had been said and written lately about the overworking of girls and young women in schools and colleges, and that his friend Dr. Clauston had come forward as the champion of health and ignorance for women, Dr. Tuke thinks that Dr. Clauston had overstated the position of matters, that he had based his opinions more on the observation of isolated cases than on the general condition of highly educated women; that he had mistaken the wail of the one for the murmur of the many. No doubt a certain number of young women suffered and broke down whilst studying, but this did not necessarily imply that study was the cause of the breakdown. Idleness and ignorance were much more prolific causes of disease amongst women than overwork. They were the main producers of hysteria and all sorts of vapourish complaints, of many ills and evils, and of inanity, if not of insanity. As a matter of fact, it was not an easy thing to overtask the energies of the brain by work. It was not work, but worry, that killed the brain. The latter, he feared, must be ever with us all. The most highly educated and hard-working women whom he had the honour of knowing were eminently healthy. Perhaps this might be the "survival of the fittest"; but, even granting that it was so, the more women worked the more fit women they would have. The breakdown from overstrain did occasionally take place, and the first really important symptom was sleeplessness; when that set in, there was cause for alarm. As soon as a child or young person developed continuous headache, work should be discontinued.

COMMUNICATIONS have been received from—
Dr. Piffard, New York; Dr. G. de G. Griffith, London; M. C. Lange, Copenhagen; Professor W. T. Gairdner, Glasgow; The Registrar-General for Scotland, Edinburgh; The Registrar of the University of London; The Registrar of the Apothecaries' Hall, London; Surgeon-Major Dobson, Netley; Mr. A. W. Beaumont, London; Dr. Rodet, London; Dr. James Anderson, London; Mr. Francis Mason, London; Dr. Norman Chevers, London; Mr. J. K. Thornton, London; Mr. J. Cantlie, London; Dr. Willoughby, London; Dr. Charles West, Nice, France; Mr. J. Chatto, London; Messrs. Wm. Wood and Co., New York: Mr. W. W. Reeves, London; Mr. Clement Lucas, London; Mr. F. W. Rudler, London; Mr. Henry Morris, London; Dr. W. Alexander, Liverpool; The Secretary of the Royal Institution, London; Dr. Sidney Coupland, London; Mr. E. Nettleship, London; Mr. F. Canton, London; Mr. E. King, Richmond; Dr. J. W. Moore, Dublin; Mr. F. Long, London; Mr. Lawson Tait, Birmingham.

BOOKS, ETC., RECEIVED—
Analysis of Eight Thousand Cases of Skin Disease, by L. Duncan Bulkley, A.M., M.D.—On the Unity of Poison, etc., by Dr. G. de Gorrequer Griffith—The Systematic Treatment of Nerve Prostration and Hysteria, by W. S. Playfair, M.D., F.R.C.P.—Physiology, by F. Le Gros Clark, F.R.S.—Dr. Norris's Third Corpuscle of the Blood, by Mrs. Ernest Hart—Year-Book of Pharmacy—Friendly Societies, Industrial and Provident Societies and Trade Unions Reports, 1881—The Diseases of the Prostate, by Sir Henry Thompson—Army Medical Organisation, by Surgeon-Major G. J. H. Evatt, M.D.—Diseases of Women, by Dr. Atthill—The Essentials of Bandaging, by Berkeley Hill, M.B., F.R.C.S.

PERIODICALS AND NEWSPAPERS RECEIVED—
Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Deutsche Medicinal-Zeitung—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Archives Générales de Médecine—National Anti-Compulsory-Vaccination Reporter—Journal de Médecine—Glasgow Medical Journal—Boston Journal of Chemistry—New York Medical Journal—Ophthalmic Review—Medical News—Medical Temperance Journal—Western Medical Reporter—The Veterinarian—Edinburgh Medical Journal—Journal of Anatomy and Physiology—Philadelphia Medical Times—Monthly Homœopathic Review—Indian Medical Gazette—Maryland Medical Journal—Western Medical Reporter—Birmingham Medical Review—Morningside Mirror—Revue Mensuelle, etc.—Caslon's Circular.

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ORIGINAL LECTURES.

THE LETTSOMIAN LECTURES
ON THE
TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

By A. ERNEST SANSOM, M.D. Lond., F.R.C.P.,
Physician to the London Hospital; Senior Physician to the North-Eastern Hospital for Children, etc.

LECTURE I.—ENDOCARDITIS.—JANUARY 8.

THE RATIONAL BASES OF TREATMENT—MORBID ANATOMY—CLINICAL INVESTIGATION—ORIGIN AND PROGRESS OF ENDOCARDITIS—STUDY OF ENDOCARDITIS OCCURRING IN CHILDREN — PATHOGENESIS — EXISTING METHODS OF TREATMENT—PREVENTIVE TREATMENT.

In my first perplexity as to choice of a subject, when I learned that this Society had done me the high honour of electing me Lettsomian Lecturer for the present year, I thought that I ought to be guided by two considerations. The first, that it behoved me to give of my very best—in other words, that I should address you on a subject upon which I had the most personal experience. Yet I well knew that my best effort would fall far short of my desire and your desert. The second, that, considering the character and traditions of this Society, I should aim at something practically useful. I am very far from decrying the labours of those who pursue Science for her own sake, and I well know that many who have done so have elicited truths which have eclipsed, in numberless instances, in practical usefulness the results obtained by those who might, from their mode of procedure, be deemed more practical men. But I dared not take a narrow path in mere hope. So I thought it best to review a subject which presents itself very frequently as a therapeutic problem to everyone who is daily occupied in the practice of medicine, and I chose the affections which my title indicates because for many years my thoughts have turned towards them. It seemed to me that it might fulfil a useful purpose if I reviewed our extant knowledge as to the Treatment of Valvular Diseases of the Heart, compared these with the results of my own experience, and made, perhaps, a few suggestions as to progress towards precision in the future.

Then as to the point of view whence I could review the subject I felt some doubt. I could proceed from the therapeutic agent to the disease, or from the disease to the agent. Here, with all my difficulty as to how to perform my task, I could not hesitate as to how *not* to do it. I would by no means enunciate a therapeutic dogma, crystallise it into a phrase, and marshal the facts in such wise as they should support it, and if they refused—so much the worse for the facts. Apart from the consideration that such dicta as "*Similia similibus curantur*," "*Contraria contrariis*," etc., present to my mind some of the most pernicious of hasty generalisations of our day, is the one consideration that they are based on the treatment of *symptoms*; and as I shall presently show that the diseases we are about to study are oftentimes accompanied by no symptoms at all, so the practical application of the dogma becomes an impossibility, and its universality an absurdity.

For many reasons I thought it best to consider the phenomena of disease first, and our treatment of them subsequently. My plan then will be to enunciate very briefly the bases on which I believe our therapeutics ought to rest. These are, in my opinion, (1) the teachings of morbid anatomy; (2) clinical observation of disease-processes and their correlations. Then I propose to review (3) the lessons of the past as to treatment, and (4) to adduce towards the elucidation of the various problems the arguments from analogy afforded by experimental investigation—a mode of inquiry rendered difficult, alas! by the stumbling-blocks which a false sentimentalism has placed in our way.

First, then, I will consider the teaching of morbid anatomy as to lesions of the valves of the heart. You will understand that I shall do this very briefly, for my object is merely to note them in so far as they may afford a guide to treatment, and when I speak apparently dogmatically I do not make an assertion "*ex cathedrâ*," but in the spirit of an inquirer after truth.

We will first consider the disease which most commonly affects the valvular apparatus of the heart and the adjacent endocardium—the disease known as *Endocarditis*. In briefly reviewing its morbid anatomy much will remain unsaid, but I shall treat it first from the stand-point of mere observation, leaving all speculative questions. I would classify the first changes in the endocardium which I shall notice as *exudative*. The curtains or cusps of the valves may be seen to be slightly swollen, and the endocardium to contrast by its dulness with the healthy portions adjacent. The changes are most noticeable at the free edges of the valves, where may be seen isolated or agglomerated bead-like processes. Upon such processes may be observed sometimes little caps of fibrine. A thin section of a valve thus affected is seen under the microscope to differ from healthy valve structure in that its cellular elements are more numerous, and especially towards the free edge are closely aggregated. I wish to insist on the fact that, in a valve so affected, even the portions which seem to the naked eye unaffected are really infiltrated with cells. Only the aggregation is greater at the free edge, and here often the aggregated cells form little very slight concavities on which rest little caps of fibrin. The bead-like eminences observed by the naked eye are, then, according to my view, indications of a more widely spread inflammatory change in the valve than might be at first suspected. My friend and colleague, Dr. Turner, will show some specimens illustrating this point. It is scarcely encroaching on speculation if we conclude that this is the recent, the early stage of endocarditis. In looking over the records of sixty-eight post-mortems of cases of valvular disease at the London Hospital, I find that this stage of recent inflammatory change with exudation was observed in nine, *i.e.*, about 13 per cent. The aortic cusps were affected in five, the mitral in three cases. In one case mitral, aortic, and tricuspid were affected; in another, mitral, aortic, tricuspid, and pulmonic. In one case the tricuspid alone was thus diseased. In such early stage of endocarditis, emboli were noted in two cases—in one in the kidney, in the other in a branch of the pulmonary artery.

The *second form* of endocarditis, or properly speaking valvulitis, to which I shall call attention, is that which I would term the *sclerous* or fibrotic form. Here the valve—and it is the mitral which is affected in by far the greatest frequency—is thickened, but the thickening is not due to swelling of the soft tissue; it is felt to be hard and firm. The endocardium of the auricle near the valve is found to be dense and white. The valve curtains, and often the cords and fleshy columns, are more or less rigid. A patch of the endocardium lining the left ventricle and leading up towards the aortic cusps is sometimes also found white and thick, and the aortic valves themselves may be seen to have undergone similar changes. In this form microscopic section shows that there is a gradual fibrous transformation of the neoplasm resulting in the production of a quasi-cicatricial tissue. In some cases the thickening is such that the structure resembles cartilage—in fact, Dr. Wilks has found well-marked cartilage in such a thickened mitral.(a) Or, degeneration continuing, calcareous change may take place, and the valve, etc., become of bony hardness. It is evident that this may be considered the chronic form of endocarditis. It was met with in one-fourth of the post-mortems in cases of heart disease which I have mentioned. The effects produced upon the mitral and aortic orifices will be treated of in future lectures. In this class of cases vegetations were observed in the proportion of seven instances in twenty cases—on the mitral and adjacent auricle in three cases, the aortic in two, the tricuspid one, the aortic, mitral, and tricuspid as well as in the auricle in one case. Infarcts were noticed in branches of the pulmonary artery (five cases),

(a) "Pathological Anatomy," by Wilks and Moxon. Second edition, page 134.

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spleen (five), kidneys (two), brain (one), retinal artery (one), intestines (one).

A *third form* of endocarditis, which I think of practical importance to distinguish, is that which is *secondary to endarteritis* (atheroma). In this form it is the aortic valves which are affected in a large majority of instances. Patches of soft, flabby swelling may be seen in the lining membrane of the aorta close to the aortic cusps, involving them in the change, and perhaps causing the inversion of one or more. Or yellowish patches may be observed, in some cases covered by a soft pulpy material, the blood perhaps forcing its way at some softened spot between or within the arterial coats. Or the root of the aorta may be hard and thick, the thickening being of cartilaginous consistence, and in such thickening the cusps of the valve may be involved. Or in like situation and with like deformity of valves there may be a bony or stony hardness—a calcareous change. The evidence obtained by microscopic investigation is to the effect that in the swollen soft patches are abundant exudation-cells with hyaline or slightly fibrillar matrix. These occur mostly as swellings of the internal coat; but Dr. Wilks has observed them in all the coats of the vessel. The yellow patches show fat granules, and sometimes cholesterine crystals. There is evidently a fatty degeneration of the inflammatory neoplasm. In the fibrous or semi-cartilaginous variety there is more fibrillation and fewer cells; and in the hard and bony form there is a deposit of earthy salts in the interstices of the fibrous tissue. In this category came twenty-seven of the sixty-eight autopsies of heart disease which I have recorded. What I may term the *soft* stage was observed in eight instances, fibrous thickening in seven, calcareous change in five. The mitral valve was also thickened or atheromatous in seven cases, the tricuspid in two. In one case where there was calcareous transformation, ulceration of one cusp of the aortic valve was also observed. Infarcts were discovered in three cases—less commonly, it will be observed, than in the other forms of valvulitis—in the kidney in one case, in spleen and kidneys in another, and in middle cerebral artery in a third.

The fourth and last form of endocarditis, as demonstrated by post-mortem examination, to which I shall call attention is that termed *ulcerative endocarditis*. Swollen and dull portions of the endocardium of the valve may be seen to present here and there a yellowish or greyish discoloration, and to be covered by a finely granular *débris*. The superficial endocardium in such situations has become necrosed. Though such breach blood may find its way, and, spreading between the layers constituting the valve, may form an aneurism thereof. Or, the ulceration extending through both layers, the valve may be perforated. More commonly a considerable portion of the valve is eroded, and upon the eroded surface fibrine is deposited in the form of single or multiple vegetations. The finger readily detaches these vegetations, and the surface below them is found to be covered by a friable material. Such a specimen, from a recent case under my care, I now show you. Microscopic examination has demonstrated in a very large number of cases the presence on the ulcerated surface and in the tissue of the valve of aggregations of micrococci. Dr. Stephen Mackenzie exhibits here a specimen which shows these exceedingly well. In this form of valvulitis embolism is the rule, and such emboli are sometimes *infective*; that is, they may lead to suppuration at the points whereat they lodge, or may be causes of septicæmia.

In the autopsies which I have taken as illustrative, ulceration was observed in six. The ulceration affected the aortic valve in three cases, the mitral in two, and both aortic and mitral in one case. Infarcts were observed in five out of the six cases, the exception being in a case included under the category of atheroma, where one of aortic cusps was destroyed by ulceration, the others being thick and calcareous. The infarcts were found in the spleen in three cases, the spleen and middle cerebral artery in one case, the spleen, middle cerebral artery, and kidneys in one case.

I turn from this brief review of the morbid anatomy of the affection to—

II. *The Rise and Progress of Endocarditis, as evidenced by Clinical Observation.*—The fact which stands out pre-eminently in this connexion is the association with Rheumatism, acute and subacute. This association has been noticed ever since adequate means have existed for the detection of morbid changes in the valves of the heart; to Bouillaud must be ascribed the merit of first calling prominent attention to it. It is now a matter of common experience with all of us who have to treat cases of rheumatic fever. We know that in any case of this disease there is a strong probability of Endocarditis becoming manifest by a change in the valves of the heart. Discrepancies exist as to the proportion in which valvular complications are declared in acute rheumatism, but those are probably susceptible of some explanation. Amongst English observers (Fuller, Sibson, Budd, Latham, and others) the figures approximate tolerably closely, and indicate that in acute rheumatism Endocarditis becomes manifest in one out of every two or three cases.(b) Continental observers, however, record a less proclivity, the figures of Bamberger, Lebert, Wunderlich, and Roth showing a proportion of one in five to eight cases.(c) The statistics collected for me by Dr. Gabbett from the records of the London Hospital show that, in 1880, 113 cases of valvular complications were noted in 244 cases of rheumatic fever, a proportion of 46·3 per cent.; and in 1881, 170 in 295, or 60·6 per cent. The increasing proclivity to valvular complications with repeated attacks of rheumatic fever is not shown by the table for 1880.

Thus in cases of a first attack of rheumatic fever valvular changes were evidenced in 44 per cent.

In cases admitted for a *second* attack of rheumatic fever the proportion was 48·5 per cent.

In those who had suffered from two or more previous attacks the proportion was 59·0 per cent.

Or, to modify the plan of observation, the heart was *noted as healthy* in cases of a first attack of rheumatic fever in 50 per cent., in cases of a second attack 40 per cent., and after two or more attacks 20 per cent. These statistics are somewhat modified by the experience of 1881, when the valvular mortality was in the first attack slightly reduced (viz., 41·8 per cent.), whilst in the second attack it had greatly risen (viz., to 70·8 per cent.), and after two or more attacks stood at about the same ratio (67·1 per cent.) The record of "healthy heart" was in the ratio of 37·1, 19, and 22·8 per cent. in the three classes respectively.

We may now inquire by what signs the advent of Endocarditis in the course of Acute Rheumatism is declared? I exclude those cases which are complicated by Pericarditis, because those are out of the scope of my subject. First, as regards *symptoms*. These, according to the experience of many with which my own observations are entirely in accord, are by no means characteristic. Oftentimes there is absolutely no subjective sign which might give rise to the suspicion that the lining membrane of the heart is becoming involved in a serious disease. The course of the rheumatic fever appears to be modified in no appreciable degree. I am aware that some observers have laid greater stress on the prevalence of such subjective signs. The late Dr. Sibson, for instance, states that in nearly every one of his cases developing heart complications in acute rheumatism the inflammation "pronounced itself by the immediate language of the heart itself, by pain in its region, by the anxious expression of the face and its dusky or glazed hue, and by the disturbed breathing.(d)

Next, as to the *physical signs* by which the endocardial implication is indicated or rendered probable. I believe the most frequent sign to be a *prolongation of the first sound of the heart*. Sir William Gull and Dr. Sutton have noted this sign. They say: "Such a prolonged first sound not unfrequently in the course of a few days becomes a well-marked mitral bruit. . . . It also occasionally happens that the first sound is prolonged at the apex, and continues so until the patient is almost, if not actually, convalescent; and then this prolonged sound becomes a decided mitral murmur."(e) Dr. Sibson made a similar observation. Prolongation of the first sound was noted by him in eighteen out of twenty-two cases of threatened rheumatic endocarditis.(f) My own view as to the significance of this sign is that it is due to an impairment of the valvular element of the first sound. The curtains of the valve being swollen, the flap of their closure is rendered less manifest; the ear consequently perceives, for the most part, the muscular element of the systolic sound.

(b) *Cf.* Hayden, "Diseases of Heart and Aorta," page 304 *et seq.* Dublin: Fannin; London: Churchill. 1875.
(c) Rosenstein in "Ziemssen's Cyclopædia," vol. vi., page 85.
(d) "Address in Medicine," *British Medical Journal*, August 13, 1870, page 161.
(e) *Medico-Chirurgical Transactions*, 1869, page 82.
(f) *Loc. cit.*, page 162.

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The period of the disease at which manifestation of the involvement of the endocardium occurs is an important, though a debateable, question. Hayden placed it from the sixth to the ninth day of an attack of acute rheumatism;(g) Fuller from the sixth to the twentieth day. Gull and Sutton say, however: "Experience teaches that the heart becomes diseased at the very outset of the rheumatic fever, before the patients enter the hospital," (h) and Sibson was in accord with this observation: "The prolongation of the first sound, when present, was generally audible on the first day." I consider that though the prolongation or murmurish character of the first sound may be heard at variable periods of the evolution of rheumatic fever, it is very common to find it, as the observers last quoted have said, at the very earliest periods of evolution of the disease. I shall again call attention to the importance of this observation. But even though a distinct mitral murmur be noted, this must not be taken as conclusive evidence of disease of the valves, for it may be due to regurgitation from passive yielding of the ventricular muscle. This we shall consider in the lecture on Mitral Regurgitation.

A prolongation of the first sound or the production of a veritable systolic murmur does not, however, constitute the only sign of involvement of the endocardium in disease. To one sign I wish to call particular attention, chiefly because I want more evidence on the point. I have observed, as an early sign, *reduplication of the first or of the second sound* of the heart, and, so far as my experience has gone, when I have observed this sign the resulting change upon the valve has induced, not mitral regurgitation, but mitral stenosis. I have formerly before this Society developed my views as to the manner in which such reduplication is effected.(i) And, again, the change may be noted exceptionally in the aortic and not in the mitral valve. I have now under my care a case in which, during the evolution of rheumatic fever, a musical diastolic murmur became manifest at the base of the heart. My view is that such murmur is caused by the vibration of a pedunculated vegetation depending from an aortic cusp.

The next inquiry I would make is, Whether is there any causal relation between the pyrexia of rheumatic fever and the occurrence of endocarditis? Wunderlich says: "Cardiac complications are by no means excluded by the absence of fever."(k) My own experience is entirely in accord with this statement. Again, cases of rheumatic fever which manifest hyperpyretic temperatures are not accompanied by an abnormal proportion of valvular complications. In fact, the report of the Committee of the Clinical Society on Hyperpyrexia in Acute Rheumatism, states that endocarditis was a little less frequent in such cases than in rheumatic fever generally.(l) The conclusion, therefore, is irresistible, that there is no relation of causation between pyrexia and endocarditis.

Some authors have considered that there is a relation between the severity of an attack of rheumatism, the extent of the polyarthritis, and the development of valvular disease. I can only say that such is not my experience. This will engage our attention immediately.

Let us now inquire concerning those cases of Endocarditis which are not associated with a history of Acute or Subacute Rheumatism. These may conveniently, for purposes of investigation, be divided into two classes—(1) those which are observed in early life; (2) those which develope after maturity. In the latter class are those cases of gradual onset which involve the aortic orifice, and sometimes the mitral, which are traceable to subinflammatory changes at the root of the aorta, and degeneration subsequently. In these cases the Endocarditis and Valvulitis are consecutive—they have no necessary connexion with rheumatism, and their consideration may be conveniently deferred.

The study of Endocarditis as it occurs in the early periods of life is, however, at the point at which our investigation has hitherto been advanced, a matter of very great importance. Almost every practitioner is familiar with the fact that cases of disease of the valves present themselves which have shown evidence of such disease for many years, from very early periods of the life of the patient; and yet inquiry fails to elicit that the subject of such disease has ever suffered from Rheumatism in any form. It is surely a matter of importance, therefore, that we should endeavour to learn how such disease originates in the period of childhood.

I have elsewhere discussed this question at some length,(m) and I shall here only call your attention to a summary of such points as I think are absolutely necessary to bear in mind when we are considering Endocarditis with a view to treatment. I may, however, cite some evidence supplementary to my former lectures, derived from a summary of more recent cases prepared for me by Mr. J. A. West, our House-Surgeon, and formerly our Registrar at the North-Eastern Hospital for Children.

In acute and subacute rheumatism in the child, it has been considered by West, Rilliet, Barthez, and others that the proneness to Endocarditis is greater than in the adult. Rosenstein(n) has combated this view; but he considers "the disposition to endocardial affections on the whole smaller in childhood than after puberty." My experience entirely coincides with that of Dr. West, and is against Rosenstein, whose only recorded argument is that "he has repeatedly seen cases of rheumatic arthritis, even in children, which were not followed by endocarditis." Typical rheumatic fever is much less common in the child than in the adult; the articular manifestations are slighter, but I consider the morbility of the endocardium to be greater. Of thirty-two cases of acute and subacute rheumatism occurring in children under twelve years of age admitted into the North-Eastern Hospital during the past three years, twenty, or 62 per cent., presented signs of endocardial affection. The development of endocarditis, however, in the child has not so close a relation with the other phenomena of rheumatic fever as in the adult. It may precede, or may succeed, even after long periods, the attack.

We meet with cases of Endocarditis in children by no means uncommonly where the manifestations of rheumatism are very slight. There may be no history of subacute rheumatism, but only very slight pains, often designated "growing pains." Such has been noted by me in the following proportions in the three classes of cases: (*a*) acute rheumatism, forty-seven cases; (*b*) subacute rheumatism, twenty-one cases; (*c*) rheumatoid pain, eight cases.

Again, the manifestation, or, rather, indication, of rheumatism may be even slighter still. I have noted Endocarditis in cases where *eruptions* have been the only indications (if so they be admitted) of the rheumatic diathesis. Such eruptions are *ecsema*, *erythema* (*e. circinatum* or *marginatum*), and *purpura*.(o)

(To be continued.)

PYROGALLIC ACID IN PHAGEDÆNA.—M. Vidal, Surgeon to the St. Louis, thus concludes a paper which he read at the Académie de Médecine, "On the Treatment of Phagedæna of Simple Chancre by Pyrogallic Acid or Pyrogallol":—1. By destroying the virulence of simple chancre, it arrests phagedænism and rapidly transforms it into an ordinary sore. 2. Only causing very slight pain for some minutes, limiting its caustic action almost exclusively to the diseased tissues, and easy of application to all the invaded parts, pyrogallol, incorporated with an ointment mixed with an inert powder in the proportion of one-fifth, has proved to be the best topical application to simple chancre and phagedæna. 3. It may be applied over large phagedænic ulcerations without danger accruing from its absorption. 4. Although so remarkable in its efficacy in the phagedænism of simple (invading) chancre, it has no special action on the phagedænism of syphilitic ulcerations (tertiary phagedænism).—*Union Méd.*, January 4.

IODOFORM FOR ASCARIS LUMBRICOIDES.—Dr. Schildowsky has employed iodoform successfully in three cases of ascaris, and recommends that a further trial should be given of the remedy. He gives to an adult one grain with ten grains of bicarbonate of soda three times a day, and a quarter of a grain to a child.—*St. Petersburg Med. Woch.*, December 30.

(g) "Diseases of Heart and Aorta," page 799.
(h) *Medico-Chirurgical Transactions, loc. cit.*, page 80; *British Medical Journal, loc. cit.*, page 162.
(i) *Proceedings of the Medical Society of London*, vol. v.
(k) "Medical Thermometry," New Sydenham Society's translation, page 320.
(l) *British Medical Journal*, June 3, 1882, page 807.
(m) "Clinical Lectures on Diseases of the Heart in Children," *Medical Times and Gazette*, 1879.
(n) "Ziemssen's Cyclopædia," vol. vi., page 85.
(o) *Vide* "Lectures on Diseases of the Heart in Children," *Medical Times and Gazette*, December 27, 1879, page 711.

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THE DIAGNOSIS OF DISEASES OF THE SKIN.

By DR. McCALL ANDERSON,

Professor of Clinical Medicine in the University of Glasgow; hysician to the Western Infirmary, and to the Special Wards for Diseases of the Skin.

LECTURE XVII.

B.—ORGANIC AFFECTIONS.

I.—THOSE DEFINED BY UNIFORM CAUSES.

3. *Strumous Affections of the Skin.*

ii. *Lupus Erythematodes* (Erythema Centrifugum [Biett]; Seborrhœa Congestiva [Hebra]; Lupus Erythematosus [Cazenave]).

THIS form of skin disease, first described by Biett under the name of Erythema Centrifugum, is now better known under the title of Lupus Erythematodes. It is connected with Lupus Vulgaris not only in name, but also in that it presents these features in common with it, viz.: that it occurs almost invariably upon the face; that it has usually a dusky-red or violet tint; that it is an exceedingly chronic and obstinate affection; and that it leaves a cicatricial appearance of the skin: but it has not the same tendency as Lupus Vulgaris to attack very young persons, seldom appearing till after puberty; and females are more liable to it than males.

It may set in as a pretty acute affection, or exhibit acute exacerbations in its course, and even be accompanied by fever, but usually it is an exceedingly chronic affection, and progresses slowly and insidiously. It commences in the form of minute dusky-red spots about the size of lentils, situated at the orifices of the sebaceous follicles, and each is covered by a thin, oily, adherent scale, which is depressed in the centre owing to its being attached to a slender plug of epidermis which dips into the dilated sebaceous follicle beneath. These spots gradually increase and often coalesce, so that sometimes, sooner or later, a very considerable extent of surface is involved. The edge of each patch is more or less rounded, and in the advancing stage abrupt and elevated, and as it extends circumferentially, it often heals in the centre, the area presenting a slightly depressed and cicatricial appearance, frequently covered with dry, parchment-like scales. The eruption may be the seat of slight burning or itching, but it is very rarely painful, and is never the seat of ulceration. If the surface is free of scales, it has, in typical cases, a rough and pitted appearance, owing to the gaping orifices of the follicles plugged with hardened sebum-corks. A patient affected with Lupus Erythematodes once informed me that, at the seat of the eruption, she felt "as if all the pores of the skin were blocked up." The nose and cheeks are the parts of the face most liable to be involved, and the eruption at times assumes the form of a butterfly with outspread wings, the disease on the nose representing its body, that on the cheeks the wings. The hands are sometimes implicated as well as the face, and also occasionally other parts, but the ears much more frequently than the hands; the head, too, is often affected in scattered patches, in which case, after the disappearance of the eruption, its previous seat is indicated by permanent alopecia with whiteness and depression of the scalp.

This disease has comparatively little tendency to spontaneous cure; indeed, it often continues for many years, or even during the rest of the lifetime of the patient. Erysipelas is a not uncommon complication, apart altogether from the use of irritating local applications. This is a source of some danger to the patient, but is occasionally followed by the disappearance of the primary disease.

Lupus Erythematodes may be mistaken for simple Erythema, Psoriasis, Tinea Circinata, Lupus Vulgaris, Seborrhœa Sicca, and tertiary syphilitic eruptions.

Erythema, though common on the face, is frequently met with on other parts of the body; it has a much brighter tint; its edge is much less abrupt, as a rule, the colour gradually shading into that of the healthy skin; the sebaceous follicles are not involved; it is much more evanescent; and, when it disappears, it leaves no trace behind it.

Psoriasis sometimes resembles Lupus Erythematodes in the colour and shape of the patches, but it has no special tendency to attack the face, the elbows, knees, and head being its most common seat; it is much more extensively diffused; the scales are silvery white, imbricated, and less adherent; itching is more frequently present; the patches are much less obstinate, although the disease has a tendency to recur, especially in spring; and no cicatrices are left.

Tinea Circinata (Ringworm of the body) often occurs upon other parts than the face; it is a comparatively acute affection; it is non-symmetrical; the sebaceous follicles are not specially involved; there is usually a history of contagion, and the parasite can often be detected among the scales with the microscope; it does not give rise to cicatrices; and it is most commonly met with in children.

The diagnosis of the remaining affections may be best shown in a tabular form.

Lupus Erythematodes.	*Lupus Vulgaris.*
1. Does not usually appear till after puberty.	1. Often appears in childhood, or about the period of puberty.
2. Initial lesion an Erythema, which is comparatively superficial.	2. Isolated minute nodules, and more deeply seated.
3. Orifices of sebaceous follicles often gaping, and distended with hardened sebum-corks.	3. Sebaceous follicles not specially involved.
4. Never ends in ulceration.	4. Very commonly ulcerates—at parts at least—at some period of its course.

Lupus Erythematodes.	*Seborrhœa Sicca.*
1. If scales present, they consist chiefly of epidermis, and the under surface sends little processes into the sebaceous follicles.	1. Crusts consist chiefly of sebaceous matter, though mingled with epidermis.
2. Skin beneath crusts dry, and dusky-red or violet.	2. Skin beneath crusts oily, but otherwise healthy or slightly reddened.
3. Sebaceous follicles filled with hardened sebum-corks.	3. Sebaceous follicles filled with soft white sebum-corks, which escape in great numbers on pressure.
4. On disappearance, a cicatricial appearance of the skin is left.	4. Leaves no trace behind it.

Lupus Erythematodes.	*Tertiary Syphilitic Eruptions.*
1. Often of many years' duration.	1. Chronic, but not nearly so much so.
2. Oftenest met with on the face, ears, and head.	2. Common on the face, though never assumes the butterfly form previously described, and other parts frequently involved.
3. More or less symmetrical.	3. Generally non-symmetrical.
4. Colour dusky-red or violet.	4. In the chronic stage brownish or coppery.
5. Never the seat of ulceration.	5. Ulceration (presenting the characters already described) common.
6. Occurs in strumous subjects.	6. Occurs in syphilitic subjects, and other manifestations of Syphilis may be present.
7. Very obstinate, and little influenced by constitutional remedies.	7. Easily removed by anti-syphilitic remedies, local and constitutional.
8. Sebaceous follicles often patulous, and plugged with corks of sebum, and scales very adherent.	8. Sebaceous follicles not involved, and, if scales are present, they are thin, and not very adherent.

iii. *Lichen Scrofulosorum.*

This affection, which was first described and delineated(a) by Hebra, commences in the shape of little papules situated at the orifices of the hair-follicles. They are about the size of millet-seeds, have a pale-yellow or brownish-red colour, and

(a) See "Atlas der Hautkrankheiten," 3 Lieferung, Taf. iii.

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are covered with minute scales. They are arranged in clusters, or even in circles or segments of circles, are accompanied by little or no itching, and, if not treated, have a tendency to remain long without undergoing any material change. When they disappear they leave behind them for a time little pigmented spots, or even minute cicatricial depressions. They are generally limited to the trunk of the body. When the affection has reached a high pitch of intensity other lesions appear. "These consist," says Hebra,(b) "in the formation of more or less bluish-red tubercles, as large as lentils, and quite distinct from one another. They appear in intervals between the groups of papules, and also on parts, such as the limbs and face, where there had been none of the lichenous papules. The tubercles resemble those of acne, and undergo exactly the same changes as in that affection. In some of them a purulent fluid developes itself, which afterwards dries up or is discharged, when the tubercles themselves disappear; others of them do not suppurate, but gradually subside. In either case they leave discoid, darkly pigmented maculæ of the size of lentils; and they are followed by a fresh eruption at other spots. The cuticle of the surface between the tubercles is often cast off in small branny scales, having a fatty lustre, and this gives the skin generally a peculiar cachectic appearance."

Lichen Scrofulosorum almost always occurs in males, being especially frequent between puberty and twenty-five, and is generally associated with other manifestations of strumous disease, either of the skin, glands, or bones.

The diseases most apt to be confounded with it are Lichen Ruber, Eczema Lichenoïdes, and Syphilitic Lichen, the distinguishing features of which are indicated in the following tables.

Lichen Scrofulosorum.	*Lichen Ruber.*
1. Eruption confined to the trunk of the body.	1. Most frequently commences on the limbs, but the fully developed disease involves the whole cutaneous envelope.
2. Papules pale-yellow or brownish-red; arranged in groups, but not confluent, and tendency to healing in the centres of the patches, leaving little pigmented or even cicatricial spots behind them.	2. Papules red, not arranged in clusters, and soon coalesce, forming dark-red infiltrated patches; and, on removing the scales, orifices of hair-follicles found dilated.
3. Other manifestations of Struma usually present.	3. No manifestations of Struma, but nails often affected, and, as disease advances, nutrition of body markedly interfered with.

Lichen Scrofulosorum.	*Eczema Lichenoïdes (Lichen).*
1. Papules pale-yellow or brownish-red.	1. Papules reddish in colour.
2. Eruption remains papular and is dry throughout.	2. Papules may become vesicular or pustular; skin becomes infiltrated, and may be the seat of serous exudation.
3. Little or no itching present.	3. Very itchy.
4. Eruption limited to the trunk of the body.	4. May attack any part, and very often the extremities.
5. Usually other manifestations of Struma.	5. Occurs in persons subject to eczematous eruptions.
6. Cured by cod-liver oil internally, and the free application of it to the eruption four times a day, with flannel underclothing (Hebra).	6. Cured by treatment applicable to Eczema.

Lichen Scrofulosorum.	*Lichen Syphiliticus.*
1. Papules pale-yellow or brownish-red in colour, and the size of millet-seeds.	1. Papules in the chronic stage coppery, and generally much larger.
2. Eruption remains papular throughout.	2. Often many of the papules become pustular (Lichen Syphiliticus pustulosus of Wilson).
3. Eruption limited to the trunk of the body.	3. Any part may be attacked; common on the extremities, and even on the face.
4. Usually other manifestations of Struma.	4. Almost invariably other manifestations of secondary Syphilis.
5. Cured by cod-liver oil internally and externally, as above.	5. Cured by anti-syphilitic treatment.

(b) "On Diseases of the Skin, including the Exanthemata." By Ferdinand Hebra, M.D. The New Sydenham Society translation, vol. ii., page 53.

ORIGINAL COMMUNICATIONS.

PRACTICAL NOTES ON THE ORDINARY DISEASES OF INDIA,

ESPECIALLY THOSE PREVALENT IN BENGAL.

By NORMAN CHEVERS, C.I.E., M.D.

(*Continued from page 747.*)

MALARIOUS REMITTENT FEVER OF THE PLAINS OF INDIA.

Causes and Differentiation of the Remittent and True Enteric Fevers of India.

A DIFFICULTY has been raised with regard to "Paludal Remittent with bowel irritation." A very high authority lately asked me in writing, "Does Peyerian ulceration only occur in Specific Enteric Fever?" I replied, "There may be follicular ulceration of (1) tubercular and (2) dysenteric origin,—but, wherever I have found such" [*i.e.*, Peyerian] "ulceration in a case of *fever*, the other features of that fever have been those of True Enteric Fever." A man with Paludal Remittent has no exemption from its congener Dysentery, in which there is sometimes ulceration at the end of the small intestine; but no one who has seen the Peyerian ulcers of True Enteric could possibly fail to distinguish them from dysenteric ulcers. If I saw the former in any case, whatever the life-history of that case might have been, I would at once declare, undoubtingly, "This was a case of True Enteric Fever."

Since the above remarks were written, Dr. Charles Morehead, a man whose admirable published works and noble personal character were universally esteemed by the profession in India, has passed from among us in advanced old age, but without any appearance of bodily infirmity, and with a mind clear, wide, and deep—a fountain of living water, fresh and bright to the very last. Every word written and spoken by Dr. Morehead upon Indian disease is so valuable that I consider myself justified in citing the following passages from his recent correspondence:—

Dr. Morehead's latest Commentary upon the True Enteric and other Fevers of India.(a)

The following was Dr. Morehead's reply to my inquiry as to his *present* views regarding the occurrence of True Enteric Fever in India:—

"August 9, 1879.

"Our friend Grant has forwarded your note to me, and it has reached me this morning. I am absent in the country away from all books, and shall be so till the 19th, when I return to Edinburgh; so that what I write to you, without delay, is from recollection, but yet sufficiently accurate, I believe, for your purpose.

"Refer to 'Typhoid Fever' in the *Second* Edition of my 'Clinical Researches,' and to my Report of Sanitary Progress in Bombay from 1830-1860 in the second vol. of the *India Office Sanitary Reports* (1868), head 'Typhoid Fever,' and you will find the degree to which the opinion in the First Edition of the 'Researches' is altered; and please do not, kindly, refer to me in connexion with this question without carefully considering these references.(b) Now, in respect to what has been written of Enteric Fever in India since these dates—to the extent that I am informed of it—

(a) With this should be read extract from a recent letter from the same authority to Sir Joseph Fayrer, at p. 170, "Climate and Fevers of India."

(b) Reference to my chapter on True Enteric Fever in India (*Medical Times and Gazette* for September 20 and 27, 1879, pages 336 and 363) will show that this injunction was strictly obeyed.—N.C.

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I would say, that the anticipations formed by me, as expressed in the concluding suggestions of the remarks on Typhoid Fever, in my *Second* Edition, of a probable epoch of confusion, have been realised; and I hope that the time is near when the subject will be cleared of its doubts and difficulties. I am not acquainted with any Clinical Report of Enteric Fever in India—I mean which gives the history of an epidemic, including *recovered* cases as well as fatal, *and* the ratio of deaths to recoveries; and until this is done the literature of the subject is manifestly incomplete. What I know of it in these later years is from post-mortem reports, chiefly those incorporated by Bryden in his Statistical Papers. I stated in the suggestions above referred to, that we were not justified in concluding that where there was Peyerian ulceration there had of necessity been Enteric Fever. In addition to the exceptions mentioned by me" [at page 161, Second Edition.—N.C.], "'you will find in my chapter on Measles in the *First* Edition of my 'Researches,' one or two fatal cases in which there was Peyerian disease, and, if I mistake not, Dr. Harley has somewhere also referred to this connexion. Now, this pathological fact has been in great measure overlooked in these later years in India, and it has been almost universally assumed that the presence of Peyerian ulceration after death is evidence of there having been Enteric Fever during life. I believe it would not be difficult to pick out many of Bryden's reported cases, of which this is a forced and improbable interpretation. In many of them, after six or eight days' illness, there is extensive ulceration. This does not accord—I mean such morbid results after a few days' illness—with the history of Enteric Fever in European countries, and it ought not to be accepted of the disease in India, unless supported by undoubted symptoms during life, and the clinical histories of *coincident* recovered cases. On this point, however, I would remark that it is not improbable that it will be found, if it has not already been proved, that we may fairly look for modifications in the course of the disease as occurring in India, compared with this country, as, for example, in a more marked remittence, and in a more rapid course and a greater mortality, but still not to the degree which belief in Bryden's cases would imply.

"I cannot but think that writers on this disease, and on others common to Europe and India, are too dogmatic in formulating the etiology, the symptoms, and pathology too exclusively from observation in Europe, and that the history of many diseases, as observed in these two fields conjointly, has yet to be written. I feel sure that much of the obscurity, the contradiction, and difference of opinion rest on this, I would say, self-evident principle. I have one observation further—I cannot accept the statement so often put forth, that enteric fever was habitually overlooked by those of my generation of observers. I can say for myself, that I went to India familiar with the fact that, as described by Louis, there was a form of continued fever with Peyerian disease, and I of course followed the discovery made by Jenner some fifteen years afterwards, that this was a fever distinct from typhus; and it is not likely that, not working with my eyes closed, I should frequently have overlooked it, if it had come under my observation. There is a case of mine, in a girl of the Byculla Schools"—[this is Case 35, of Caroline Smith, at page 95 of the Second Edition. The observation (which Dr. Morehead cites here from memory, not having then his book to refer to) is, "the glands of Peyer were distinct, and there were three or four round ulcers, each the size of a split pea; cicatrisation had commenced."—N.C.],—"which has been several times referred to as an instance of this oversight; it will be found that the ulcers in the small intestines were cicatrised—evidence that they were the result of some previous illness, and not of the fever from which she succumbed. But it is useless to refer to particular cases, and I do not think that we are unreasonable in demurring to the verdict that we were ignorant and careless observers, and in continuing to insist that in our several fields of observation in India, from 1830-60, Enteric Fever was rare, and that its clinical history in India since its greatest frequency has yet to be written; for assuredly during this period there has been, and there still continues, as I believe, much confusion and error on the subject of Fevers in India."

In a letter, dated two days subsequently, Dr. Morehead observes—"One further remark before leaving this subject. In a prefatory note to No. 5, *Medical and Physical Society's Transactions*, Bombay, somewhere about 1843, I explained that it was my constant practice to examine all the organs, not only those expected to be diseased, and specially to open the entire tract of the intestinal canal, and I explain my several reasons for so acting. I mention this now as an additional reason for the confidence with which I maintain that I could not—except in a very occasional instance—have overlooked the existence of Peyerian ulceration in Indian fevers."

The following observations occur in a commentary upon my chapter on the True Enteric Fever of India, which Dr. Morehead most kindly sent me. I had remarked, "When Dr. Morehead published the first edition of his treatise, in 1856, he believed that this malady" [Enteric Fever] "did not occur in India, although the type of disease in some of the cases which he recorded closely resembled that of Enteric Fever—a fact which he clearly observed, when, after describing Case 32, he added, 'While retaining this case in its original position, I must admit that recent inquiry may suggest that it was true typhoid, not adynamic remittent.'" Upon this Dr. Morehead remarks, "At page 337 you rightly interpret me, with this slight exception: I do not know that you quite recognise that it hangs exclusively on one case (32). Therefore, instead of 'the type of *some* of the cases,' it should read '*one* case.' It was that of a man of the 15th Hussars, quartered for some months in the Town Barracks of Bombay, the sick being sent to the General Hospital under my care. It was, therefore, if *Enteric*, a sporadic case in a body of men exposed to the same influences; therefore, taken in its connexion, it proves little as to the existence of Enteric in Bombay in those days (1840). Case 35 is another which I am said" [not by me—N. C.] "to have mistaken. A girl, after eight days of febrile symptoms, dies; at the end of the ileum were three or four small ulcers the size of a split pea; *cicatrisation* had commenced. Could this lesion be regarded as the result of the eight days' febrile condition, or could it be regarded otherwise than [as] an antecedent lesion? And yet on these two cases, in the first of which, when first reported in the *Transactions of the Medical and Physical Society*, I remarked on the appearances as resembling those of the European Continued in one of its forms, and this six years before Jenner wrote,—it is affirmed that I was in the habit of overlooking Enteric Fever and calling it Remittent.

"Then further note that the case which I first observed in 1856, and which showed me that Enteric Fever was to be admitted, occurred to me before I had seen the Reports of Ewart, Scriven, Goodeve ('Clinical Researches,' second edition, page 160). Could you have stronger evidence that I had not been purblind during the thirty years of my Indian practice, and that it would be quite as reasonable for European physicians to maintain that my not having witnessed scarlet fever in India was simply an error in diagnosis from having mixed it up with measles, with which I was familiar, as physicians in Europe had done—before Home, some hundred years ago? Medicine can never progress as a science if we cut the Gordian knot of difficulties by assuming ignorance and incompetency in the observers who have preceded us, unless the indications are so manifest as not to be evaded. I entirely agree in the very excellent remarks which you make as to the course which ought to be pursued in the future. I do not pretend to have seen the greater number of the Reports which have come from India, as" . . . . . "for these are not accessible to outsiders, but I have seen sufficient to convince me that there is much looseness and inaccuracy and want of the close method and precision which clinical observation and record require before they can be received with perfect confidence. In a word, the hobby has become rampant and run away with its riders, which, as you observe, is exactly what I predicted, but it has occurred to an extent I could not have ventured to anticipate.

"One word of doubt. I am not sure that you interpret rightly the reference which you make at page 336 of your paper, antecedent to 'Twining'" [I give a citation from Annesley, which Dr. Lyons holds to be evidence that enteric fever was observed by that authority in India.—N. C.] "To me the incident seems to resemble what I describe at page 24, 'Clinical Researches,' second edition, beginning at 'The Mortality,' and on to the top of page 28" [Intermittent complicated with diarrhœa or dysentery.—N. C.]

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"much more than anything allied to Enteric, and I am quite sure that these were not Enteric."

Seeing that the whole question of the etiology of Indian Enteric Fever is at present quite unsettled and subject to investigation, I propose the following considerations, results of my experience—not as dogmatic conclusions, but as texts for inquiry.

Only one form of True Enteric Fever has occurred within my observation in India.

The morbid appearances of Peyerian disease in True Enteric are so characteristic that no morbid anatomist can fail to distinguish them from all other ulcerative and inflammatory lesions to which the ileum is subject.

If I found these characteristic appearances in an ileum, I would declare the case to be one of True Enteric, quite irrespective of its life-history, just as I would distinguish variola by looking at its fully developed eruption.

The follicles of the ileum are liable to dysenteric and tubercular lesions; but, whenever I have met with ulceration here in a case of fever (hectic excluded), the other features of the disease have been those of True Enteric Fever.

I have repeatedly seen True Enteric Fever in Calcutta having all the characteristics of the Enteric of Jenner. I have seen it only in Europeans and Indo-Britons. I believe that its prevalence among natives has been exaggerated; but, of course, I am not justified in giving a dogmatic opinion upon that which I have never seen. I believe that it is frequent among young European soldiers, but I think that this matter requires the test of strict future observation.

I recognise the Enteric Fever of Jenner as an entity so distinct that I would not deny the identity of a case in which I found all its clinical conditions, only because I could not discover that it was due to this cause or to that, any more than I would ignore the existence of a man standing before me only because I failed to discover the name of his grandfather.

In India I would approach the investigation of a so-called case of True Enteric Fever with the very maximum of scepticism compatible with belief in the rare occurrence of the thing looked for and an honest desire to elicit truth.

Unless the case ended in perforation, I would not accept, without question, the assertion of any professional brother that he had under his care a case of Indian Enteric Fever, unless he convinced me that, in symptoms and progress, and, if fatal, in morbid appearances, it had all the leading characteristics of English Enteric.

Paludal Remittent, more or less amenable to quinine,(c) uncomplicated with looseness of bowels or with follicular disease, is one of the most prevalent and fatal diseases of India. Paludal Remittent may be complicated with, or followed by, diarrhœa or dysentery. But there is nothing to show that such complicated cases of marsh fever are characterised by the Peyerian disease of True Enteric Fever.

As regards their probable modes of origin, I draw the strongest line of distinction between Paludal Remittent and Enteric Fever. The former is due to malaria solely. May it not be that, like Plague, Enteric Fever is epidemic, and that attacks are *excited*, not *caused*, by the ingestion of sewer-filth? The facts that it is not subject to the antidotal action of quinine, and that its existence cannot be discovered in many localities where the marsh poison is most virulent, make it probable that it is not generated in marshes. But there are grounds for considering that it can only exist in an atmosphere pervaded by marsh exhalation.

Marsh malaria of high intensity may somewhat modify its type.

Is it now too late to question whether decomposing sewage matter, when taken into the system, acts as a specific poison producing the fever, or as a mere excitant and explosive?

It is certain that the term "Typhoid" has led to so much confusion, in the writings of careless people who ought to have known better, that it ought to be stamped out of medical nomenclature, the designation "Enteric Fever of Jenner" taking its place.

(To be continued.)

(c) In my chapter on True Enteric Fever, page 364 of September 27, 1878, I have twice, rather unguardedly, used the expression that Paludal Remittent is "curable by quinine." Essentially, quinine is an antidote in all paludal fevers; but, in laying down the conditions of the QUININE TEST for Indian Fevers (page 121 for August, 1879), I have emphatically set forth the fact that, in neglected and moribund cases of Remittent, quinine fails to cure, just as water fails to quench fire in its highest intensity.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

CASES UNDER THE CARE OF DR. THEODORE WILLIAMS.

[Reported by Mr. GEORGE V. PEREZ.]

Case 1.—Mitral Stenosis and its Results—Treatment by Koumiss.

MARY ANNE R., aged twenty-five, admitted October 26, 1882, with a history of three severe attacks of rheumatic fever since 1876, followed by hæmoptysis to the extent of several ounces in 1799, 1880, and 1882, by palpitation, and dyspnœa, which have persisted. Since August she has had obstinate vomiting and retching, and was admitted in a very exhausted condition.

State on Admission.—Aspect anxious, skin slightly jaundiced. She has cough with blood-stained expectoration, orthopnœa, and sleeplessness. Has constant retching, and vomits everything. Bowels constipated; pulse 120, irregular; temperature 98·2°.

Physical Signs.—Cardiac dulness increased, chiefly in a transverse direction, and extends upwards of an inch to the right of the sternum, being bounded by the third rib above, by the sixth below, externally by a line parallel with the nipple line, but half an inch outside it, internally by a line drawn an inch to the right of the sternum and parallel with it. Heart's action extremely irregular; impulse is felt between the fifth and sixth ribs; the first sound is double, except at the extreme apex; a loud systolic murmur accompanies it, heard best between the fifth and sixth ribs, and audible also in the subclavians. Hepatic dulness largely increased upwards, and below can be detected to umbilicus. There is some dulness at the base of both lungs, with crepitation at the left base.

In spite of strong purgation, the vomiting continued for several days, being checked, but not cured, by creasote. A few days after admission, œdema appeared in both legs, and extended up to the thighs, no albumen being detected in the urine. The patient, who had been on beef-tea and milk, was dieted with koumiss (two to three bottles a day) and Brand's Essence, and no medicine was given. After twenty-four hours of this treatment the vomiting entirely ceased; and after a week of it the symptoms of cardiac oppression and hepatic congestion diminished, the hepatic dulness retreating from the umbilicus to an inch below the ribs in the right hypochondrium and epigastrium. On November 21, minced chicken was substituted for the Brand's essence, the koumiss being continued, and a diuretic mixture containing digitalis ordered. Under this treatment the œdema disappeared, the flow of urine greatly increased, the heart's action became more regular, the pulse falling to 80. The first sound of the heart lost its double character. The patient was able to leave her bed. She still remains under observation, and is gradually regaining strength.

The interesting points of this case are—1. The large hæmoptysis, which is not common early in the disease; 2. The extensive results of mitral stenosis, as seen in the congestion of the lungs, the dilated right cavities of the heart, and the gorged liver; 3. The obstinate character of the vomiting; 4. The excellent effect of simple nourishment, such as koumiss and Brand's essence, the former of which probably acted on the liver and kidneys, and thus helped to relieve the gorged portal system. Hence the diminution in the size of the liver, and the relief to the cardiac congestion, and which was still further promoted by the action of the digitalis.

Case 2.—Mitral Stenosis with Angina—Treatment by Arsenic and Nitrite of Amyl.

Mary Ann W., aged thirty-seven, single, a needlewoman, was admitted August 11, 1882. She had scarlet fever in 1865, and since then had been subject to palpitations. In 1868 she had hæmoptysis to the extent of half a pint, and was admitted into the hospital under Dr. Burdon-Sanderson,

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when mitral stenosis was diagnosed. She left the hospital improved, but has since been an in-patient in 1871, in 1876, and in 1881, under Dr. Theodore Williams, suffering generally from curious anginal attacks, which commence with pain in the head and retching; then follow violent palpitation and pain under the left nipple of a severe character. The pulse rises from 90 to 120 and even to 140 during the attack; it is very feeble, and gives a hyperdicrotic tracing with the sphygmograph. These attacks last five or six hours, and, as a rule, are greatly reduced by the inhalation of nitrite of amyl. The pulse is at other times intermittent.

Physical Signs.—Cardiac dulness extends from the fourth to the sixth rib; impulse is felt under the sixth rib midway between nipple and central line. A well-marked presystolic thrill is felt between fifth and sixth ribs. A loud presystolic and systolic murmur is audible over the whole cardiac region, but reaches its greatest intensity between the sixth and seventh ribs, at a point rather to the left of the nipple.

This patient always improved under the use of arsenic in doses three minims of the liquor arsenicalis three times a day, the palpitation becoming less marked and the attacks less frequent. The pulse, too, increased in strength and lost all intermission. Unfortunately, the arsenic seems, after a long use, to give rise to diarrhœa, and consequently has to be omitted, but the relief it gives to the patient is very marked. Here the disease evidently originated from scarlet fever, which gave rise to endocarditis, resulting in a button-hole mitral valve, and hence the troublesome palpitation. But this does not entirely account for the attacks of angina, which, judging by their transient nature, and the fact of their being benefited by arsenic, were probably neurotic, and not due to structural changes of the cardiac walls. The combination of mitral stenosis with angina is not at all a common one, and it is difficult to explain. The presystolic murmur is exceedingly loud, and the systolic somewhat faint, and bears evidence to the very small aperture to which the mitral valve must be reduced. The impulse is strong, and contrasts greatly with the extremely feeble pulse at the wrist. In this case the stenosis seems to exercise but little or no prejudicial effect on the lungs or liver, and even the right side of the heart does not appear greatly distended—in this respect contrasting greatly with the previous case. The chronicity of the case, and the fact of her having been able to resume her occupation from time to time for seventeen years, must be noticed, as bearing on the prognosis of these cases.

Case 3.—Double Aortic Disease—Large Gain of Weight.

Ada F., aged twenty-one, was admitted August 30, 1882. Father had suffered from rheumatism. She had rheumatic fever at eight, and became an in-patient under Dr. Quain at ten, who detected an aortic diastolic murmur. Since then she has had three attacks of rheumatic fever, followed, six years ago, by slight chorea, which passed off. Some years ago, dropsy of the extremities came on, and latterly she suffered from dyspnœa and palpitation. She was in-patient under Dr. Williams in 1877, and improved considerably during her stay, and afterwards took a situation as a nurse with comparative impunity, but later on became a housemaid, where the heavy work brought on increased shortness of breath, with palpitation and pain in the left side. On admission, the urine was of specific gravity 1025, and contained one-twentieth albumen. The pulse was 100 and decidedly locomotive.

Physical Signs.—The left side of the chest is enlarged, arched, and heaves with each cardiac impulse, the latter being felt chiefly between the sixth and seventh ribs in the vertical nipple line; the area of cardiac dulness is considerably increased downwards, and reaches to the lower border of the seventh rib. It is limited externally by a line drawn parallel to the nipple line and three inches outside it. Internally the dulness reaches to the median line. A loud double murmur is heard over the whole upper half of the chest, becoming most intense at the second costo-sternal articulation. A double murmur is heard in both subclavians, but in the carotids only a single diastolic one. A loud thrill is perceptible in the sternal notch. This patient has been treated with iron in large doses, and by rest with a generous dietary. The albumen has disappeared from the urine; her breathing has improved; she has gained considerably in colour and weight (two stone more than when admitted three months previously); the pulse is stronger but the sphygmographic tracings show it to still have the characteristic features of aortic regurgitation. It is noteworthy in this case that the aortic valves were early affected by the rheumatic fever, and that the mitral, strange to say, escaped, thus reversing the usual order of proneness to attack, for it is rare to find aortic disease originating in rheumatism, and especially at so early an age. The recovery from dropsy, and the disappearance of albumen from the urine at a later date, show the excellent results of prolonged rest such as this hospital affords. The large gain of weight and the increase of colour under iron and good diet show what much better results we can expect in the treatment of aortic disease with cardiac hypertrophy in the young than in the old. In a case like this, if the conditions of rest and of good diet could be insured, the patient might live almost for the natural term of life.

Case 4.—Anæmia with Cardiac Hypertrophy.

Emily S., aged twenty-two, domestic servant, was admitted September 18, 1882. She had suffered from several attacks of pleurisy, which seemed to have left little or no trace behind; but in 1879, after a "hard place," she became intensely anæmic. The catamenia ceased, and her breath was short. Her pulse was weak. She had slight exophthalmos.

Physical Signs.—The cardiac apex-beat was one inch outside the nipple-line in the fifth interspace; the dulness was increased upwards and to the left. A soft systolic murmur was audible over the whole cardiac region, loudest at the second left costo-sternal articulation.

Under large doses of iron the patient recovered her colour completely, and gained a stone in weight. The murmur entirely disappeared, but the increased cardiac dulness remained. The catamenia returned, and became regular. Pulse and breathing both became normal. The question arises, in this case, as to the cause of the cardiac hypertrophy which seemed to affect the left ventricle. The valves were apparently healthy, and there was no obstacle to the circulation save in the thin state of the sanious fluid. Though the patient had slight exophthalmos, she had no goitre, and therefore no cause for the hypertrophy can be traced there. We must conclude that the case was one of anæmia giving rise to hypertrophy—a somewhat uncommon combination; and, such being the case, we can less wonder at the rapid improvement.

THE LATE DR. CORVISART.—This gentleman, who was physician to Napoleon III. and the Prince Imperial, died suddenly on the 24th ult., at his residence in the Champs Elysées, aged seventy-one. He was nephew of Baron Corvisart, physician to Napoleon I., who died of apoplexy when he heard of the defeat of Waterloo. The Baron just deceased attended Napoleon III. at Chislehurst on his death-bed.

SUCCESS OF M. PASTEUR'S INOCULATIONS IN CHARBON.—The Department of Eure-et-Loir is one of those which has suffered most from the ravages of charbon, and as soon as the results of M. Pasteur's inoculations in Seine-et-Marne were made known, trials of the same kind were instituted. The Veterinary and Agricultural Society of Chartres has just published the results. The number of sheep inoculated during a year was 79,392; and of this number the mean annual loss from charbon during the last ten years would be 7237, or 9 per cent. But since the inoculations only 518 have died, or 0·65 per cent. It is probable, however, that the losses during the late wet year would not have been more than 3 per cent.; but even then 2382 sheep would have died instead of 518. In the flocks which were only partly inoculated, there were 2308 inoculated and 1659 non-inoculated; and the losses among the former were only 8, or 0·4 per cent., while among the latter they rose to 60, or 3·9 per cent.—the two categories of animals living under identical conditions. There were also 4562 cattle inoculated; and of that number, in place of 322 deaths (7·03 per cent.) that should have taken place, there were only 11 deaths, or 0·24 per cent. These were the results of the first year, and there is every reason to believe that when the inoculations are better performed, and all the details attended to, still better results will follow. Indeed, quite recently 16,520 sheep and oxen have been inoculated without a single accident.—*Revue Scientifique*, December 23.

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Medical Times and Gazette.

SATURDAY, JANUARY 13, 1883.

CRIMINAL LUNATICS AND IMBECILES.

Should the practice be continued of sending insane prisoners and convicts to county and borough asylums? Should imbeciles who are habitually criminal be detained in State institutions? These are the two most interesting questions which the recent Commission on Criminal Lunacy had to answer, after hearing a great deal of contradictory evidence and dealing with many conflicting documents supplied by members of the Commission, and by witnesses. It is a matter for regret that the class of lunatics whose presence in ordinary public asylums has long been regarded as a grievance by medical superintendents and members of asylum committees—namely, insane convicts whose sentence had expired before they were sent from Broadmoor to county and borough asylums—was technically excluded from the reference to the Commission. It was argued that as the sentences of such lunatics had expired before their removal from the criminal asylum at Broadmoor they could only be regarded as ordinary pauper lunatics. Though, however, this decision was unavoidable, the Commissioners practically ignored it in their inquiry, and a considerable proportion of the facts and opinions elicited from witnesses bore upon the character of lunatics who were ex-criminals, and on their unsuitability for residence in county and borough asylums.

Exclusive of this class, those who may correctly be styled criminal lunatics come under two heads, namely, Queen's-pleasure lunatics, and those who have become insane within the period of their sentences, whether the sentence was one of imprisonment or penal servitude. In the latter class are also included those who have become insane while under remand or waiting for trial. Queen's-pleasure lunatics are those who are under any sentence or order of a court consequent upon being indicted for any offence, and are either found to be insane on arraignment, or acquitted on the ground of insanity. Prisoners who become insane while undergoing sentence of imprisonment in local prisons are certified, and sent to the corresponding county or borough asylum, where they are treated as ordinary pauper lunatics. But convicts who become insane during the currency of sentences to penal servitude are, if females, sent to Broadmoor Asylum, and if males, to Woking Prison, to which is attached a lunatic department. Here, by an expedient which would not be justified if practised by a less august authority than the Home Office, male convict lunatics are kept during the progress of their sentence, or at least till within a few weeks of its close, when they are sent to Broadmoor Asylum, from which place alone they can legally be transferred to county and borough asylums. The great discontent amongst asylum authorities which led to the appointment of the departmental Commission to which we have referred, seems to have been caused chiefly by the transfer of the latter class from Broadmoor. Though the practice of handing over insane prisoners from local prisons to public asylums does not appear to commend itself to asylum superintendents, yet their objection to this class of patients seems to have been eclipsed by their abhorrence of the expiree lunatic coming to them indirectly from the convict prison. Dr. Medlicott, of the Wells County Asylum; Dr. Sheppard, late of Colney Hatch Asylum; and the Hon. Francis Scott, one of the visitors of the County Asylum at Brookwood, all testified from personal experience to the disastrous effects which, they considered, inevitably resulted from placing these expirees amongst the non-criminal population of a county asylum; and Dr. Gover, the Medical Superintendent of the Government Prisons, stated that various superintendents had pointed out to him the extreme inconvenience, and in some cases the evil effects, arising from the presence of criminal lunatics among the ordinary patients. Though, however, each of these witnesses commenced with a strong expression of such opinions, all had in turn to admit, first, that all expiree criminal lunatics are not dangerous; secondly, that many lunatics who have never been technically criminal are quite as dangerous as so-called criminal lunatics; thirdly, that many lunatics who have entered asylums direct from the ranks of the populace have a criminal history; and fourthly, that the mass of the patients in county and borough asylums is largely drawn from the same classes that produce the prisoner and the convict. And, generally, these admissions were followed by another—that if the purely criminal or ex-criminal lunatic, who is dangerous, has to be removed to a special asylum, it will logically and practically become necessary to remove also all specially dangerous or homicidal lunatics, whether crime has appeared in their history or not. And it might almost be supposed from much of the evidence that this conclusion would be equally applicable to private patients of a specially dangerous class.

The statements regarding lunatics of the criminal class were that they constitute a specially dangerous class of persons; that they are often homicidal; that they differ from ordinary lunatics in being able to conspire; that they incite other patients to turbulence and breaches of discipline; that their presence necessitates a stricter discipline and greater restrictions than would be necessary for non-criminal patients alone; and that county and borough asylums have not the equipment or appliances which are required for the safe keeping of such persons. It was also alleged that the association with persons stained with crime, and coming indirectly from convict prisons, was detrimental to the ordinary patients of pauper asylums. There can be little doubt that the evidence submitted to the Commission shows that these objections can scarcely be sustained in their present form, and that if any change is to be made in the constitution and population of county and borough asylums, it will have to be made by the removal of unwelcome elements—not because they are, have been, or might be criminal, but because they are specially unmanage-

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able or dangerous. It would be difficult to adduce stronger evidence of the dangerous character of many non-criminal lunatics than the fact, stated by Dr. Orange, that there are in Broadmoor Asylum no fewer than twenty-nine Queen's-pleasure lunatics, who are detained for having committed homicide while actually under treatment in lunatic asylums. It is also obvious that the fact of a person being a criminal lunatic instead of an ordinary pauper lunatic is often due more to the fault of his friends, or of public officials, than to his own dangerous qualities. Dr. Orange admits that good counsel would in many cases have converted a convict lunatic into a Queen's-pleasure lunatic; and Dr. Sibbald testifies that in Scotland the number of criminal lunatics is kept down by the exercise of a proper watchfulness on the part of the procurator-fiscal and Crown counsel, which leads to the avoidance of making a man a criminal who can more properly and justly be dealt with as a lunatic. Dr. Orange also states that a considerable proportion of ex-criminal lunatics sent from Broadmoor to county asylums have become too demented to be dangerous. The reports from such asylums fully confirm this statement.

A general view of the evidence submitted to the Commission regarding dangerous lunatics of the criminal type shows that much of the grievance complained of by medical superintendents of asylums has had its origin in a gradual transformation which their ideas of the function of public asylums have undergone. They do not allege that dangerous and offensive lunatics are more dangerous and offensive than they used to be. In fact, the only inference in this respect which can be drawn from their evidence is that they are less so. What they really complain of is, that the presence of ex-criminal and criminal lunatics in ordinary public asylums outrages the feelings and limits the comforts of harmless, inoffensive patients, many of whom have been in good circumstances, such as governesses, clergymen, etc. It would have been interesting to know—but none of the members of the Commission seem to have thought of inquiring—how many of these patients of the better class were only paupers by arrangement, and inhabitants of pauper lunatic asylums by sufferance, inasmuch as their maintenance was repaid by their friends to parochial boards. When, again, we are told that on the male side of Colney Hatch Asylum, with a maximum population of 858 patients, there are probably 300 imbeciles and idiots as distinct from dements,—many of the dements being equally quiet and harmless,—the question naturally arises whether, if there is to be an eviction of any class from county asylums, the process should not really begin with the harmless, for whom, perhaps, such institutions were not originally intended, so that room and provision might be made for dangerous lunatics, whether they have been so far left to themselves as to commit crime or not. The evidence indicates one argument in particular which supports the view that this dislike to dangerous lunatics is due to a change in the public and official estimate of what a lunatic asylum is. Many witnesses asserted that they could deal with dangerous and offensive lunatics; but to do so they would require to use an amount of seclusion and restraint that would be out of keeping with modern ideas as to the best mode of treating lunacy. It can scarcely be denied that this statement rests on a certain basis of fact, and the discussion of it is approachable from two sides. The solution of the difficulty may be the separation of dangerous and offensive lunatics into two classes, namely, a class requiring greater restraint, and a class requiring greater freedom and greater physical exercise, than ordinary lunatics. It is natural that Dr. Orange, for instance, should look upon criminal lunatics from a point of view which, if adopted by the superintendent of a county asylum, would be regarded in high quarters as illiberal. Not that Dr. Orange is by any means one-sided. The perusal of the evidence given by him before this Commission would in itself be sufficient to establish his character for comprehensiveness of grasp and fairness of judgment. Any one-sidedness is quite as likely to be in the hemi-opic humanitarianism which insists upon the luxurious treatment of all forms of insanity, without consideration of the necessity for repressing that criminality which may be associated with lunacy, for which lunacy may in fact be the avowed excuse, though there may be no inherent and necessary connexion between the lunacy and the crime. Dr. Orange says, and it would be difficult to express a more important fact more clearly, "The insanity of those who have been first of all sentenced to imprisonment, and afterwards certified to be insane, is various in its character; it partakes very often indeed of the surroundings of the person, and that kind of person is often more dangerous by reason of his habits, which are not part of his insanity, than by reason of his insanity." It does not astonish one to hear this opinion followed up by the emphatic expression of the practical application of it. Thus, when questioned by Dr. Arthur Mitchell about the proportion of lunatics who are difficult to manage, Dr. Orange replies, "I think 'difficult to manage' would not be quite the term I should use. I would adapt the management to the particular case. In the case of one of those insane convicts where the man was turbulent and ill-behaved irrespective of his insanity, I should be inclined to treat him as he would be treated in prison, *and make no difficulty at all about him*; he would then cease to be a trouble to anybody." Now, however unpalatable such an opinion and such a course may be to humanitarians who have much sympathy to spare for those whom Thoreau calls "one-and-a-half witted men"—who, having a small tinge of insanity, and wit enough to make a great deal of use of it, fall ultimately under the rod of justice,—there can be no doubt that it is a clear and emphatic opinion expressed by an able man who can be both considerate and firm, and whose opportunities of forming a correct judgment have never been surpassed. It may be safely granted that a certain number of dangerous lunatics will always require to be treated in this way, and it may, without uncharitableness, be assumed that dangerous lunatics are occasionally treated in this way in other institutions as well as in Broadmoor.

With regard to the other class of dangerous lunatics, we find that their case is perhaps best represented by Dr. Sibbald, and as he is accepted by the Commission as representing Scotland, the principle which he advocates may be spoken of as the Scotch method. It is that which makes as few people criminal lunatics as possible, and which provides that they shall remain criminal lunatics no longer than the consideration and reconsideration of their case show such a course to be absolutely necessary. The Scotch law has a provision which appears to cover much that English superintendents demand, namely, that persons considered unfit for treatment in ordinary asylums may be sent direct from local prisons to the lunatic department of the prison at Perth. It is significant, however, that this provision seems to be quite ignored. Dr. Sibbald entirely disapproves of it, and more than once in his evidence expresses the opinion that lunatic asylums should be able to receive all kinds of lunatics; and that "when it is found that a person is unfit for treatment in an ordinary asylum it suggests that there is something imperfect in the administration or in the equipment of the ordinary asylum." A prominent feature of the Scotch method is the facility with which Queen's-pleasure lunatics can, on their restoration to complete sanity, be again allowed to mix in society, and, under a rigid but unobtrusive supervision, to earn their livelihood,

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or live quietly amongst friends or strangers. This practice is undoubtedly a risky one, but it has never as yet caused any scandal, or in fact any inconvenience. Dr. Orange thinks there are certain acts committed during madness which render it absolutely necessary that a man should be detained for life, irrespective of his recovery or non-recovery. The Scotch method advocates frequent examinations of criminal, and especially of Queen's-pleasure lunatics, with a view to determining whether or not their state and circumstances have not so changed as to justify their discharge; and Dr. Orange would approve of the adoption of a similar revision of Broadmoor patients. The everyday feature, however, of the Scotch system in its dealings with dangerous lunatics, whether criminal or not, was little touched upon, except in the evidence of the Hon. Francis Scott. A liberal amount of outdoor labour, carried on under judicious direction, and encouraged by the example of a cheerful attendant, with the removal from asylums of all the features which assimilate them to prisons, is treatment equally effective for many criminal and non-criminal dangerous lunatics. That large numbers of them can be effectually dealt with in that way is very evident from the memorandum regarding Lenzie Asylum which was submitted by Dr. Mitchell. This memorandum shows that the population of that asylum, in which there is no walled airing court, and, as a rule, no locked door, and which is surrounded by no asylum wall, included at least nine patients who had been under penal servitude, and twenty-two who had suffered terms of imprisonment. This fact was unknown to the superintendent till he was asked to make special inquiry. Dr. Rutherford says, "They are by no means the worst patients in the house; indeed, I would have classified them, and do actually classify them, as good working patients, orderly and easily managed." Thus, then, we have two widely different classes of criminal lunatics. It is reasonable to assume that few dangerous lunatics of any kind are not amenable to such treatment as will permanently or temporarily subdue their excitement; but it is equally true that there will always be criminal lunatics of another class who will require penal treatment, and it would be misplaced humanity to adopt any other method with them than that penal method which Dr. Orange describes.

A CRY FROM THE CREMATION SOCIETY.

We have received from the Council of the Cremation Society a copy of a long correspondence that has taken place between the Society and two Secretaries of State for the Home Department, Sir Richard Cross and Sir William Harcourt, and a hope is expressed that we may be able to publish the correspondence in full, or in abstract. We cannot spare space to do the former, and we fear the letters would lose greatly in interest and significance if given in abstract. But we readily accede to the more modest request that the matter may in some way be noticed in our pages. The Cremation Society was founded, as many of our readers may remember, in 1874, by a number of gentlemen eminent in science and art, the President of the Society being Sir Henry Thompson, whose skilled and powerful pen has, on various occasions, been employed in explanation and furtherance of its objects. The Society proposed, in 1875, to erect a crematorium, and a piece of ground was offered for that purpose in the Great Northern Cemetery of London, but the Bishop of the Diocese objected to the establishment of such a building in consecrated ground. "After much seeking for a secluded yet accessible spot," a site was obtained near Woking Cemetery, and then the Society erected a crematorium from the designs of Mr. Eassie, and all seemed likely to go well. So soon, however, as the purpose of the new building became public, residents in Woking raised an outcry against it; and a deputation from them obtained an interview, in 1879, with the Secretary of State for the Home Department, then Sir Richard Cross, whose opinion in the matter was decidedly hostile to the proposed employment of the crematorium. The Society then requested the Home Secretary to receive a deputation from them; and, in reply, he informed them that he could not acquiesce in their proposal to carry out the practice of cremation, either at Woking, or elsewhere in this country, until Parliament had sanctioned such a practice; and that if they persisted in their undertaking he should test its legality in a court of law, or should apply for an Act of Parliament to prohibit it until Parliament had had an opportunity of considering the whole subject. The Society, however, notwithstanding this very decided expression of the Home Secretary's opinion, wished to interview him on the subject, and he granted their request. All they obtained from him, however, was the suggestion that a Bill might be introduced into the House of Lords to determine the matter on a legal basis, and to establish a proper system of regulation. This has not been done. The proceedings of the Society were made the subject of a question in the House of Lords, in March, 1879, but without any practical result; and the Society wisely accepted the position, and assured the Home Secretary of their intention to act in conformity with the wishes and directions of the Government. In 1880, however, the country chose to try a change of Government—a Liberal Ministry replaced the Conservative one, and, of course, a "Liberal" Home Secretary reigned at the Home Office in place of Sir Richard Cross. The spirits of the Cremation Society revived, and they sought an interview with the new Home Secretary. But, alas! Sir William Harcourt was worse than Sir Richard Cross. Sir Richard had received a deputation from the Society, though he had taken the trouble to show them by letter that nothing would be obtained by interviewing him; but Sir William not only declined to receive a deputation, but also led the Society to take the trouble of stating their views in writing, and was not moved either by the statement they made, or by their "hope to receive from him an assurance" that Government would not interfere with the practical use of the Woking Crematorium, always supposing that no nuisance was caused, and that ample and satisfactory assurances of death having occurred from natural causes should be shown in each case. On the last day of 1880, Sir William Harcourt simply acknowledged this communication; and before he had had time—for great bodies move slowly—to answer it formally, the Society tried rather to force his hand by putting to him a hypothetical question, whether the executors of a man who directed his body to be burnt in the crematorium would be liable to prosecution for carrying out their instructions. The answer to this, on February 14, 1881, was that Sir William could give no opinion in matters which belong to the jurisdiction and decision of courts of law. He holds that the practice of cremation ought not to be sanctioned except under the authority of an Act of Parliament; and that it is the duty of those who wish to pursue the practice to obtain such authority: until it is granted, Sir William Harcourt means to adhere to the view expressed by his predecessor in office.

There the correspondence, up to the present time, ends, and some wonder may be felt why a series of letters, the latest of which dates so far back, should be published now. But societies, especially a society preaching a comparatively new doctrine and having a new purpose in view, must be somehow kept before the public. It does not appear that the Cremation Society have again sought, or that they intend to ask anew for, an interview with Sir William

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Harcourt. From their point of view they might fairly complain that he has treated them harshly in declining to receive a deputation; for, the being able to command or to obtain access now and then to one of the Secretaries of State is an excellent advertisement, and moreover is, to some extent, a certificate that the object of the Society admitted to an interview has a certain weight and practicability about it. The Cremation Society has men of eminence and authority among its members, and its object is feasible, practicable, and purely for the public good. Moreover, it greatly encourages all the members of a society to know they are going to send, or have sent, a deputation to a Minister of State: all like to see the name of their Society—not a few dearly love to see their own names as members of the deputation—in the daily press; and to some the pleasure of seeing a Minister, a servant of the public, interviewed, interrogated, advised, and baited, is fully worth the expenditure of many annual subscriptions. The Cremation Society might, with some show of reason—if we leave out of all consideration the value of time to a member of the Government—request once more to state their views orally to the Home Secretary. But they would act more wisely, we think, in being content, at present, with bringing themselves before the public by the publication of the correspondence of which we have been speaking. The difficulties in the way of getting cremation legalised are many, and some of them are very great. There must be the most ample and reliable measures to secure that death has occurred from natural causes; and that at all crematoria the process of cremation shall be carried out with thorough efficiency. We imagine that certification of actual death in all cases will be demanded. All these safeguards the Cremation Society consider necessary, and are quite willing to undertake to provide. But should crematoria multiply, how is sufficient and efficient supervision to be always insured? There can be no doubt, however, that all material difficulties could be easily and well overcome should the public and the Government agree that cremation shall be a legalised mode of disposing of our dead; but other and vastly more serious obstacles array themselves against cremation. The custom of centuries; the sentiment, poetry, and, it might almost be said, the affections that have grown around and cling to the quiet country churchyard, the peaceful "God's acre"; the facts that the burial of great men—great for various reasons—in particular places or churches casts a lasting halo round the spot where they lie tombed, and that men visit lovingly, or at least with interest, such places; all these things—call them sentiments, prejudices, what you will—are very real forces, and have to be reckoned with before cremation can become either legal or popular.

THE WEEK.

TOPICS OF THE DAY.

A CONTEMPORARY has been enlarging on the critical financial position of several of the large London hospitals, four of which have found it necessary during the past year to pay a considerable fraction of their current expenses out of a gradually decreasing reserve. In the case of King's College Hospital the income fell short of the expenditure by £9500; at St. George's the deficiency was £8000; at University College Hospital it was £6000; and at the Westminster Hospital £4000. It is asked, have the hospitals lost the confidence of their old subscribers; or has the contributing class become either disinclined or unable to give as much as before; or again, has the expenditure of the hospitals increased while their income has stood still? These are questions mostly of a complex kind, hardly admitting of a simple answer; but, our contemporary remarks, it is alleged with some show of probability that the establishment of the Hospital Sunday Fund, whilst it has procured many contributions that were formerly lost for want of the means of collecting, has, at the same time, made it possible for not a few to substitute small and anonymous contributions for the more considerable sums that used to stand after their names in the lists of subscribers; at any rate, the falling off in the revenues of several hospitals has been coincident with the establishment of the fund, and has gradually increased as the fund has gone on. This view of the question we have persistently pointed out; as also the important one that the feeling of *personal* interest which the subscribers to each hospital formerly experienced in the success of the undertaking they supported, has ceased to exist. This latter is, we think, a great loss, though it may be admitted that the hospitals could have done without it, had the Hospital Sunday Fund realised anything like the sum for distribution that was expected in so rich a capital as London. As it is, a new system has been introduced, which, we fear, experience will show to be far inferior, as regards results, to the one it superseded. Our contemporary says, in concluding his observations on the subject, "During the past nine years the collections on Hospital Sunday have only risen from £27,000 to £34,000; and if the great hospitals of London are to arrive at the beginning of 1884 with their resources unimpaired, the collections in the summer of 1883 must amount to, at least, £100,000. What chance is there of that consummation?"

In the report of the Medical Officer of Health for the Port of London, which was recently published, attention was called to the increase of outbreaks of scurvy in the crews of vessels. It is satisfactory, therefore, to find that the Board of Trade lately instituted proceedings at Liverpool against the captain of the British ship *Alfred*, on four informations, charging him with having neglected to serve lime or lemon juice to the crew during a voyage between Liverpool and Callao and other ports. Mr. Paxton, who prosecuted for the Board of Trade, said that for each day of neglect the master rendered himself liable to a penalty of £5. For 200 days of the voyage no lime or lemon juice of any kind was served out. For the defence it was asserted by the captain that lime or lemon juice was served to each member of the crew until the vessel rounded Cape Horn, and afterwards, the weather being cold, the supply was discontinued. As soon as the vessel passed Cape Horn on the return voyage, lime-juice was again served, and an extenuating circumstance was that there existed no sickness on board. A fine of £5 and costs on each of the four informations was imposed.

The Council of the London Model Abattoir Society proposes to consider the electric with other painless methods of slaughtering animals. Meanwhile, it is pointed out that the suggestion for rapid killing of animals by means of electricity has already been tried. Some years ago, Dr. Richardson made use of the large induction coil at the Royal Polytechnic Institution for testing the question, and killed several sheep and other animals by the electric shock. The experiments led to results which were to a certain degree promising, and to a certain degree disappointing. The electric discharge always succeeded in striking the animals into instant insensibility, and in many instances killed them outright; but in other instances, after the temporary production of all signs of death, there were indications of recovery, so that death had to be completed by other means. It was also found that when animals intended for human consumption as food were killed by the shock, some parts of the flesh were marked

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with dark lines and spots, which to a considerable extent interfered with the sale of the carcases. Lastly, it was found that the dangers to the workmen attendant on the systematic introduction of the method into general use, afforded an important reason for not recommending its universal adoption.

It is now some time since we published any extracts from the sanitary returns of the Punjab. Turning, then, to the report for the week ended November 11 last, it will be found that the total deaths registered from all causes in the province during that period were 15,165, against 14,567 in the previous week, and 16,684 in the corresponding week of 1881, giving respectively an annual death-rate of 42·6, 40·9, and 49·6 per 1000 of population. Again, there was not a single death registered under the head of cholera; but from small-pox there were 68 deaths, against 46 in the previous week, and 58 in the corresponding week of 1881. From fevers there were 11,481 deaths, against 10,785 in the previous week, and 12,741 in the corresponding week of 1881. There was a marked increase of fever mortality in the districts of Jhelum, Rawalpindi, and Dera Ismail Khan. Amongst infants under one year of age 4186 deaths were registered, against 4195 in the previous week; and in the forty-seven large municipal towns of the province 1162 deaths and 1114 births were registered, giving a death-rate of 48, and a birth-rate of 46 per 1000 of population.

A new food antiseptic, in the shape of carbonic acid, has recently been submitted to trial in Germany, and the result has been so far satisfactory that further tests are to be made. Professor Kolbe, of Leipsic, conducted the experiments by hanging pieces of beef, including fat and bone, in cylindrical tinned iron vessels, which were kept in a warm room of the laboratory, where the temperature at mid-day rose to 32° C. Each piece was hung from the crossbar; a plate for dropping liquid stood below; just over this was a tubular passage for entrance of carbonic acid; the cylindrical lid of the vessel entered an annular trough holding glycerine, and had a tubulure in the middle. When nearly all the air was supposed to be driven out through the latter tubulure by the entering gas, the elastic tubes connected to both tubulures were pinched with screws. After eight days in the vessel the beef was not distinguishable from fresh beef in aspect or taste after cooking, and the gravy was like that from fresh beef. After a fortnight the beef had become somewhat grey externally, and only a fine palate could distinguish the gravy from that of fresh meat. Sometimes beef and gravy had a weakly acid taste, which was easily removed with a little carbonate of potash. After three weeks the beef was of the same good quality, only softer than fresh beef, and requiring less time to cook. It was quite free from bad smell even after four to five weeks. It is noteworthy that mutton, under like treatment, began to smell bad after eight days; nor could veal be kept as long as beef.

The Bangor Local Board of Health have recently issued a summary of the expenditure incurred in stamping out the epidemic of typhoid fever which proved so serious in their district last summer. The total expenditure for the half-year is put down at £4000, of which £1600 was covered by a public subscription initiated by the Bishop of the diocese, who, it will be remembered, allowed tent-hospitals to be erected in his private grounds, and in other ways co-operated most earnestly with the local authorities. To meet the deficiency, the Local Board have found it necessary to make a rate of 3s. in the pound for the current half-year, or fully quadruple the usual amount.

The borough of Accrington may be congratulated on seeing at last the end of one of the most serious epidemics of scarlet fever that have occurred for some years. The day-schools have been closed for over three months, the loss in school-pence alone being £1000 in the same period. About 120 children have fallen victims to the fever. The schools have now been re-opened.

The Secretary of State for War has approved the appointment of Deputy Surgeon-General J. A. Marston, M.D., C.B., lately employed as Sanitary Officer with the Egyptian Expedition, to be Head of the Sanitary and Statistical Branch of the Army Medical Department at Whitehall-yard, in succession to Deputy Surgeon-General J. Irvine, M.D., who has proceeded to Egypt to relieve Surgeon-General Sir James Hanbury, K.C.B., in medical charge of the army of occupation.

It may be considered that we have as much and as correct knowledge about the illness and the cause of death of M. Gambetta as is likely to ever be made generally known. It appears that he had for some years been subject to symptoms of chronic perityphlitis, with inflammatory mischief extending upwards round the ascending colon. Some weeks before death he had, somehow, received a pistol-shot wound in the palm of the right hand; and the lowering of general health and confinement caused by the wound led to great activity of the old-standing disease. The post-mortem examination, made in the presence of Professors Paul Bert, Brouardel, Charcot, Cornil, Trélat, and Verneuil, and Drs. Lannelongue, Siredey, Fienzal Liouville, Mathias-Duval, Laborde, Guardal, and Gille, gave, briefly, the following results:—The wounds caused by the pistol-shot were perfectly cicatrised, and were not considered to have anything to do, directly, with the fatal result. The termination of the ileum was greatly contracted. Bands of adhesion bound down the vermiform appendix, and there were traces of old inflammation in the cellular tissue around the cæcum. The cellular tissue along the course of the ascending colon was infiltrated with pus. In the substance of the abdominal wall, immediately adjacent to the ascending colon, but not communicating with the collection of pus around that part of the intestine, were found sloughs of connective tissue, surrounded with purulent infiltration, but no true abscess. Some purulent fluid, but very little, was found lying free in the peritoneum, due, it was believed, to local extension of inflammation from the region of the cæcum and colon. With the exception of the heart, which was fatty, all the other viscera were quite healthy; and no metastatic abscesses were found in any part of the body.

ROYAL COLLEGE OF SURGEONS.

It may be well to remind our readers that the Museum of the Royal College of Surgeons will be formally re-opened on Saturday afternoon. The Museum has been closed, it will be remembered, for several months, in order that it might be thoroughly cleaned and repainted; and that it will after this week be available again will be very good news to a large number of workers. The President of the College will hold a reception in the Museum from two to four o'clock on Saturday afternoon, and Fellows and Members are invited to attend. No tickets of admission are needed.

VITAL STATISTICS OF DUBLIN.

In the week ending Saturday, January 6, the births of 231 children—124 boys and 107 girls—were registered in the Dublin Metropolitan Registration District. The deaths registered were 214—104 of males and 110 females—a number representing an annual death-rate of 31·8 per 1000 of the population. Eighteen deaths from zymotic diseases were registered, being 6 under the number for the preceding week, and 20 under the average for the first week of the last

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ten years. They include 2 from typhus, 9 from whooping-cough, 2 from enteric fever, 4 from diarrhœa, and 1 from erysipelas. A new feature in connexion with the deaths in the Irish metropolis has been introduced into the Registrar-General's returns, by which the relative mortality in the various classes of the population is shown. On Saturday last there remained under treatment in the principal Dublin hospitals 12 patients suffering from pneumonia, 16 from scarlet fever, 17 from typhoid, and 75 from typhus. The mean temperature during the week was 44·9°, or nearly 5° above the average.

HYSTERIA IN YOUNG BOYS.

M. Charcot has recently (*Progrès Médical*, 50 and 51, 1882) published a lecture devoted to proving that hysteria in its ordinary and typical form may occur in young boys. We should hardly have thought that a separate lecture was needed to demonstrate the fact. Even amongst such a non-emotional set of beings as the English are, we yet have ample proofs afforded us that boys can and do have hysteria, even when mere infants, as Dr. Barlow has on more than one occasion shown. One of the patients whom M. Charcot showed to his class (and we need only quote this one) was a young Hebrew, aged thirteen, who had been brought by a fond but exceedingly foolish father from Russia to Paris. The history of his malady was that he had a persistent headache, a spot of exaggerated sensibility on the top, and an attack coming on every evening about the same time, consisting of an increase in the headache, noises in the ears, and a sensation of thoracic constriction. At other times, on the right side there was analgesia to a prick, to cold, and to faradisation, taste, smell, and hearing were diminished; and there was contraction of the field of vision on this side, as also some impairment of colour-vision. During the attack he used to lie down on a couch doubled up, with his hands up to his head in a fixed position, his eyes filled with tears. In a few minutes the attack would pass off without any of the ordinary manifestations of the termination of a hysterical attack. The father, unintentionally doubtless, adopted the best means to insure a recurrence of the attacks; for as the usual time for their appearance drew near, he would pull out his watch and begin asking the boy how he felt, and expressing sympathy for him in his sufferings. As might be expected, a speedy cure was effected when the boy was quite separated from his father, though it was about a month before the amblyopia had finally disappeared.

THE METROPOLITAN ASYLUMS BOARD MEETING.

At the usual fortnightly meeting of the Managers of the Metropolitan Asylums Board, held on Saturday last, the report of the General Purposes Committee was brought up, proposing that, subject to the approval of the Local Government Board, the several infectious hospitals under the control of the Managers be for the future designated as follows:—Homerton Hospital as the Eastern District Hospital; Hampstead Hospital, the North-Western District Hospital; Fulham Hospital, the Western District Hospital; Stockwell Hospital, the South-Western District Hospital; and Deptford Hospital, the South-Eastern District Hospital. This report was agreed to. It was further reported that a letter had been addressed to the Premier in respect to the report of the Royal Commission on Infectious Hospitals, on December 28 last, earnestly asking him to receive a deputation from the General Purposes Committee, with the object of explaining the difficulties which prevent the Managers alike from fulfilling the duties imposed upon them by Parliament, and from carrying out the recommendations of the Royal Commissioners; and, further, they desire the opportunity of pointing out that, although the Act under which the Board was constituted clearly defines the duties which the Managers are expected to perform, yet it does not afford them any protection against adverse actions at law. The Managers also respectfully submitted that, in their judgment, it is impossible to conceive any question more pressing, or requiring more immediate consideration, or one more likely to be fraught with serious and complicated consequences, than the one which they desire to have dealt with, seeing that it affects, not only directly the health and lives of a large portion of the population of this vast metropolis, but also indirectly the health and lives of the community at large. The Chairman said that no reply had, up to that time, been received to this letter. He hoped, however, that they might reasonably look for some little more aid and consideration now that Sir Charles Dilke had been appointed to the Local Government Board. The comparative return of the number of small-pox cases in the several hospitals of the Managers for the four weeks ending January 5 last, stated that the number remaining under treatment had been 79, or an increase of 12 upon the total for the previous four weeks. The return of fever patients for the same period showed that there were 529 persons remaining under treatment, as compared with 602, or a decrease of 73.

HARVEIAN SOCIETY OF LONDON.

The following is a list of the names of gentlemen proposed by the Council as officers of the Society for the year 1883:—*President:* *E. Symes Thompson, M.D. *Vice-Presidents:* W. B. Cheadle, M.D., H. Cripps Lawrence, Esq., *G. P. Field, Esq., *Percy Boulton, M.D. *Treasurer:* *Thomas Buzzard, M.D. *Hon. Secretaries:* W. H. Lamb, M.B., *J. Ernest Lane, Esq. *Council:* Henry Power, Esq., D. Ferrier, M.D., J. Knowsley Thornton, Esq., H. W. Kiallmark, Esq., J. H. P. Staples, M.D., *H. Allen Aldred, M.D., *W. Hickman, M.B., *S. H. Davson, M.D., *W. R. Gowers, M.D., *Chas. Vasey, Esq., *Jas. E. Pollock, M.D., *Malcolm Morris, Esq. An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year.

RETRO-PERITONEAL FIBROMA: A REMARKABLE CASE.

In a recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* a case is recorded by Dr. Möricke, which he thinks, with reason, is unique, and we therefore briefly condense his account of it. The patient was twenty-four years old, had had two children, and was in fair general health. A firm non-fluctuating tumour, as big as a man's head, rounded, and apparently loosely connected with the right side of the pelvis, was felt in the abdomen. This was diagnosed (erroneously, as it turned out) to be an ovarian tumour, and therefore an operation was undertaken. After the peritoneal cavity had been opened, the tumour was found to lie behind the mesentery. It was divided into two unequal parts by a furrow running from the upper and left part of it downwards and to the right. In this furrow lay a part of the ileum, the mesentery of which was spread over the tumour. The bowel was dissected off the new growth with the mesentery, which was cut through on each side, a little distance from the intestine. The dissection was one of great difficulty, the connexion between tumour and ileum being very intimate. After the bowel had been freed, the flaps of mesentery raised with it were united over the part that had been attached to the tumour. At a portion of it the mesentery dissected up was not enough to surround the bowel without risk of stricture; and therefore, here, about half of the circumference of the intestine was left without

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any peritoneal coat. The tumour was then removed. It was fibrous in structure, and weighed about two pounds and a quarter. An ovary, which contained a small dermoid cyst, was also taken away. Slight pyrexia followed the operation, and lasted four weeks. The patient left her bed thirty-three days, and the hospital forty-two days after the operation. Dr. Möricke remarks that the case is probably unique in the fact of a foot of intestine being deprived of its mesentery and left in the abdomen, and the patient nevertheless recovering.

THE PARIS WEEKLY RETURN.

The number of deaths for the fifty-second week of 1882, terminating December 28, was 1116 (588 males and 528 females), and among these there were from typhoid fever 66, small-pox 11, measles 16, scarlatina 1, pertussis 7, diphtheria and croup 35, dysentery 2, erysipelas 6, and puerperal infections 6. There were also 42 deaths from acute and tubercular meningitis, 199 from phthisis, 44 from acute bronchitis, 82 from pneumonia, 62 from infantile athrepsia (25 of the infants having been wholly or partially suckled), and 27 violent deaths (21 males and 6 females). The number of deaths registered this week is lower than the mean of the last four weeks. The deaths from typhoid fever have diminished from 84 to 66, while at the hospitals there have been received 145 patients instead of 171 in the former week. The number of deaths from diphtheria are the same (35) as in the former week; but the number of admissions has diminished from 37 to 19. The births for the week amounted to 1169, viz., 617 males (461 legitimate and 156 illegitimate) and 552 females (421 legitimate and 131 illegitimate): 101 infants were born dead or died within twenty-four hours, viz., 44 males (35 legitimate and 9 illegitimate) and 57 females (38 legitimate and 19 illegitimate). Comparing the births and deaths of the fourth quarter of 1882 (the fortieth to the fifty-second week) with that of 1881, we find that there were, in 1881, 14,939 births and 13,088 deaths, and in 1882, 15,290 births and 14,173 deaths, *i.e.*, an increase of births by 351, and of deaths by 1085. This excess of deaths for the quarter of 1882 over that of 1881 arose from the increase of deaths from typhoid fever, as seen in the following table:—

Fourth quarter of	Typhoid Fever.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Puerperal Infections
1881 . .	433	119	152	48	619	80
1882 . .	1,571	101	136	16	419	55
Increase in 1882	1,138	—	—	—	—	—
Decrease „	—	18	16	32	200	25

ROYAL ZOOLOGICAL SOCIETY OF IRELAND.

The annual general meeting of this Society was held in the Hall of the College of Physicians, Kildare-street, Dublin, on Tuesday, the 9th inst. The Rev. Professor Haughton, M.D., F.R.S., Secretary, read the annual report, from which we learn that the number of admissions to the beautiful Zoological Gardens in the Phœnix Park during the year 1882 reached the total of 125,571, or more than 5000 compared with the total for 1881, while the receipts exceeded by more than £200 those of the previous year. With regard to the visitors, the numbers for last year were greater than for any year since 1873, when they reached the total of 147,762; and the receipts were higher than any year in the decade. No doubt this satisfactory state of things is due to the importation of the two elephants, "Rama" and "Sita," who, by reason of the hubbub which their big brother "Jumbo" aroused in London, acquired an adventitious and wholly exceptional interest. In connexion with these Burmah elephants—which, we may add, are worthy of all the excitement their arrival created—a series of valuable lectures was delivered by a number of the Fellows and Professors of Trinity College, led by Professor Haughton himself, on "Dogs," for the purpose of aiding in the construction of a suitable house for the reception of the strangers. These lectures produced a net profit of about £50.

NOTHING NEW UNDER THE SUN.

The "*Convallaria majalis*," recently so strongly recommended by Russian physicians as a substitute for digitalis, and otherwise, is, we may inform those of our readers whose botanical knowledge does not go beyond the plants of the Pharmacopœia, the familiar "lily of the valley." In Ray's catalogue, "Plantarum Angliæ," published in 1670, and dedicated to *clarissimo viro* D. Francisco Willughby, *armigero, amico et mæcenati suo, plurimum honorando*, to whose labours he owed much of his materials, Mr. Ray gives the uses of the plant in medicine as follows:—"Usus præcipue in morbis capitis frigidis, ut apoplexiâ, paralysi, vertigine, epilepsiâ; hinc et in lipothymiâ. Insigne itidem errhinum exhibent pulverisati flores.—*Schrod.*" As lipothymia is an old name for syncope, and is coupled with vertigo, a notion of its strengthening the heart's action seems to underlie the whole. Indeed, the apoplexy referred to may have been intended for cerebral anæmia.

LIVERPOOL MEDICAL INSTITUTION.

At the annual meeting, on Tuesday, January 9, the following list of officers and Council, and Microscopical Committee was adopted; those marked thus (*) did not hold the same office last year:—*President:* Mr. T. Shadford Walker. *Vice-Presidents:* Mr. E. A. Brown, *Dr. W. Macfie Campbell, *Mr. Rushton Parker, Dr. H. G. Randon. *Hon. Treasurer:* *Dr. James Barr. *Hon. General Secretary:* *Dr. F. Pollard. *Hon. Secretary to Ordinary Meetings:* Mr. F. T. Paul. *Hon. Librarian:* *Dr. J. E. Burton. *Council:* *Dr. W. Alexander, *Dr. R. S. Archer, *Dr. W. Carter, *Dr. T. Clarke, Dr. A. Dunbar, *Dr. T. R. Glynn, Dr. J. Lambert, *Mr. W. McCheane, Mr. J. Kellett Smith, Dr. S. Spratly, Dr. J. H. Wilson, Dr. A. Wiglesworth. *Microscopical Committee:* Dr. Alexander, Dr. Braidwood, Mr. Briggs, Dr. Glynn, Dr. Grossmann, Dr. Hicks, *Dr. McClelland, Mr. Newton, Mr. Rushton Parker, Mr. Paul, *Dr. Rich, Dr. Whitford, and Dr. W. Williams.

GOVERNMENT CINCHONA PLANTATIONS IN INDIA.

Cinchona cultivation in India attains year by year larger dimensions. The *Indian Medical Gazette* for December last gives some interesting notes from Surgeon-Major G. King's Report on the Government Cinchona Plantations and Factory for the year 1881-82. There were planted out 154,000 trees of *Cinchona Ledgeriana*, and 91,731 of a hybrid variety, accidentally produced in the plantations, and carefully conserved. Some of the hybrids have been found to yield a good proportion of quinine. Of the *C. calisaya* there were 858,323 plants, and 3,873,285 of *C. succirubra*. The year's crops amounted to 344,570 lbs. of dry bark. The amount of alkaloid manufactured was 8010 lbs. Since the commencement of the enterprise 44,449 lbs. of febrifuge have been disposed of, more than 15,000 lbs. of which were sold for cash to the public. The net profit of the year was equal to a dividend of 13 per cent. on the capital employed. The saving to Government through the substitution of the mixed alkaloids for quinine is estimated at three and a half lakhs of rupees, and the total saving to Government on this account since the factory got to work is calculated at about twenty lakhs.

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LEGION OF HONOUR.

Dr. Goujou, Mayor of the Fourteenth Arrondissement of Paris, Dr. Tarnier, Surgeon to the Maternité, and Prof. Parrot, of the Hopital des Enfants Malades, have just been nominated Officers of the Legion of Honour.

MARTIN'S OPERATION.

A case of this operation, which has not yet, so far as we know, been performed in this country, is published by Dr. Möricke in a recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie*. The case came under the care of Dr. Möricke while he was in charge of Professor Schroeder's wards, during a recent illness of that distinguished gynæcologist. The patient was aged thirty-five, suffered from pain and hæmorrhage, and was very anæmic. The uterus was about the size of one four months pregnant. The cervical canal admitted the finger, and thus a broad-based tumour could be felt springing from the anterior wall of the cavity. Beside this, a fixed tumour, as big as a good-sized apple, and closely connected with the cervix, could be felt behind the uterus in the hollow of the sacrum. The patient was perseveringly treated with ergotin, and then by scraping the uterine mucous membrane with a sharp spoon, without any persisting benefit. "Martin's operation" was then performed antiseptically. The abdomen was opened, the uterus was made to protrude through the wound, and its anterior wall incised till the tumour was got at. This was then shelled out of its bed, and removed. A thick drainage-tube was inserted into the uterus, and made to emerge through the vagina. The uterine wound was sewn up with numerous closely set sutures, and the abdomen closed in the usual way. The operation lasted three-quarters of an hour, and the amount of blood lost was very slight. The operation was followed by remittent pyrexia; and on the tenth day an inflammatory exudation was perceptible in the left lower belly. The drainage-tube was removed on the nineteenth day, as secretion had then ceased to flow from it. On the forty-sixth day a quantity of fœtid pus was discharged from the vagina. The pyrexia after this abated, and the patient left her bed on the seventy-sixth day after operation. The temperature again rose, however, the patient wasted, and died 111 days after the operation. The autopsy showed peritonitis with sero-fibrinous exudation; a collection of pus in each broad ligament; almost complete involution of the uterus; the endometrium healthy. The cervical tumour was a myoma. Dr. Möricke thinks Martin's operation is strongly to be recommended, being in the strictest sense "an ideal operation."

MANCHESTER MEDICAL SOCIETY.

The following is the list of office-bearers for 1883, elected at the annual meeting held at the Owens College, January 10:—*President:* *Daniel John Leech, M.D. *Vice-Presidents:* *Julius Dreschfeld, M.D., Arthur Gamgee, M.D., *Thomas Jones, M.B., *James Ross, M.D. *Treasurer:* David Little, M.D. *Secretary:* Charles James Cullingworth, M.D., 260, Oxford-road, Manchester. *Other Members of Committee:* John Augustus Ball, M.B. (Stockport), *James Duncan, M.B. (Ashton), *John Earle, Charles Edward Glascott, M.D., *James Hardie, M.D., John Dixon Mann, M.D., Siegmund Moritz, M.D., *Herbert Smith Renshaw, M.D. (Sale), *James Stephens, *Walter Whitehead, William Yeats, M.D. The above, with the past Presidents of the Society and two representatives of the Council of the Owens College, form the Committee. *Library Committee:* Judson Sykes Bury, M.D., *Abraham Emrys-Jones, M.D., Siegmund Moritz, M.D., Thomas Windsor, William Yeats, M.D *Auditors:* *Alfred Godson, M.B., *Frederick Armitage Southam, M.B. Those marked with an asterisk did not hold the same office last year. The report stated the number of members to be 218, the same as last year. The library now contains 27,298 volumes, of which 1054 were added during the year 1882.

PREVENTABLE DESTRUCTION OF HUMAN LIFE IN INDIA.

The annual report for 1881, on the destruction in India of human life and cattle by wild animals and snakes, shows that 254,968 snakes were destroyed at a cost of about 11,960 rupees, while, in 1880, 212,776 snakes were destroyed at a cost of about 11,663 rupees. Of wild animals, including tigers, leopards, bears, and wolves, 15,279 were destroyed in 1881. In that year 2757 human beings were killed by wild animals; but nearly 19,000 fell victims to snake-bites. There does not appear to be any regular system of rewards for the destruction of snakes, for the report states that 6214 rupees were paid for this object in Bombay, 3430 in Bengal, 1587 in the Punjaub, and 562 in the Central Provinces; while in the other provinces the payments for the destruction of snakes were merely nominal, and in Madras no rewards at all were paid. Sir Joseph Fayrer, in a communication to *Nature* (December 28, 1882) on this subject, insists that it is essential that the system for carrying out the destruction of venomous snakes be laid down on some general principles, for the whole of India; that there be a department with a responsible chief, and subordinate agents; and that the rules adopted should be carried out all over the country without let or hindrance, some discretion as to details being left to local authorities. "It is mainly," he says, "a question of perseverance and the expenditure of money, and one can hardly imagine a more desirable object on which to expend both energy and rupees."

THE ORGANISMS OF SYPHILIS.

Birch-Hirschfeld, the well-known pathologist of Dresden, has published a very important qualification and extension of his description of the organisms of syphilis, as reported by us at page 415 of vol. ii. for last year. Although it may not appear to be a point of much practical importance to the busy practitioner, those who are specially acquainted with this subject will remember that Birch-Hirschfeld represented the organisms which he had discovered in condylomata and gummata as rod-shaped bacteria or bacilli with rounded extremities. It now appears, as the result of the examination of more favourable material, that the so-called rods can be resolved into two or more cocci or micrococci (*Centralblatt f. die Med. Wiss.*, November 4, 1882). These micrococci are, however, not exactly circular, but somewhat oval, in outline. It can be understood how readily two, three, or more of such bodies, mutually united end to end, might be mistaken for a single rod, when it is considered that a $\frac{1}{12}$-inch oil-immersion lens is required to resolve them. There is nothing novel in the method employed by Birch-Hirschfeld for the detection of these organisms in syphilitic growths, except that he prefers caustic potash to acetic acid for clearing up fresh specimens, as no precipitate occurs about the nucleus after the former which might readily be confounded with organisms. If it be desired to stain the micrococci, all that one has to do is to make a fresh cut in a condyloma with an aseptic knife, scrape a little juice on to a covering-glass, dry it, fix it, and colour and mount it as usual, fuchsin and gentian violet being the best staining fluids for the purpose. The organisms of visceral gummata are comparatively small-sized and abundant; those of condylomata are relatively large and less abundant: in gummatous cicatrices they are exceedingly difficult to find; whilst in young gummata they are most numerous in the

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actively growing parts. There can be no question that the organisms lie *within* the cells; and in some instances they may be found filling the nuclei to distension. Pathologists are now becoming so familiar with the characters of the micro-organisms of syphilis, that we shall not be greatly surprised if we hear very shortly of the discovery of the cocci in the spermatozoa of persons suffering from specific disease.

DIPHTHERIA.

Professor Henoch lately delivered, at the Berlin Medical Society, an address on Diphtheria, which may be read with interest and some profit (*Berliner Klinische Wochenschrift*, No. 40). The Professor remarked that although sixty years had now winged their flight since the appearance of Bretonneau's epoch-making work on Diphtheria, still differences of opinion prevailed among physicians as to what was and what was not diphtheria, and hence disputes arose about treatment. Most medical men are familiar with a non-diphtheritic angina, in which white specks are seen in the enlarged crypts of the tonsils. It is not against this form of throat affection that Henoch directs his shafts, as he firmly believes in the existence of what Bretonneau, and later on Trousseau, have described as "angine couenneuse" (croupous angina), an affection which is not truly diphtheritic. The phenomena by which this croupous sore-throat is manifested are very like those of diphtheria: a white or greyish-white layer is seen on the tonsils, which layer does not, however, look like that seen in well-marked cases of diphtheria, but exists as a more superficial stratum on the deep-red, swollen tonsils; there is some fever, and more or less dysphagia, with swelling of the lymphatic glands at the angles of the jaw. Henoch cannot deny that the distinction between this non-specific croupous angina and true diphtheria is not always possible in the first few days of the illness. However severe the non-specific membranous pharyngitis may be, it does not terminate fatally; the membrane may spread over the parts surrounding the tonsil, and even an acute abscess with great pain may develope and be opened, but the edge of the incision never shows a diphtheritic appearance. A very important truism, or what we believe to be such, was stated by Henoch: anatomico-pathological phenomena of precisely similar appearances may be due to entirely different causes. This generalisation of experience is one of very wide application, and cannot too strongly be borne in mind. It is an experience not only of morbid anatomy, but of other phenomena. It may own its existence as a truth to some imperfection of our senses; otherwise, organised beings might possibly be able to see or feel differences to which we are insensible. Hence it is very necessary for us to supplement our possibly defective organs by a more watchful outlook on the part of our higher cerebral functions. It will be seen that the doctrine of Henoch with regard to membranous pharyngitis and laryngitis is a maintenance in some senses of the old distinction drawn between croup and diphtheria. Many of the rising generation are now taught that there is no difference between croup and diphtheria; croup is diphtheria in the larynx—that is the teaching that may be heard in some medical schools. Works on pathological anatomy, as is known, give the distinction from croupous membrane in the facts that diphtheritic membrane extends into the substance of the mucous membrane, and, when detached, leaves a bleeding surface. According to Henoch, this "croup" may be originated by many causes—*e.g.*, hot steam; irritating substances (ammonia); the inhalation of cold air, especially from east and north winds; finally, and most frequently, through the irritation of the diphtheritic virus propagated from above by direct extension, or by respiration, with the inspired air,—just as many different agents may bring about pustules exactly alike. The principal question is, How are we to diagnose the origin of this anatomical appearance, especially if the cause of it be the diphtheritic poison, whatever that may be? Our duty with regard to it may not be the less easy to carry out, but it aids us somewhat in treatment, and perhaps more in prognosis. Some information may be derived from the thermometer: *pseudo-diphtheritis* (if that term may be allowed) steps in with a course more akin to that of acute tonsillitis, whilst the true enemy advances with a febrile track of more insidious character. Another aid of less value is to be found in the circumstance that, speaking generally, the non-specific form invades and covers one tonsil ere it fixes on the second; but this feature is by no means pathognomonic. The extension of the membrane to the soft palate, and more especially to the pharyngeal wall, is greatly in favour of the case being genuine diphtheria. But Henoch places most reliance on the affection or not of the nasal mucous membrane. He has never yet, in croupous angina, found the nose invaded, as is so frequently observed in diphtheria. Henoch went on to point out that albuminuria is a broken reed to trust to, for it may fail in true diphtheria; and that, with all our knowledge, cases will yet occur, in which doubt will be the master for, say, two or three days, and then isolation of the patient and scientific waiting and watching are to be practised. With respect to the micrococcus found in diphtheria, we are glad to find how cautious Henoch is in drawing conclusions therefrom. In the present oscillating mental state with regard to the question, it is well that we should not build on such unstable ground-work. The Professor next passed on to the questions of diphtheria complicating other specific diseases, more especially scarlatina. The difficulties of pathology are here found in full luxuriance. In the course of diphtheria a redness may cover the body, which may own a great number of causes. In scarlet fever a membranous exudation may be found on the tonsils, which may be due to the scarlatinal or diphtheritic poisons, or to quite other influences. In fact, we still have very much to learn about diphtheria; and we are not likely to *know* more except through the most careful and patient observation and thought.

ŒSOPHAGOTOMY.

On September 4, 1882, external œsophagotomy was performed in the Kommunehospital at Copenhagen by Dr. Holmer. The patient, a man aged thirty, was a lunatic who had swallowed a stone with suicidal intention two days before. The foreign body became impacted in the gullet a little below the larynx, and could not be dislodged either upwards or downwards. The accident was further complicated by the "cradle" of Gräfe's coin-catcher having become detached during the attempts to extract the stone, and remaining in the gullet. Dr. Holmer then made an incision along the anterior border of the sterno-mastoid muscle, and opened the œsophagus over the site of the impacted substances. The little "cradle" was first removed, and, after a good deal of trouble, the stone was seized with a pair of forceps such as are used for lithotomy in children, and extracted. The stone was found to be five centimetres long, by five centimetres wide at its broadest part. The wound was dressed with iodoform, and the patient made a rapid recovery. His voice, however, remained hoarse, owing to paralysis of the left vocal cord. This was possibly due to injury of the left recurrent nerve during the operation, but Dr. Holmer thinks it more probable that it was caused by the pressure of the stone as the patient's voice was husky when he first came under observation.

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THE HOUNSLOW TRAGEDY.

THE inquest on the death of the late Dr. Edwardes, of Hounslow, was resumed on Wednesday. Dr. Whitmarsh was again absent. The evidence of Mr. Garrett, assistant to Dr. Whitmarsh, and of Mr. Barber, solicitor, of Hounslow, was taken, besides some minor evidence in formal proof of facts. The inquest was again adjourned.

HER MAJESTY lately presented six birch lounge-chairs, provided with shifting backs, and soft crimson-covered cushions, to Netley Hospital, for the use and comfort of the invalids in that establishment.

IT is good news that Her Majesty has granted a pension of £250 a year to the widow of Professor Palmer, and that the Admiralty are considering a proposal to grant a sum of money towards the education of the younger of the Professor's four children.

THE Army Medical and Transport Inquiry Committee sat again at the War Office on the 10th inst., the Earl of Morley presiding. The examination of medical officers who had had charge of field hospitals and sick transports occupied the whole sitting.

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund, held on the 9th inst., Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £54 was distributed among the several applicants.

IT will not have been forgotten that some time ago Miss Baxter, of Balgavies, and Dr. Baxter, Procurator-Fiscal, of Dundee, gave jointly £150,000 for the endowment and erection of a college in Dundee. It is reported that the necessary buildings have been acquired, and that, professors having been appointed, the work of the college will soon commence. Miss Baxter has, within the last few days, given £10,000 more to provide a laboratory, and the trustees of the late Dr. Baxter an additional £10,000 to endow a chair of law.

MR. G. C. STEET, F.R.C.S., Second Medical Officer to the General Post Office, has been appointed Chief Medical Officer in the place of the late Dr. Waller Lewis; and the present Assistant Medical Officer, Mr. A. H. Wilson, L.R.C.P. Lond., M.R.C.S. Eng., succeeds Mr. Steet as Second Medical Officer. It is stated that the medical superintendence of the female branches of the General Post Office will be entrusted to a lady.

THE Metropolitan Sewage Committee met on the 9th inst., for the purpose of taking further evidence on behalf of the Corporation of London. But Mr. Lumley Smith, Q.C., applied on the part of the Corporation for an adjournment, on the ground that the City authorities had not yet been able to complete their experiments and the examination of the river. The adjournment was granted till the 23rd inst., but the chairman (Lord Bramwell) hinted that should the Corporation not then be ready with their evidence, the Commission might possibly refuse to hear them.

MORPHINISMUS.—Dr. Landowski finds that in 160 cases of this there were fifty-six medical men, and twenty-eight persons more or less in connexion with them, such as wives of medical men, midwives, nurses, etc. He is in favour of treating the affection by the gradual withdrawal of the morphia.—*Gaz. des Hop.*, No. 101.

FROM ABROAD.

THE PARIS HOSPITALS MORTALITY RETURNS.

In his report for the third quarter, ending in September, Dr. Castel observes (*Union Médicale*, November 26, December 10 and 24) that the mean temperature for the quarter did not exceed 16·5° C., the normal mean of that period of the year being 17·9°; and in the month of August the mean remained nearly two degrees below the normal. The rainfall was considerable, the height attained being 180 millimetres, while the normal height of the quarter is 150. The general mortality of the hospitals for the quarter remained below that of the same quarter of the preceding year, amounting to 3549 deaths in place of 3650. The diminution by 100 deaths is the more remarkable since the hospital population during the quarter was more numerous than usual, owing to the considerably increased number of beds rendered necessary by the epidemic of typhoid fever. The 3549 deaths are 487 in excess of the mean of the quarter as observed during the last ten years, which is 3112.

1. *Affections of Respiratory Organs.*—Taken together, these do not seem to have been sensibly more frequent or more fatal than during the corresponding period of last year; but two affections attained exceptional proportions, viz., pleurisy and tuberculosis. Pleurisy was especially frequent and grave, the admissions having increased by a third, and the number of deaths rising from 38 to 59. But while both the morbidity and mortality of pleurisy increased in this marked manner, the number of pneumonias remained the same, this disease having been only mild and of the catarrhal form. During the quarter there were 2214 cases of phthisis, with 881 deaths (39 per cent.); 586 of pneumonia, with 170 deaths (29 per cent.); 1093 of bronchitis, with 59 deaths (5 per cent.); and 485 of pleurisy, with 59 deaths (12 per cent.).

2. *Diphtheria.*—Dr. Cadet de Gassicourt, of the Hopital Trousseau, writing to the reporter, states his hope that this disease has lost a portion of its terrible gravity; and asks whether the unusual number of successes in his ward may not be due to the constant pulverisation of carbolic acid that is constantly going on there. Dr. Castel remarks that a general amelioration of the disease has been observed; for while the deaths for this quarter in all Paris were last year 536, they have fallen this year to 432; and in the hospitals the admissions have fallen from 285 to 246, and the deaths from 173 to 160. But then, as there is a normal, regular, seasonary attenuation at this time of year, it is impossible to be able to declare whether the diminution will persist, and what will be the amount of seasonary exacerbation which will follow.

3. *Eruptive Fevers.*—These have, for the most part, been very benign. *Small-pox* has continued to diminish, and it is to be hoped that the end of the epidemic, which has prevailed for four years, is now at hand. During this quarter there have taken place in Paris 100 deaths in place of 211 last year; and in the hospitals there have been 394 admissions in place of 504, and 54 deaths instead of 87. *Scarlatina* has been much less fatal than in 1880 and 1881. In Paris there were only 40 deaths instead of 133 and 165; and in the hospitals there were 135 instead of 216 admissions in 1881, and 9 deaths instead of 17. *Measles* has become much more frequent, but its gravity has notably diminished. In the hospitals there were 182 in place of 156 admissions, but only 14 deaths instead of 25. *Erysipelas* remained frequent and relatively fatal. In the hospitals there were 380 admissions instead of 321 in 1881, and 56 deaths instead of 39.

4. *Typhoid Fever.*—At the time when the epidemic of small-pox underwent a diminution which led to the hope that its end was approaching, and that diphtheria exhibited a relatively benign aspect, typhoid fever underwent a considerable recrudescence. From June an exacerbation, which was out of its proper season, led to the fear, which has been realised, that its apogee would become especially disastrous. From the beginning of August the cases of typhoid began to assume large proportions (2136 admissions and 322 deaths during the third quarter of 1882, in place of 942 admissions

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and 201 deaths in the corresponding period of 1881; in the whole of Paris there were 780 instead of 435 deaths). This exacerbation is not, however, peculiar to Paris and dependent upon its unsanitary condition, for in almost all the large towns of France it has increased in the same way. What is to be expected as to the course for the present epidemic? First, it is to be remembered, as so clearly established by Dr. Ernest Besnier, that the increase of the disease now observed is a normal increase; for he has shown that among endemo-epidemic diseases typhoid fever is the one which is most manifestly submitted to seasonary influence. After attaining in the spring the lowest point of its annual track, it rises slowly in summer, undergoes a sudden and considerable increase in autumn, and then slowly declines again in winter—its maximum mortality being habitually at the commencement of the autumnal paroxysm, which then rapidly diminishes until the minimum is reached. The truth of this law has been remarkably verified by an examination of the course of the disease in the hospitals during the last ten years. Six times the maximum appeared in October, twice in September, and once in December. The frequency of typhoid during September and October has, then, been the result of the normal exacerbation following the seasonary evolution of the disease; but it has been very excessive, and the laws of its evolution allow us to hope that the remission which has latterly been observed will prove a genuine remission. But it is to be feared, as is habitually the case, that this decrease will be slow, and interrupted, perhaps, by some exacerbations, so that the epidemic may yet for some time to come exhibit a high figure. The unanimous opinion of observers is that the present epidemic is distinguished by its benignity, and by the relative rarity of fatal cases. During this quarter the mean mortality has been but 15 per cent., which is quite an exceptional mildness in the course of an epidemic paroxysm. Among children the usual comparative mildness of the disease has been far exceeded in the present epidemic, so that in 150 cases only two deaths occurred. The number of cases of typhoid fever admitted into the hospitals during the quarter was 2136, with 322 deaths, or 15 per cent., viz.: 1292 men, with 193 deaths; 653 women, with 113 deaths; 95 boys, with 3 deaths; and 96 girls, with 13 deaths. The following is a tabular view of the mortality in Paris from the principal contagious diseases during the third quarter of the last five years:—

	1878.	1879.	1880.	1881.	1882.
Small-pox . .	19	158	449	211	109
Scarlatina . .	22	22	123	166	40
Typhoid fever .	280	292	365	435	780
Diphtheria . .	368	407	497	536	432

Therapeutical Value of Continuous Baths.

M. Leloir, in a note to the *Progrès Médical* (1882, No. 43), calls attention to the fact that, although the great advantage derivable from the continuous bath, as employed by Hebra at Vienna, has been known for several years in France, it has never been practically adopted, and that even at the St. Louis there is no appliance for carrying it into effect. Having recently visited Vienna, he has been struck with the great benefit derived from this procedure by Prof. Kaposi at the General Hospital, and also at the Rothschild Hospital of that city. It is not only in the treatment of certain serious affections of the skin which resist all other modes of cure (extensive and inflamed psoriasis, pemphigus, etc.) that the continuous bath furnishes, as everyone knows, such excellent results by powerfully modifying the condition of the skin, relieving the itching, abolishing the paroxysms of fever, etc., and procuring for the patient a great increase of comfort. This prolonged use of water has also, in the hands of the Viennese practitioners, produced remarkable results in the treatment of affections which have nothing to do with special wards, but are met with daily in every hospital. These excellent effects have been obtained by its employment in extensive burns and gangrenes; for under the influence of the baths the pain of the burns diminishes, fever disappears, sleep ensues, and cicatrisation takes place with great rapidity. But it is especially in the treatment of eschars of every kind, and particularly in gangrenes from decubitus (nervous decubitus, gangrene supervening in the course of typhoid fever, etc.), which so obstinately resist treatment and are of such grave prognosis, that the most remarkable results are obtained. At the end of a fortnight, vast and deep-seated eschars are detached; the sphacelus becomes limited, and a red granulating wound of good aspect follows, which cicatrises with great rapidity. "I have seen, treated in this way, an enormous eschar, which had denuded the sacrum and made great ravages on the buttocks, in full cicatrisation twenty days after its origin. And neither 'hecticity' nor purulent fever was produced." These excellent results obtained by this treatment are readily understood when we reflect that, added to the influence of the prolonged bath itself, there is almost a complete absence of pressure in the vicinity of the parts upon which the patient reposes, in consequence of the great diminution of the weight of the body in water. Not only should these baths be established at the St. Louis, but also in all the hospitals, where they would prove of great service. They are very easily set up, consisting, as they do, only of a mechanical bed placed in a vast wooden case covered with zinc, which constitutes the bath. The water, first prepared in a reservoir attached to each water-bed, reaches the patient at a temperature suited to his case. The cost of the bath is moderate, but the presence of an attendant in the ward is always necessary. "The patient eats and sleeps in his bath, is well contented to be there, and only asks to be allowed to remain. I have seen patients who have continued in the bath for fifty or one hundred days, without ever quitting it, and who complained of no fatigue from so prolonged an aquatic sojourn; quite the contrary, often they spoke to me in warm praise of the relief which this simple treatment had obtained for them."

REVIEWS.

Human Morphology: a Treatise on Practical and Applied Anatomy. By Herbert Albert Reeves, F.R.C.S. Ed., Assistant-Surgeon and Teacher of Practical Surgery at the London Hospital; Surgeon to the East London Children's Hospital; formerly Demonstrator of Anatomy at the London and the Middlesex Hospital Medical Colleges. Vol. I.: The Limbs and the Perineum; with 564 Illustrations. London: Smith, Elder, and Co. 1882. Pp. 719.

A new work on anatomy, at the present day, brings the usual comments that have greeted such productions for the last forty years, viz., What necessity is there for more works on human anatomy? it is a science settled and done with; all is known that there is to be known concerning the subject. To refute this, one has only to point out that book after book has appeared during the last decade, each one having some distinctive characteristic, and bringing variable amounts of collateral matter within the range of human anatomy. None that have appeared have gone so far as this, the most recent anatomical production, whether it is considered in regard to the number of collateral subjects treated of, the beauty of its text, its numerous delineations, or its magnificent get-up. The perusal of even the first volume takes some time, owing to the immense wealth of knowledge and variety of subjects brought together and set forth in its pages. The "historical sketch" at the beginning is a great feature. It teaches the student from the first the meaning of many a score of names which beset his reading. It clothes a "part" with a garment of interest, and it brings home to the student the fact that Scarpa, Vesalius, Eustachius, etc., are not mythical beings, but that they were living realities who had previously dissected a body as we might do now. The chapter on "anatomical technics" was much wanted. Such details are usually left to the dissecting-room porter, or the museum-man, and anatomists in this country, at least, held little or no community on the subject. When we come to anatomy proper we find much that is pleasing and much that is surprising—pleasing in the contemplation of the author's easy style and lucid expression, the beautiful plates and the useful diagrams; surprising in the meagre and faulty descriptions of many common-place anatomical subjects. Throughout the book many words are misplaced, such as "coracoid" for "glenoid," "abductor" for "adductor," and the like. There are many errors in description also, which cannot be explained away by any process of reasoning. It is impossible to mention all, but

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some of the more evident are as follows:—The gluteus maximus is said to "arise from the superior curved line of the ilium, and the posterior third of the iliac crest, and from an impression of the bone below it"; the gluteus medius is said to "arise from between the crest and the superior curved line of the ilium." The former of these is not only ambiguous, but incorrect; and the latter is obvious nonsense. The boundaries of the popliteal space are slovenly and incorrectly given. These are only chosen as main examples of faulty description and seeming carelessness in detail, whilst there are many others of minor importance.

The anatomy represented in the diagrams in many instances does not correspond with the text. The following are a few of the instances we observe:—In Fig. 97 the radial and ulnar veins are misnamed; Fig. 177 shows the adductor pollicis going to the wrong side of the thumb; in Fig. 179 the (8.8.) indicate the interossei going to the wrong fingers; in Fig. 180 the dotted origin of the flexor brevis pollicis does not correspond with the description in the text; Fig. 234 is at variance with the description of the musculo-cutaneous nerve as to the toes it supplies. The author has been deluded into inserting Fig. 184 from Cunningham; it is certainly altered, but it is impossible to render natural or correct a diagram which is an anatomical impossibility, and should never, in the first instance, have been published. The summaries of facts set forth in tables are by far too ponderous to be attractive, as the text itself would be gone through with almost as much advantage and as little trouble. Still, say what one will, this work is a great entity in anatomical literature. The wide range of knowledge possessed by the author has rather hampered than helped him in this his supreme effort. Had less collateral work been tried, more space would have been available for anatomy pure and simple. No one pretending even to teach anatomy can, however, afford to lay this book aside unread.

The Illustrated Quarterly of Medicine and Surgery. Edited by George Henry Fox, Professor of Diseases of the Skin, and Frederic R. Sturgis, Professor of Venereal Diseases, New York; with the co-operation of numerous well-known American Physicians, Surgeons, and Specialists. New York: E. B. Trent; London: J. and A. Churchill.

The first three numbers of the first volume of this journal are before us, and command consideration, both from the roll of illustrious men's names associated therewith, as well as from the novelty and completeness of the undertaking. With illustrated periodicals, generally, one is apt to glance at the pictures and neglect the text, as the news contained is never very recent, and the information to be conveyed is generally fully communicated by a study of the illustrations. In a journal, however, dealing with intricate or rare diseases, it is impossible to so exactly delineate the subject matter as to do away with the necessity of description; hence a glance at the pictures and sketches contained in this work rather whets the desire to read the text than otherwise. One's curiosity is excited rather than allayed by a casual glance at the various representations. In the first place, the illustrations are of varying value. Some, such as plate viii., No. II., and plate ix., No. III.—the former a representation of a duodenal ulcer, and the latter an attempted representation of skin-grafts,—are useless, conveying no information nor elucidation of the text. Some are calculated to mislead from the grossness of the drawing—markedly plate xi., No. III, which misrepresents a papilloma of the pharynx. There is no doubt the best are the uncoloured sketches, especially those of the style seen in No. 3, showing a new method of closing urethral fistula, where each step is clearly set forth. The next in point of usefulness are the photographs, especially those illustrative of facial paralysis. It is by following such types as these, and these only, that it can be hoped to keep this work afloat. In the second place, in regard to the quality of the cases communicated, we must admit the interest attaching to almost every one. They are mostly rare diseases, but not so rare but that it is worth the while of every medical practitioner to know, and to think about them. The danger is, that, unless widely contributed to, the succeeding numbers will fall off in quality, as the material of those interested in promoting the periodical becomes exhausted. For the future we would advise the editors to do away with coloured plates entirely, as being absolutely useless, and to adhere to clear delineations and photographs as the means of illustration. Let us also suggest that instantaneous photographs of accidents, such as photographs illustrative of the position of a limb when a bone has been recently broken, or of a dislocation, etc., would be useful, and likely to increase the popularity of the work.

GENERAL CORRESPONDENCE.

"THE RECENT EPIDEMIC OF MEASLES IN ICELAND."

Letter from Mr. C. E. Paterson.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your issue of the 23rd ult. you notice a note on the recent epidemic of measles in Iceland, which appeared in the *Edinburgh Medical Journal*, No. 330; and you remark, *à propos* of the number of cases in proportion to population, that "it is difficult to understand why the disease should prove more infectious in the country than in the town." The anomaly is, I think, only an apparent one, due chiefly to some want of clearness of expression on my part.

It was the case that in Reykjavik, in the latter part of June, 1100 persons were ill at once, but the total number of cases in that town in the two months during which the measles remained there must have been very much greater. Unfortunately, I have no record of the total number of cases. Many of the inhabitants—the Danish merchants, and the official and professional class, whose children go to Denmark to complete their education—were protected by a previous attack.

The questions as to whether all who escaped the previous epidemic suffered from this one, and whether any suffered now for a second time, could not be reliably answered without much fuller information than it was in my power to obtain. One lady I heard of, who, though exposed to infection, escaped the disease both in 1846 and 1882.

I am, &c., Chas. E. Paterson.

24, Pitt-street, Edinburgh, January 8.

Deaths from Chloroform.—The *Philadelphia Medical News* of December 2 notices two recent deaths from chloroform which have occurred in the United States. One of these took place in the practice of Dr. McGuire, of Virginia, a distinguished practitioner who has administered chloroform 13,000 to 14,000 times. While the inhalation was proceeding the pupils of both eyes slowly dilated to two or three times their natural size. On being spoken to the patient answered intelligibly, but as she spoke her pulse abruptly ceased beating, respiration continuing for some seconds afterwards. Prior examination had detected no sign of disease of the heart or lungs. About a drachm of Squibb's chloroform was administered on a towel, the inhalation having continued about two minutes when the heart became paralysed. The other case occurred during extraction of teeth, the patient on former occasions having inhaled chloroform with impunity. Here too a towel was employed, and the patient passed quickly into a state of unconsciousness. A third tooth was about to be removed, when her respiration becoming embarrassed, and her eyes open, fixed, and staring, she died. The reporter calls attention to the danger in using a towel folded as a cone in these cases, the air being almost entirely displaced by the denser chloroform—almost pure chloroform vapour being, in fact, inhaled at first. With regard to the second case, he observes that so frequent have deaths from chloroform taken place during the extraction of teeth, that the dentist should absolutely refuse to administer it, even when, as in this case, the patient earnestly requests that it should be used. "It has been abundantly demonstrated," he says, "that operations in the domain of the fifth nerve, under chloroform-narcosis, are peculiarly dangerous. The reason is obvious. The nucleus of the fifth and the nucleus of the pneumogastric lie in close juxtaposition, and intimate reflex relations, if not direct commissural connexion, subsist between them. The impression made on the end organs of the fifth, in tooth-extraction, exerts a powerfully stimulative effect on the inhibitive function of the pneumogastric."

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FOREIGN CORRESPONDENCE.

HOW THEY MANAGE THESE THINGS IN BRAZIL.

[To the Editor of the Medical Times and Gazette.]

SIR,—I give here the translation into English of two cuttings or excerpts (which accompany this), taken from numbers of the *Jornal do Commercio*, of Rio de Janerio, of last week, giving an account of the occupation, on two several days, of the model of monarchs, the Emperor Peter II.

"His Majesty the Emperor, accompanied by his Lord-in-Waiting, visited, the other day, the clinical wards and lectures in the public Hospital (the largest in the world), arriving a little after eight, and leaving about noon.

"His Majesty was received by the Honorary Councillors, V. Saboia, Director of the Faculty, and Substitute Moraes e Valle; Dr. Ferreira dos Santos, Director of the Sanitary Service; and Dr. Motta Maia, Professor of Operative Surgery. His first visit was to the Surgical Clinic of Dr. Pereira Guimaraes, where he was shown several important cases. Thence he passed to that of Hon. P. Counsellor Saboia, under the temporary charge of Dr. Bulhoës Ribeiro, where he saw a case of resection of the humerus, followed by the bone suture; another of enterotomy, rendered necessary by an abnormal anus; and another of partial amputation of the foot, by Pirogoff's process; hearing afterwards part of the lecture of this Professor on two patients—one a case of lupus erythematosus, and the other of organic urethral stricture. He then went to the Surgical Arsenal, and examined the new instruments lately arrived for the use of the Hospital.

"Descending to the ground-floor, His Majesty, having inspected the children's wards, visited the Medical Clinic of Dr. John Paul, where he saw several important cases, and among these that of a patient suffering from spinal sclerosis; was present during part of the visit of Hon. P. Counsellor Torres-Homem, where he saw the examination of several patients made by the pupils, and expressed great pleasure at seeing the improvement of the students and the excellence of the method of clinical teaching, without causing any inconvenience or suffering to the patient. From thence he passed to the Ophthalmological Clinic of Dr. Hilary de Gouvêa, where he proceeded to a minute inspection of all the instruments for the examination of the eyeball, and witnessed a number of most varied experiments on the acuteness of vision, myopia, hypermetropia, etc., consenting that Dr. Gouvêa should examine his eyes in order to tell him exactly his degree of visual perception. His Majesty then examined, with the ophthalmoscope, the interior of the eyeball of a student, discerning with ease the optic disc, the retinal vessels, etc.; and then assisted at the consultations for extern patients at the Ophthalmological Polyclinic, seeing various operations performed by Dr. Gouvêa. His Majesty, on retiring, expressed his conviction—the truth of which is admitted by all—that clinical teaching in the hands of earnest men will soon attain among us the degree of excellence which he had occasion to verify in hospitals of Europe and the United States."

Now for the work of the second day, there having been an interval of four or five days between the two visits.

"FACULTY OF MEDICINE.—On September 26, His Majesty the Emperor, accompanied by his Lord-in-Waiting, visited this Faculty, where he remained from eleven to one o'clock. Received by several Professors and the Secretary, his Majesty directed his steps to the room destined for the free course of lectures on affections of the larynx, where Dr. W. Zawerthal inaugurated the course by an oration of forty minutes in presence of a numerous auditory. His Majesty next visited the Museum of Pathology, where he found the Director, Dr. Bonet, and saw the magnificent collection of plastic models recently arrived from Europe, representing various obstetric facts. From thence he entered the Chemical and Biological Laboratory, where the Curator, Dr. Campos da Paz, placed before him several good specimens of the labour of the pupils who were at that moment engaged in practical exercises. Next he entered the Laboratory of Mineral and Toxicological Chemistry, and the respective lecture-rooms, where he heard part of the lecture of the Professor, Dr. Souza Lima, who treated of asphyxia by drowning. Then came the turn of the Cabinet of Mineralogy, the Laboratory of Botany and Zoology, where the Curator, Dr. Ribeiro de Mendonça, showed several preparations made by the pupils, the Professor, Dr. Pizarro, being at the time engaged in lecturing on an important subject. Then His Majesty went to the Laboratory of Histology and Pathological Anatomy, where the Curators, Doctors Souza Fontes and Poncy, exhibited some specimens. Then he inspected the Bureau of the Secretary, the Pharmaceutic Office, the Laboratory of Physics, and that of Materia Medica and Therapeutics, where he found the Professor, Dr. Albino de Alvarenga, and the Curator, Dr. John Paul, who practised in His Majesty's presence the experiment of producing in a dog all the symptoms of uræmia, by the intravenous injection of a solution of carbonate of ammonia. The Anatomical Theatre was the place next visited, where students were employed in dissecting; and in an adjoining department Dr. Peter Paul was commencing the lecture of his free practical obstetric course. With the inspection of the Cabinet of the Professor of Topographical Anatomy and Operative Surgery, and of the Laboratories of Physiology and Dental Surgery, the Imperial visit ceased."

The journalistic notice continues as follows:—"The visit of His Majesty had been preceded by that of the Minister of the Interior (or Home Secretary), who remained from a quarter to ten to almost eleven, being accompanied by the Director, Secretary, and aid. "His Excellency examined the Bureau of the Secretary, and the Laboratory of Histology and Pathological Anatomy, which was shown by the Professor, Baron de Maceio; the Museum of Pathology; the Anatomical Theatre; the Laboratories of Physiology, of Organic Chemistry, and of Mineral Chemistry, where the assistant, Dr. José Borges da Costa, was engaged in practical exercises with students; thence he went to the Library, and returning, heard part of the lecture of the Professor of Clinical Medicine, the Hon. P. Councillor Dr. Torres-Homem. The Minister, verifying the necessity of alterations and repairs in the edifice occupied by the Library, ordered their immediate execution, in order that the objects of the creation of the institution may be entirely obtained."

You will deign to consider that the interests of science and humanity may profit greatly by the publication of so laudable an example. It will surprise some to know that in this age of *Nihilism* there exists a monarch who is as free in all his actions as any English country gentleman, and for whom dynamite has no terrors. I compare him to the ancient kings of my unhappy country, where two thousand years ago arts, science, and literature flourished in a degree inconceivable in these centuries of the triumph of the Anglo-Saxon commercial class. Unfortunately there are here people who do not sympathise with the scientific enthusiasm of Don Peter, and thwart him when they can.

The European physicians and surgeons who come to try their fortune in Brazil must be greatly taken aback when at the ceremony of the "defence of the thesis" they see the Emperor among the spectators, as often happens. The Emperor and Empress never fail to be present at the ceremony of conferring the doctor's degree on the *alumni* who have completed their six years' course. I am of opinion that as a whole, the medical practitioners of Brazil are over-educated in relation to the probable future of the profession, and there is a necessity for the creation of a less highly cultured class, who should represent the English surgeon-apothecary of thirty years ago, the individuals constituting which may be more suitable to the practice of the interior, and with less elevated aspirations. Until now, the non-existence of a middle (bourgeois) class and the existence of slavery rendered possible the remuneration of medical men of high literary and scientific culture and social standing, the sick slave being, as a rule, as well cared for as the Emperor. But now, with the gradual extinction of slavery, the introduction of European colonists or immigrants, and the extension of commerce, the necessity of a class of practitioners with a lower minimum standard of qualification and humbler social pretensions will very speedily make itself felt.

The Chambers have voted a gratuity of about £3500 to Dr. John Baptist Lacerda for his discovery of the antidotal virtues of permanganate of potash in relation to ophidic poison. I will not trespass further on your patience and your space.

I am, &c.,

RICHARD GUMBLETON DAUNT, M.D. Edin.

Campinas, San Paulo, Brazil.

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REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 2.

SAMUEL WILKS, M.D., F.R.S., President, in the Chair.

Dr. ANGEL MONEY exhibited, by card, the Liver of a female child, aged five years at the time of death, showing well-marked cirrhosis. The parents, on bringing the child to the hospital, attributed her illness to a chill about two months previously; but on inquiry it was ascertained that two years before she had stayed for two months at a public-house, and had then acquired a liking for alcoholic liquors, which she had ever after been allowed to gratify. There was no reason whatever to suspect syphilis. She had died with ascites and anasarca.

CARCINOMA OF ŒSOPHAGUS.

Dr. NORMAN MOORE showed this specimen. The whole middle third of the œsophagus was affected. The new growth (a scirrhous carcinoma) infiltrated the whole wall, and had caused a stricture which just admitted a probe. The œsophagus was adherent to the lung, and at the point of adhesion its wall was perforated, so that any food which passed the stricture could enter the lung. The lung at this point was not gangrenous, but in a condition of pneumonic consolidation. There were secondary growths in the ileum, exactly resembling in form and relation to the wall of the alimentary canal those in the œsophagus. Both lungs, the liver, spleen, mesenteric glands, and both kidneys also contained masses of carcinoma, and there was one small nodule in the external wall of the left ventricle. All the secondary masses were remarkably firm. The patient was a man aged fifty-six. He had symptoms of dysphagia in May, and died in December, so that the duration of the growth was about eight months. Out of eleven cases of carcinoma of the œsophagus examined at St. Bartholomew's Hospital since 1867, all were males. In six the lower end was the seat of the growth; in five the middle third; in four secondary growths were found in the lungs; in only one in the heart. Exhaustion was the commonest cause of death; ulceration into a vessel occurred in two cases, gangrene in one, and fatal pleurisy in three. The ages ranged from thirty-six to fifty-eight.

LYMPHO-SARCOMA INVADING DUODENUM.

Dr. MOORE also showed a lympho-sarcoma, which, originating in the lumbar glands, had penetrated the duodenal wall, and produced at one place narrowing, and at another dilatation of the duodenum. The mucous surface was extensively ulcerated; the lumbar and mesenteric glands and the duodenum were the only parts infiltrated. The patient was a woman aged forty-one, and the duration of her illness about eight months. An abdominal pulsation was first felt, then a tumour, and then attacks of vomiting came on. The intestine was nowhere in front of the tumour, and a part of the mass which was resonant during life was found post-mortem to owe its resonance to the dilatation of the intestine at the most ulcerated part.

ENDOCARDITIS WITH MILIARY ABSCESSES OF THE HEART IN A CASE OF HIP-JOINT DISEASE.

Dr. MOORE then exhibited this specimen. The hip-joint showed extensive denudation of the acetabulum and the head of the femur, and was full of pus, as also was the right sterno-clavicular joint. The heart showed growths on and destruction of the aortic valves, and an ulcer one-fifth of an inch long below the middle aortic cusp on the ventricular wall. Beneath the endocardium of both right and left ventricles were numerous minute specks, looking like tubercles to the naked eye. There were similar specks in the pericardium, in the liver, and in the mucous membrane of the intestine, and surrounded by patches of injected vessels on the surface of the brain. There were softened and broken-down infarcts in the spleen, and softened infarcts in both kidneys and in the right lung. The little specks on microscopic examination were found not to be tubercles. They had no meshwork and no giant cells, and, examined by Koch's process, yielded no bacilli. They consisted of accumulations of leucocytes, and were, in fact, very early abscesses. The patient was a boy aged sixteen years. The beginning of his hip-joint disease was not ascertainable. He had a fall while doing gymnastics on November 11. A few days after he had acute inflammation of the joint, followed by endocarditis. Two days before his death he became suddenly hemiplegic, and presented some symptoms of tubercular meningitis.

CHRONIC INFLAMMATION OF THE GLOTTIS.

Dr. MOORE then showed the trachea and larynx from a woman aged twenty-five, who died with cavities in both lungs. She had had dysphonia for some weeks only, and died in a sudden attack of dyspnœa. The vocal cords, arytænoid cartilages, arytæno-epiglottidean folds, and epiglottis were all greatly thickened. A slight additional œdema had caused complete closure of the glottis. At the root of the epiglottis there was a small erosion, and all down the trachea a long patch of redness and ulceration. No tubercles were visible in the larynx or in the trachea.

Dr. GOODHART remarked that last year he had brought before this Society a set of cases which, in his opinion, tended to show that ulcerative endocarditis was in some way infectious; and he asked whether this one of Dr. Moore's was one of a group of cases, and whether any other members had recently had cases under observation.

Dr. CURNOW said that between October and Christmas three instances of this disease had come under his care at the Seamen's Hospital; and added, in reply to the President, that they were all cases of old-standing heart disease.

Dr. WILKS thought that the cases which Dr. Goodhart had referred to had all been cases of old heart-mischief, whereas, if he had understood Dr. Moore rightly, in the case under discussion the heart disease was quite recent, and the infarctions were not to be regarded as secondary to the endocarditis, but as a result of the general pyæmia.

Mr. WALSHAM, referring to Dr. Moore's fourth specimen, asked if any microscopical examination of the laryngeal muscles had been made, as some researches in this direction of late had shown the existence of miliary tubercles in between the muscular bundles.

Dr. MOORE, in reply to the last question, regretted that no microscopical examination of the muscles had been made. In reference to the infarctions in his other case, he would regard them as secondary to the disease of the aortic valves. He had been quite aware of the views put forward last year by Dr. Goodhart in regard to the nature of ulcerative endocarditis, and had examined the records of St. Bartholomew's Hospital especially in reference to it, but could not find any evidence therein in support of the idea that this disease occurred in epidemics.

BALL OF FIBRIN IN THE RIGHT AURICLE.

Dr. F. CHARLEWOOD TURNER showed a heart in which there was marked stenosis of the mitral valve, and also disease of the aortic valves. Both auricles were greatly dilated, and in the left there was found an ovoid body about two inches long by one inch broad, smooth externally, formed of partly organised layers of fibrin; it was hollow, its contents having escaped through an aperture at one extremity; evidently it was the remains of a clot that had formed during life. In the left auricular appendix were found traces of an old ante-mortem clot. The specimen was taken from the body of a woman aged thirty-four, who had had an attack of acute rheumatism some three years previously. There was evidence of great enlargement of the heart, and the sounds were very feeble; a double murmur was heard at the apex, and a diastolic murmur at the base. The lungs were much congested, and there was ascites. Besides the morbid appearances already described, there was found some recent endocarditis of the tricuspid valves, and also a small clot in the right auricle. The liver and kidneys were greatly enlarged, the latter showing some parenchymatous nephritis. There were infarcts in the spleen. He referred to a similar specimen that had been brought before the Society by Dr. Ogle, and depicted in vol. xiv. of the Society's *Transactions*.

FIBRINOUS GROWTH ON PLEURA.

Dr. TURNER showed a small pedunculated dendriform growth of whitish appearance, attached to the edge of the base of the left lung by a narrow pedicle, and not measuring more than half an inch in diameter; it appeared to be composed of fibrin entirely. There were some old pleuritic adhesions, but not in its immediate neighbourhood. The specimen was taken from the body of a man aged seventy,

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who had died from suppurative nephritis consecutive to abscess in the prostate. It was not known to have given rise to any symptoms during life.

Lardaceous Infiltration of the Liver.

Dr. Turner also showed an unusually large lardaceous liver. It was taken from the body of a man who died at the age of thirty-four. Ten years previously he had had a hard chancre. The liver was very large, uniform, smooth; it cut like a lardaceous liver, and gave the characteristic reaction with iodine. Microscopical examination of the liver showed that the lardaceous degeneration was seated in the capillary network of vessels, but not regularly distributed throughout, some areas being apparently almost healthy.

Dr. Barlow had not yet seen the last specimen referred to, but if he had rightly understood the description given of it, there were scattered deposits of lardaceous material throughout the liver, and he would ask whether these might not be in reality degenerated gummata. In a case he remembered to have seen, which he believed was similar to this, he found masses in the liver which stained very deeply with iodine, surrounded by healthy liver-tissue. He believed that these masses were retrograde gummata. He thought there was a drawing in the post-mortem room at Guy's Hospital which exactly represented the condition he was referring to.

Dr. Norman Moore recollected two cases of a similar kind, in which parts of the liver were perfectly normal, and other parts were infiltrated with a material which stained deeply with iodine.

Dr. Turner did not think that Dr. Barlow's view was applicable to his own specimen. He had no doubt that the liver was involved throughout: no healthy liver-cells were seen anywhere, but everywhere there some traces of liver-cells, so that he thought that the change had been a general one, and that it had followed along the vessels.

Dr. Goodhart said that at the time of the debate on lardaceous disease, Dr. Hilton Fagge had arrived at the conclusion, from the study of a good many cases, that lardaceous disease was liable to attack some parts much more severely than others, and might even sometimes undergo caseous degeneration.

Dr. Curnow asked Dr. Barlow whether, in the case he had referred to, the disease had been as uniform as it was in the present specimen.

Dr. Barlow replied that in his case the liver was enormously enlarged, and it was not until after the application of iodine that any suspicion as to the true nature of the case arose. He thought that between the three processes of gumma, syphilitic infiltration, and cicatricial contraction no hard and fast line could be drawn.

Polypus of Bladder.

Mr. Shattock exhibited the bladder and kidneys of a little girl aged five, the bladder containing a mucous polyp about the size of a large walnut, which sent down a process into the urethra. Both ureters were dilated.

Rickets in a Baboon.

Mr. Sutton had brought this specimen forward chiefly because in important particulars it resembled a case exhibited by Dr. Goodhart at the last meeting of the Society, in which the appearances had been attributed to syphilis. The skeleton which he had brought this evening was that of a West African baboon aged eighteen months. The liver was found to be greatly enlarged, pale, and gave a marked lardaceous reaction with iodine. There was no other visceral lesion. The bones were very vascular, quite unusually so, and the curvatures of all the bones were much exaggerated, especially of the right femur, insomuch that it was a wonder it had not broken; the epiphyses all presented the characteristic changes of rickets, and cartilaginous islets could be seen in them without a magnifying glass. The skull was very thick, and uniformly so, but the thickness ceased abruptly at the occipital ridge, below which the appearance suggested craniotabes; but comparison with the skull of a healthy baboon showed that there was no real thinning. At the suture just above the mastoid bone on one side the thickening was absent; otherwise it did not in any way respect the sutures. An unusual condition of the right radius and ulna was found, the right radius articulating with the inner aspect of the ulna, and its upper part resting on the coronoid process. On the outer side of the humerus there was a small nodule, which articulated with the outer part of the right ulna. He attributed this malformation to dislocation of the radius in early life. He had noticed in this case an interesting point in connexion with the teeth. Baboons very often have some of their milk-teeth already cut when they are born: in this instance, on splitting open the alveolus, he found a marked thickening of the dental follicles. If the same state obtained in the human subject, it would very well explain the delayed dentition which was so common a feature of rickets. Referring to a diagram of the epiphysis, he explained how small portions of cartilage gradually got pinched off to form cartilaginous islets. He thought that the best term to describe the process would be diffuse epiphysitis.

Mr. Eve remarked that the study of these specimens was always interesting, as in animals we had the purest form of rickets. The most marked feature of rickets in animals was, he thought, the porotic condition of the bones, not only of the skull, but also of the long bones. It was, perhaps, best shown in lions, the enlargement being due not so much to a deposit of new bone, as widening out of the cancellous tissue. He asked Mr. Sutton whether, in using the term epiphysis, he had not meant to say the growing end of the diaphysis; the irregular and imperfect ossification shown in these specimens was most characteristic.

Mr. Clement Lucas asked how long the animal had been under observation, and also at what age it had been weaned, and upon what diet it had been fed. He had very little doubt that rickets occurred in every animal, notwithstanding Dr. Baxter's failure to produce rickets artificially. He had seen a greyhound which, after straying for a time, returned with marked rickets, presumably from the insufficient food it had had during its wanderings.

Dr. Goodhart said he had been under the impression that it was generally admitted as an undoubted fact that syphilis did occur amongst baboons.

Dr. Barlow, referring to the question of syphilis, called attention to the lardaceous disease of the liver; and observed that, notwithstanding Sir W. Jenner's unfortunate use of the term "albuminoid," in reference to the rickety liver, yet the liver in rickets never gave the characteristic reaction with iodine.

Dr. Wilks asked what age baboons usually lived to, in respect of the period at which rickets might be expected to appear; and he also said that in the museum of the Anthropological Society there was a skeleton of a monkey labelled syphilitic.

Mr. Sutton said that monkeys lived to be ten years old, and therefore a monkey at the age of six months would correspond to a child of three years and a half. In reply to Mr. Eve, he said that the cartilaginous islets were found not only in the growing ends of the long bones, but also in the epiphyses. The monkeys were fed chiefly on nuts and soaked bread and milk, but he reminded the Society of the miscellaneous character and quality of the food supplied by chance visitors, of which no record was kept. He hoped to be able to show at the next meeting a specimen of rickets in a lizard. He regretted that he had not brought the liver with him that evening, but he should have great pleasure in submitting it to Drs. Goodhart and Barlow. In reference to syphilis in monkeys, he said that he had had the opportunity of making post-mortem examinations of a great many monkeys at the Zoological Gardens, but he had never once found any evidence of syphilis.

Mr. J. R. Lunn showed (by card) a specimen of Renal Calculus and Abscess. Also a Rupture of the Stomach in a child aged four years, who was run over, and died about six hours later.

Mr. B. G. Morrison showed (by card) a deposit of Lime-salts in the Hepatic Ducts of an Ox.

Annual Meeting for Election of Officers.

The President announced that the Scrutineers, Dr. Walter Edmunds and Mr. Eve, had handed him the list of officers elected for the ensuing session. We published it last week.

The Secretary then read the annual report of the Council, which showed that the affairs of the Society were in a prosperous condition. Twenty-seven new members had been elected, five had resigned, and nine had died, the latter including two former Presidents of the Society—viz., Sir

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Thomas Watson, Bart., and Dr. Peacock,—Dr. George Budd, and Dr. Edwards Crisp, who had been indefatigable in his labours in the field of comparative pathology. The death of Schwann had deprived the Society of one of its most distinguished foreign members. The income during the past year had amounted to £563 19s. 1d., and the expenditure had been £502 3s. 4d., and there was now a balance in hand of a little more than £200. The Council referred with satisfaction to the appointment of a Comparative Pathology Committee, in accordance with a suggestion of the late President, Mr. Jonathan Hutchinson; and also to the appointment of a Committee to obtain further information, where possible, about cases recorded in the first thirty-one years of the Society's *Transactions*, the report of which Committee had been printed in the volume of the *Transactions* just issued.

Dr. Robert Barnes moved the adoption of the report, and congratulated the Society upon its most flourishing condition, not merely from a financial point of view, but also for its success in acquiring and diffusing sound knowledge.

Dr. Coupland, in seconding this proposal, remarked on the great value to the members that the introduction of comparative pathology had already proved to be, as instanced in the specimens brought forward that evening.

The adoption of the report was unanimously agreed to.

Dr. Dyce Duckworth, in proposing a vote of thanks to the retiring President, Dr. Wilks, congratulated the Society in that their meetings had for the past two years been presided over by one of the most practical pathologists in Europe. After recalling the invaluable labours of Dr. Wilks in the post-mortem room at Guy's Hospital, he alluded to his well-known sympathies with all workers, especially with all young workers.

Dr. Barlow, in briefly seconding the resolution, expressed the earnest hope that Dr. Wilks would long be able to come amongst them, and give them the benefit of his wide and valuable experience.

The resolution was unanimously agreed to.

Dr. Wilks, in returning thanks, said he could truly say, as he had often heard previous occupants of the chair say on similar occasions, that he thought that the advantage accrued to the President rather than to the members. He had never left any of their meetings without feeling that he was a wiser man. Theirs was a society of progress, and no one could come to their meetings without deriving some benefit. He believed that the Society had been continuing to make progress at the same rate as of old. Brilliant progress was not to be expected, nor was it desirable—they must rely upon slow, steady work. In illustration of the value of the work done by the Society, he pointed to the great increase in the knowledge of syphilitic manifestations that had been gained from the specimens and discussions at their meetings. Comparing the present time with the early days of the Society, he thought that the advance in histology was the most striking feature. He left the chair with much regret, but congratulated the Society in the choice of so distinguished a surgeon and pathologist as Mr. Hulke.

Dr. Day proposed a vote of thanks to the retiring Vice-Presidents and other members of Council.

This was seconded by Mr. A. P. Gould, and carried unanimously.

Dr. Southey, in proposing a vote of thanks to the retiring Secretary (Dr. J. F. Payne), referred to the arduous duties of the office, and the discretion and readiness with which Dr. Payne had always fulfilled them.

Mr. Clutton briefly seconded this, and the resolution was carried unanimously.

Dr. Payne, in returning thanks, said that the duties, though perhaps at times arduous, yet, owing to the courtesy of the members, had always been pleasant. He had always been an ardent believer in the Society, and he thought that the other societies had of late paid the Pathological Society a great compliment by imitating them in endeavouring to make their work more practical.

The meeting was then adjourned.

Absence of the Spleen.—Prof. Scheuthauer, of Pesth, found at the autopsy of a woman aged seventy that no spleen existed. The organ had not been destroyed by disease, but had never been present.—*St. Petersburg Med. Woch.*, December 30.

ACADEMY OF MEDICINE IN IRELAND.

Pathological Section.—Friday, January 5.

John M. Purser, M.D., President, in the Chair.

Dr. F. Henston exhibited an Oval Dermoid Tumour of the Right Ovary, the circumference being ten inches and the diameter nine. He had removed it from the body of a dissecting-room subject, aged sixty-five. The tumour was connected by adhesions with the surrounding viscera. Microscopic sections of the wall of the cyst showed bony plates and nodules of cartilage. A fibroma existed in the upper and posterior portion of the vagina.

Mr. Arthur Benson exhibited drawings of two cases of Rupture of the Choroid from External Injury. *Case* 1: From the left eye of a man aged thirty-three, who received the injury three weeks before admission to St. Mark's Ophthalmic Hospital by a fall from a horse. The rent in the choroid was seen to occupy a space midway between the disc and the yellow spot, and was crescentic in form, its concavity being directed towards the disc. The rent was marked by a considerable accumulation of pigment. The retinal vessels ran over it without any alteration in their curvature or direction. The pigmentation occurred six or seven weeks after the accident, and was not the remains of hæmorrhage. *Case* 2: From a girl aged nineteen, who had, six months before admission, received a blow from a portion of an exploding coffee-pot. There were three separate rents in the choroid—one at the yellow spot, the second a small crescent above the disc, and the third a large irregular rent above the last and near the periphery.

Mr. J. S. M'Ardle exhibited Tumours of the Cerebellum, removed from a child ten years old, who, three days after a fall on his head, was admitted into St. Vincent's Hospital with all the symptoms of cerebro-spinal meningitis. Sections of the tumour, prepared by Mr. P. S. Abraham, showed giant cells, with caseation of the central parts of the tubercular mass.

Dr. J. Magee Finny exhibited a specimen of Cirrhosis or Fibroid Induration of the Upper Lobe of the Right Lung, in which the disease was strictly limited to that lobe, and had caused it to be converted into a series of cysts varying in size from a pea to a small marble. There was a complete absence of the normal alveolar tissue, which was replaced by dense fibro-cellular tissue of a greyish-red colour. The cysts, which, as a rule, did not communicate with each other, contained a gallon of purulent secretion (free from special fœtidity), and were lined with a mucous membrane continuous with that of the bronchi. They permeated the entire lobe, giving it a very peculiar honeycomb appearance. The bronchi were slightly dilated in their tertiary divisions. It seemed as though the alveolar tissue alone, to the almost total exclusion of the pleura, and to a partial exclusion of the bronchi, was the seat of the fibroid change. No other exactly similar case had been observed, and while the lines of demarcation between bronchiectasis and the cirrhosis of Corrigan were by no means so marked as some recent writers (including Juergensen, in vol. ix. of "Ziemssen's Cyclopædia") would imply, it was plain that, in the specimen, the bronchial dilatation had little, if anything, to do with the condition of the lobe. The pleura of the right lung was thickened and adherent to a very slight degree, and sent no fibroid prolongation into the substance of the lung. The patient, a boy aged seventeen, was under observation for but a week, having been admitted to Sir Patrick Dun's Hospital on December 21, 1882, for a supposed attack of pneumonia of the upper lobe of the right lung. On December 28, physical examination showed the presence also of a pleural effusion, of a latent type, on the left side, to the level of the sixth rib. In the course of the case, two days before death, pleuritic friction was heard as high as the fourth rib. Over a limited extent, occupyng the third and fourth ribs, a double friction sound, synchronous with the impulse of the heart, and increased by pressure, was readily made out and heard by several observers. It was thought to be of pericardial origin, the inflammation being secondary to extension from the pleura. The post-mortem examination showed that there was no pericarditis, and that its real cause was the impact of the heart against the pleura, which was roughened and granular in its narrow prolongation under the sternum. Dr. Finny noticed the rarity, and commented on the clinical

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significance of this physical sign. The cause of death was syncope, due to the sudden outpouring of fluid into the left pleura and the incautious sitting up of the patient. On the evening before his death, the respirations were 28, pulse 120, temperature 102° Fahr.; there were no signs of any asphyxia; the patient was resting easily on the right side, and expressed himself easier and better than he had been since admission, and during the day the fluid had not reached above the fifth rib in the semi-recumbent posture, and there were no symptoms suggesting, not to say demanding, immediate relief. At three o'clock, a.m., on the 29th, he sat up to cough, as he was in the habit of doing on waking out of sleep, and, whilst taking nourishment and conversing with the night-nurse, he was noticed suddenly to become pale and to be bathed in perspiration. He died in an hour. Effusion of a very rapid nature and to a very considerable extent must have occurred during that night, as the pleural cavity was found full of serum, and the lungs compressed, without enlargement of the side or bulging of the intercostal spaces. Trousseau and Bartels' notice of the possibility of sudden death in pleurisy, and their explanation of it as being by syncope, were detailed, Dr. Finny laying more stress upon the rapidity with which the effusion is poured out than on the amount.

Mr. SWANZY read a paper on Glioma of both Retinæ, illustrated by a living specimen. The patient was two years and a half old. His mother first noticed a peculiar appearance in the interior of the right eye twelve months ago, and four months later in the left eye. At the first visit to the National Eye and Ear Infirmary, six weeks ago, a growth of a pale yellow tint was found in each eye. In the right eye it lay deep on the posterior surface of the globe; in the left eye it came more to the front, occupying two-thirds of the vitreous humour, and presenting a lobulated surface. The vitreous humour in each eye was clear. There had been no iritis or other inflammatory process, and there was no injection of the anterior parts of the eyeballs. There were not, and had not been, any head symptoms, and in all respects the patient's general health was perfect. He had never had any illness. The only changes since the case had been under observation were a slight increase in the size of the growths, and that the right eye had become glaucomatous. However, the child, who spoke remarkably well for his age, had lately spoken sometimes very indistinctly and rapidly, and with a forced repetition of the final letter of words, thus: "bread-d-d-d-d."

Mr. SWANZY also read a paper on a case of Intra-ocular Tumour (illustrated by microscopical sections prepared by Mr. P. S. Abraham). The growth had commenced six years ago, and when removed was, with the eyeball, the size of a hen's egg. It was still covered in front by conjunctiva and atrophied sclerotic, but had grown through the sclerotic above, and displaced the eyeball downwards. The greater portion of the tumour was found to consist of a melanotic sarcoma with round and spindle cells in the usual arrangement. Around the optic nerve behind the globe there was a considerable mass of tumour, containing less pigment, and in it there was an alveolar arrangement corresponding to Billroth's alveolar sarcoma. At one part of the highly pigmented portion, where it came in proximity to the conjunctiva, there were well-marked alveoli containing epithelial cells, thus so far placing the tumour in the category of carcinomatous sarcomata described by Virchow.

The Section then adjourned.

THE SEAT OF INSTINCT.—Dr. W. A. Hammond read a paper at the New York Neurological Society, claiming that the seat of instinct was in the medulla oblongata. He arrived at this conclusion from the study of the history of acephalic monsters, and from a series of experiments which he and others had made on frogs and other reptiles. He said that he had found very little written about this subject. In acephalic monsters the capacity for suckling and other instinctive acts was observed, providing the medulla was present. In monsters in which there was no brain or cord, no such actions took place. In frogs the removal of the cerebral and cerebellar lobes did not interfere with instinctive acts, such as swimming, the sexual action, etc. Neither did removal of the spinal cord. In the discussion which followed, there was a general expression of disagreement with Dr. Hammond's views.—*New York Med. Record*, December 9.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 8th inst., viz.:—

Atkinson, J. Lancelot, of the Leeds School.
Battersby, C. Robert, Dublin.
Fisher, W. Mulres, Galway.
Greenwood, G. Spencer, of the Leeds School.
Hamilton, James, Glasgow.
Holroyd, G. Abraham, of the Leeds School.
Holt, M. Percy, of King's College.
Husbands, H. Wessen, Bristol.
Keyworth, A. Foster, Manchester.
Lund, Herbert, Cambridge.
Meaden, E. Henry, Bristol.
Raywood, J. R. Isaac, of Guy's Hospital.
Read, Bertram J., of St. George's Hospital.
Roach, G. Ernest, Birmingham.
Shelmerdine, Herbert, Edinburgh.
Wawn, E. Russell, of the Leeds School.
Williams, Alfred, Glasgow.
Young, J. More, Glasgow.

Four candidates were referred for three months, and one for six months. The following gentlemen passed on the 9th inst., viz.:—

Aspinwall, J. Fullerton, Manchester.
Badcock, Arthur, Leeds.
Brodrick, H. Edward, Liverpool.
Browne, H. Elliott, of the University of Cambridge.
Clarke, J. Michell, of the University of Cambridge.
Edge, Frederick, Manchester.
Fry, W. W. Baldock, of the University of Edinburgh.
Gaudin, F. Neel, of University College.
Graham, W. Perceval C., of the University of Cambridge.
Higgins, T. Francis, Manchester.
Lister, C. Edmond, of Guy's Hospital.
Musgrave, F. Bernard, Leeds.
Nairn, D. Mathewson, of the University of Glasgow.
O'Kell, J. Bathurst, of St. Thomas's Hospital.
Peachey, A. Thomas, of the London Hospital.
Plummer, H. B. Wetherell, Newcastle.
Ritchie, E. Duguid, of the University of Cambridge.
Swindells, Edgar, Manchester.
Wishan, R. Robert, of the University of Cambridge.

Five candidates were referred for three months, and one for six months.

Primary Examinations.—The first anatomical and physiological examination for the diploma of membership of the Royal College of Surgeons for the present session was commenced on Friday last, when 196 candidates presented themselves, against 179 at the corresponding period last year. The following were the questions submitted at the written portion of the examination, when the candidates were required to answer four (and not more than that number) of the questions in each paper. In Anatomy, from one to three o'clock, the questions were:—1. Describe the fourth ventricle of the brain. 2. The tongue: describe its attachments, surfaces, muscles, vessels, and nerves. 3. Describe the attachments and relations of the scalenus medius muscle. 4. Describe the articular surfaces of the bones entering into the formation of the elbow-joint. 5. Describe the excretory apparatus of the liver. 6. Describe the dissection required to expose the great sciatic nerve external to the pelvis. And the following were the questions on Physiology, from four to six o'clock:—1. What are the gases of the blood? What is the average percentage of these gases in arterial and venous blood? In what condition do these gases exist in the blood, and how may this be determined? 2. Describe the principal varieties of epithelium; state where they are found, and the functions they discharge. 3. Describe the structure of a lymphatic gland. How is the movement of the lymph maintained? 4. Describe the distribution of the bloodvessels in the kidney. State and explain the effects on renal secretion of increased arterial supply. 5. State the results of complete intracranial section of the fifth pair of nerves. 6. What is the composition of the atmospheric air? What are the changes effected in it by respiration? Give the average amount of oxygen absorbed by a healthy adult in twenty-four hours.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 4:—

Bruce, Robert Marston, Carentan House, Lordship-lane, S.E.
Dowsing, Herbert Leopold, Argyle Villa, Hull.
Knapton, George, 29, Wimpole-street, Cavendish-square, W.

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The following gentleman also on the same day passed his Primary Professional Examination :—

Reeks, John, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

BUTTERWORTH, S., M.R.C.S. Eng., L.R.C.P. Edin.—Assistant House-Surgeon at the Metropolitan Free Hospital, *vice* F. R. Anness, M.R.C.S., resigned.

HADDEN, W. B., M.D. Lond., M.R.C.P.—Medical Registrar to St. Thomas's Hospital, *vice* C. E. Sheppard, M.D., resigned.

BIRTHS.

ADAM.—On January 4, at Crichton House, Dumfries, N.B., the wife of James Adam, M.D., Medical Superintendent of the Crichton Royal Institution, of a daughter.

CARMICHAEL.—On January 4, at Lochgilphead, Argyleshire, the wife of D. Carmichael, M.B., of a daughter.

CASSAN.—On January 6, at Gainsborough, the wife of T. Cassan, M.R.C.S., L.R.C.P., prematurely of a son, who survived his birth only for a few hours.

COLEMAN.—On January 7, at Holly Lodge, Streatham, the wife of Alfred Coleman, F.R.C.S., of a daughter.

FAUGHT.—On January 7, at Clarence House, Southsea, the wife of Brigade Surgeon Faught, A.M.D., of a daughter.

KENDALL.—On January 5, at Renfrew, Bexley Heath, Kent, the wife of Surgeon-General Henry Kendall, M.D., A.M.D., of a son.

MOIR.—On January 3, at Nevis Bank, Fort William, N.B., the wife of W. Brown Moir, M.D., C.M., L.R.C.S. Edin., of a son.

RING.—On January 5, at 18, Cliftonville, Belfast, Ireland, the wife of Surgeon James Ring, M.D., A.M.D., of a daughter.

ROBSON.—On December 31, at 20, South-street, Durham, the wife of E. Shedden Robson, B.A., L.R.C.P., M.R.C.S., of a daughter.

MARRIAGES.

MACKAY—WHITFORD.—At St. Columb, John Cawful Mackay, L.R.C.P., etc., to Mary Elizabeth, eldest surviving daughter of the late Thomas Whitford, solicitor.

MCNAMARA—MERRIMAN.—On January 4, at Dublin, W. H. McNamara, Surgeon-Major, Army Medical Department, to Mary Hamilton, daughter of the late M. Merriman, Esq., barrister-at-law.

NALDER—WALKER.—On January 9, at Spilsby, Francis, youngest son of Howard Nalder, Esq., of Shrublands, Croydon, to Bessie, eldest daughter of J. W. Walker, M.B., M.R.C.S., of Spilsby.

DEATHS.

BIRT, THOMAS, M.D., at Grove House, Leamington, on January 4, in his 70th year.

EDWARDES, WILLIAM WHITFIELD, M.D. Brux., M.R.C.S. Eng., L.S.A., late of 1, Oakley-square, N.W., at Stanley House, Hounslow, on December 27.

FOX, FRANCIS KER, M.D., of Brislington House, near Bristol, on January 7, in his 79th year.

FREEMAN, SPENCER, M.R.C.S., at Stow Market, on January 9, in his 79th year.

JONES, GRAHAM KINNAIRD, son of A. Orlando Jones, M.B., etc., at Harrogate, on January 4, aged 9.

PESKETT, WILLIAM, M.R.C.S., formerly of Petersfield, at Ditchling, Sussex, on January 1, in his 91st year.

PRIOR, R. H., M.D., J.P., at Donnington House, St. Albans, on January 4, in his 87th year.

SCAULL, BERNARD, F.R.C.S., L.S.A., at Essex House, 29, Hammersmith-road, on January 6, in his 80th year.

VAUDIN, CHARLES, M.R.C.S., at Beaulieu, St. Peter's, Jersey, on January 1, aged 83.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

LEICESTER INFIRMARY AND FEVER HOUSE.—House-Surgeon. Salary the first year £120, rising at the rate of £10 per annum until the fourth year, with board, apartments, and washing. Candidates must be Fellows, Members, or Licentiates of the Royal College of Surgeons of England, Ireland, or Edinburgh, and also possess a separate medical qualification granted by any University or licensing body in the United Kingdom, and be duly registered under the Medical Act. Applications, with original testimonials, to be sent to the Secretary, 24, Friar-lane, Leicester, on or before January 15. The election will take place on January 23.

LONDON LOCK HOSPITAL, MALE HOSPITAL, AND OUT-PATIENT DEPARTMENT, 91, DEAN-STREET, SOHO, W.—House-Surgeon. Salary £50 per annum, with board and residence. Applications, with testimonials, to be sent in on or before January 23.

ROYAL EDINBURGH ASYLUM.—Junior Assistant-Physician. Apply to Dr. Clouston.

SEAMEN'S HOSPITAL (LATE DREADNOUGHT), GREENWICH, S.E.—Resident House-Surgeon. Salary £50 per annum, with board, furnished rooms, and attendance. Candidates must be registered members of the Royal College of Surgeons of England. The successful candidate will be elected for one year, and at the expiration of that time will be eligible for re-election. Applications, together with copies of recent testimonials as to professional qualifications and moral character, to be sent to W. T. Evans, Secretary, on or before January 19.

ST. GEORGE'S-IN-THE-EAST PARISH.—Assistant Medical Officer. (*For particulars see Advertisement.*)

UNIVERSITY COLLEGE, LONDON.—The Jodrell Professorship of Physiology will be vacant at the close of the session. An endowment (which is at present of the value of £264 per annum) is attached. Applications will be received by Talfourd Ely, M.A., Secretary, on or before January 24.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Coventry Union.—Dr. W. Dresser has resigned the First District: salary £63 per annum.

Dunmow Union.—Mr. C. G. Firman has resigned the Hatfield District: area 14,485; population 3811; salary £95 17s. per annum.

Southwell Union.—Mr. C. Calvert has resigned the Southwell District and the Workhouse: area 10,962; population 4097; salary £65 per annum. Salary for the Workhouse £50 per annum.

APPOINTMENTS.

St. Thomas Union.—George C. S. Perkins, M.B. and C.M. Edin., M.R.C.S. Eng., L.R.C.P. Lond., L.S.A., to the Exmouth District.

Scarborough Union.—Annesley C. C. de Renzy, L.K.&Q.C.P. Ire., L.R.C.S. Ire., to the Workhouse.

Tewkesbury Union.—Frederick A. Healop, L.R.C.P. Edin., L.R.C.S. Edin., to the Overbury District.

ROYAL INSTITUTION.—Professor W. C. Williamson will begin a course of five lectures on "The Primæval Ancestors of Existing Vegetation, and their Bearing on the Doctrine of Evolution," on Tuesday next, January 16. Professor Dewar will begin a course of nine lectures on "The Spectroscope and its Applications," on Thursday, January 18. Mr. R. Bosworth Smith, at the Friday evening meeting on January 19, will give a discourse on "The Early Life of Lord Lawrence in India;" and will begin a course of four lectures on "Episodes in the Life of Lord Lawrence" on Saturday, January 20.

APPOINTMENTS FOR THE WEEK.

January 13. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

15. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. (Dr. Fowler, "On a Case of Intestinal Obstruction treated by Abdominal Section; with Remarks on the Operation." Dr. Wiltshire, "On Abdominal Pulsation."

16. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. W. C. Williamson, "On Primæval Ancestors of Existing Vegetation."

PATHOLOGICAL SOCIETY, 8½ p.m. Mr. Berridge—Epithelioma of the Bladder. Dr. Sharkey—1. Syphilitic Disease of the Cerebral Arteries; 2. Syphilitic Capsulitis of the Liver. Mr. Kesteven—Spina Bifida in a Child. Mr. Clutton—Keloid after Lupus Scraping (living specimen). Dr. Mahomed—1. Clot from Pulmonary Artery; 2. Cancer of Undescended Testis. Dr. Norman Moore—1. Deep Ulceration of Cranium; 2. Rheumatoid Arthritis. Dr. Samuel West—1. Tubercle Bacilli; 2. Aneurism of Arch of Aorta. Mr. Sutton—Rickets in a Lizard. Mr. Godlee—Unilateral Anophthalmos (living specimen).

17. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

18. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Dewar, "On the Spectroscope and its Applications."

HARVEIAN SOCIETY, 8½ p.m. Annual Meeting for Election of Officers President's Address and *Conversazione.*

19. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

ROYAL INSTITUTION (Council Meeting, 8 p.m.), 9 p.m. Mr. R. Bosworth Smith, "On the Early Life of Lord Lawrence in India."

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VITAL STATISTICS OF LONDON.

Week ending Saturday, January 6, 1883.

BIRTHS.

Births of Boys, 1533; Girls, 1506; Total, 3044.
Corrected weekly average in the 10 years 1873-82, 2985·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	838	725	1556
Weekly average of the ten years 1873-82, corrected to increased population ...	926·4	935·6	1862·0
Deaths of people aged 80 and upwards ...	...	...	64

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	1	3	4	2	...	5	...	2
North ...	905947	1	20	12	7	5	...	6	2	2
Central ...	282289	...	8	1	2	5	...	1	...	...
East	692738	...	6	15	2	2	...	3	1	4
South	1265927	4	15	6	6	17	1	6	...	7
Total	3816483	5	50	37	21	31	1	21	3	15

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·859 in.
Mean temperature	46·2°
Highest point of thermometer	55·0°
Lowest point of thermometer	36·1°
Mean dew-point temperature	42·1°
General direction of wind	Variable.
Wholeamount of rain in the week	0·42 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Jan. 6, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Jan. 6.	Deaths Registered during the week ending Jan. 6.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	3044	1556	20·5	55·0	36·1	46·2	7·89	0·42	1·07
Brighton	111262	69	45	21·1	52·0	35·7	46·0	7·78	0·68	1·73
Portsmouth ...	131478	114	49	19·4	...	...	...	...	...	...
Norwich	89612	77	33	19·2	...	...	...	...	...	...
Plymouth	74977	41	31	21·6	55·0	36·7	4·81	8·85	1·09	2·77
Bristol	212779	156	76	18·6	54·4	35·0	45·4	7·44	1·49	3·78
Wolverhampton ...	77557	73	36	24·2	53·6	32·2	42·3	5·73	1·27	3·23
Birmingham ...	414846	346	158	19·9	...	...	...	...	...	...
Leicester	129483	110	51	20·5	54·0	34·0	43·4	6·33	0·80	2·03
Nottingham ...	199349	164	72	18·8	...	...	...	...	...	...
Derby	85574	64	31	18·9	...	...	...	...	...	...
Birkenhead ...	88700	53	27	15·9	...	...	...	...	...	...
Liverpool	566753	423	336	30·9	...	...	...	...	...	...
Bolton	107862	59	40	19·4	52·4	32·1	42·0	5·56	1·86	4·72
Manchester ...	339252	236	177	27·2	...	...	...	...	...	...
Salford	180465	124	75	20·5	...	...	...	...	...	...
Oldham	119071	85	58	25·4	...	...	...	...	...	...
Blackburn	108460	94	62	29·8	...	...	...	...	...	...
Preston	98564	86	43	22·8	...	...	...	...	...	...
Huddersfield ...	84701	60	37	22·8	...	...	...	...	...	...
Halifax	75591	34	22	15·2	...	...	...	...	...	...
Bradford	204807	122	65	16·6	54·1	36·6	43·0	6·11	0·73	1·85
Leeds	321611	250	157	25·5	55·0	37·0	43·3	6·28	0·72	1·83
Sheffield	295497	238	126	22·2	54·0	33·0	43·2	6·22	1·00	2·54
Hull	176296	152	90	26·6	52·0	29·0	40·5	4·72	0·68	1·73
Sunderland ...	121117	109	61	28·3	55·0	37·0	45·5	7·50	0·42	1·07
Newcastle	149464	109	55	19·2	...	...	...	...	...	...
Cardiff	90033	69	29	16·8	...	...	...	...	...	...
For 28 towns ...	8620975	6561	3598	21·8	55·0	29·0	44·1	6·73	0·93	2·38
Edinburgh	235946	135	106	23·4	52·6	32·2	40·3	4·61	0·60	1·52
Glasgow	515589	408	312	31·6	52·0	32·0	40·8	4·89	1·60	4·06
Dublin	349685	231	214	31·9	55·4	31·1	43·6	6·45	0·30	0·76

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·86 in. The lowest reading was 29·43 in. on Tuesday evening, and the highest 30·28 in. by the end of the week.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Corrigendum.—In Dr. James F. Goodhart's lecture on "Empyema in Children," published last week, the *first line* of col. 1, page 2, should be read at the top of col. 2, page 1.

L.R.C.P. Edin.—Touching the physicians' symbol, Dr. Paris states that the physician of the present day continues to prefix to his prescriptions the letter "℞," which is generally supposed to mean *recipe*, but which is, in truth, a relic of the astrological symbol of Jupiter, formerly used as a species of superstitious invocation. Another origin has, however, been given. At the close of the sixteenth century Dr. Dee was, according to his own account, and we verily believe his own conviction, on terms of intimacy with most of the angels. His brother physician, Dr. Napier, got almost all his medical prescriptions from the angel Raphael; and Elias Ashmole had a manuscript volume of the receipts, filling about a quire and a half of paper. Now, it has been thought that the prefixed characters which Ashmole interprets to mean *Responsum Raphaelis*, remarkably resemble that cabalistic-looking "℞" which is to this day prefixed to medical prescriptions, but is commonly interpreted *recipe*.

Dr. Delaney.—You will obtain much of the desired information in the annual obituary of Churchill's "Medical Directory." Sir Dominic Corrigan, Bart., died at his residence, Merrion-square, Dublin, on February 1, 1880, aged seventy-seven.

Children's Clogs and the Local Government Board.—The Macclesfield Guardians have been considerably perturbed over a letter from the Local Government Board, refusing to sanction the grant of clogs to children of able-bodied men in employment, on the ground that such a grant is practically relief in aid of wages. It appears that the clogs have been supplied under some constraint from the School Board, the children requiring clogs to enable them to be admitted to school, and the parents being otherwise liable to legal proceedings for neglect of education. Several guardians declared their intention to vote for clogs, notwithstanding this veto of the Local Government Board, and one told the Clerk "to write and tell them so, and to use his name." Ultimately the Clerk was directed to inform the central authority why the clogs had been supplied.

Thomas Parr.—They were both Physicians to St. Bartholomew's Hospital, and, like Lawrence, were more than four-score years old when they died—Dr. Clement Hue in 1861, aged eighty-two; and Dr. Peter Mere Latham in 1875, aged eighty-seven.

Infanticide at Highgate.—Dr. Danford Thomas, at an inquest on the body of a child found in a field at Highgate New Town, and whose death had, according to the medical evidence, resulted from suffocation by violence soon after its birth, said he always advised juries to return the strongest verdicts that they could in these cases, because if persons thought that juries were lightly at this kind of crime it would greatly increase. He had a large number of such cases brought under his notice. A verdict of wilful murder against some person or persons at present unknown was returned.

Medical Books, 1882.—The number of new books and new editions on medicine, surgery, etc., published during the past year was—of the former 119, and the latter 58.

Urban and Rural Sanitary Improvements.—Extensive additions, including nurses' apartments and chapel, are being made to the Royal Berkshire Hospital, London-road, Reading.——A Local Government Board inspector has held an inquiry at Wimbledon into an application from the Wimbledon Urban Sanitary Authority for power to obtain ground at Willow Mead for an enlargement of the sewage-disposal works, and for other improvements, involving an estimated expenditure of £10,500. The application was strongly opposed.——The Helston Rural Sanitary Authority has adopted plans for the drainage and supply of water to the village of Portleven at an estimated cost of £8400.——The scheme for the proposed summer and winter gardens for West Brighton is being energetically proceeded with, and is receiving very influential support from several gentlemen who take a public interest in the welfare of the township of Hove. The site of the proposed gardens adjoins the Wick House, and will include that of the St. Ann's Well and Wild Garden, a most eligible spot for the purposes proposed.——It is proposed by the Salford Town Council to erect public baths for Pendleton.——The *Citizen* states that the Corporation of London has spent upwards of £10,000 in aiding the Royal Commission on the Pollution of the Thames.—The Fulham Board of Guardians have been authorised by the Local Government Board to borrow a sum of £45,000 for the erection of an infirmary in connexion with the workhouse.——According to the *City Press*, the total sum expended by the Corporation of London on the provision of sites, erection and enlargement of markets for the metropolis, has been, since 1849, £2,943,778.

M. H., St. George's.—You will find clinical lectures on the subjects by Mr. Cæsar H. Hawkins, in the *Medical Times and Gazette*, vol. xxix., 1864.

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Obstetrician.—The last Chairman of the Board of Examiners in Midwifery of the College of Surgeons was Mr. Prescott Hewett, in 1875. From that date until the present the Board has ceased to exist. There are in the Calendar of the College 976 Licentiates in Midwifery.

Vital Statistics, France.—The complete returns of the last census show that the female sex exceeds the male by 92,254—thus, males 18,656,518, females 18,748,772. Of the males 10,110,601 are unmarried and 1,025,781 widowers: while of the females 9,280,832 are unmarried and 1,964,557 widows. The total number of inhabitants is 37,405,290.

The Rivers' Pollution Act, Scotland.—A deputation of woollen manufacturers in the Tweed district has waited upon Lord Rosebery at his chambers in Edinburgh in reference to the Rivers' Pollution Act. It was stated that, as the statute enacted it should not interfere with any existing law or custom that made the Act a dead letter, because a proprietor could rest upon his rights at common law, the deputation sought that they might be put under a statute which would protect them in the whole matter of pollution. They were bound to return water to the river undiminished in quantity and unimpaired in quality, and that was impossible. His lordship, in reply, said the question was a burning one in the South of Scotland, and the views they had laid before him should have his careful attention, and they should be submitted to the Board, which could deal with them.

Mr. H. Thomas, Liverpool.—The late Mr. George Critchett was elected a member of the Council of the College of Surgeons in 1871, with Mr. T. Spencer Wells, now President of the College.

"*Splitting the Difference.*"—The Improvement Commissioners of Milton, near Sittingbourne, have just decided a long-standing dispute, arising out of a claim for compensation by the "Trustees of Tagg's Property," for the sewer passing through their ground. The trustees claimed £81, and the Commissioners offered £55. In preference to going to arbitration it has been agreed to "split the difference," and pay £70, which the trustees have accepted.

Homœopathy, Russia.—The Medical Council of St. Petersburg have arrived at the decision, which the *Official Messenger* publishes, condemning the homœopathic remedy for diphtheria, which has lately been tried there in the hospitals of the Red Cross Society, as misleading and dangerous.

Preserved Meats.—The *Grocer* says—"It is satisfactory to record that there is no diminution in the popularity of this article with the British public. The tinned meat goods trade generally is one of steady and uninterrupted growth. The enterprise in colonial and foreign dead meat, kept fresh by the refrigerating process, has also progressed as favourably as could be desired, considering the obstacles that have had to be overcome, and it only requires time to develope the improvements, as suggested by experience, to make the entire scheme for supplying our immense population with cheap and wholesome animal food a complete success."

A Counterbuff.—We lately noticed in these columns the action of the Walsall Association in condemning female labour in the chain trade. We have now to draw attention to the resolutions passed at a meeting subsequently held of male and female workers in the trade. Resolutions were adopted, disapproving of the condemnation of female labour in the chain trade by the Association, and of the appointment of a deputation to wait upon the Home Secretary. It was also resolved to invite Mr. Sheridan, the member for the borough of Dudley, to visit and inspect the district in order to ascertain "if matters are in such a disgraceful state as has been represented."

"*A Lady Help.*"—A woman named Fraser, stated to be respectably connected in Belfast, has been sentenced to four months' hard labour for a robbery committed at the Brighton Convalescent Home, where she had been engaged after staying there as a convalescent.

The Birmingham and Midland Association of Medical Officers of Health.—The eighth annual meeting was held in Birmingham last week. Dr. Strange, of Worcester, who was elected President for the ensuing year, delivered an address on "Personal Hygiene: How it may be Inculcated by Medical Officers of Health." A resolution was adopted, approving of the general principle of Mr. Hastings' Bill for the better notification of infectious disease.

The Declining Consumption of Alcohol.—With regard to the home consumption of wines, spirits, and beer last year, the records show that the consumption of imported wine was nearly 8 per cent. less last year than the preceding year, and 9 per cent. less than in 1880; in imported spirits the decline was at the rate of 1½ per cent. on 1881; in home-made spirits, for which the returns are only made up for nine months, the decrease was 1 per cent. Allowing for increase of population, the rate of decrease in the home consumption of spirituous liquors is very marked. At the same time there has been a remarkable growth in the consumption of tea. So far, last year compared with the preceding, the growth has been at the rate of 3 per cent.; in cocoa it was 8 per cent. If the police reports of the prevalence of drinking habits at holiday time may be taken as reliable, there appears good reason to assume that the recent Christmas festivities have passed over, on the whole, with much less drunkenness than usual. The offences, for the most part, brought before the magistrates were of a trifling character, and it is satisfactory to find that the number of female inebriates has greatly diminished.

Philanthropy.—The forty-ninth coffee-house establishment has just been opened in Liverpool.

Gratuitous Medical Services.—Lord Coleridge assisted last week at a meeting held at Ottery St. Mary, in support of a movement to raise £5000 to endow a hospital which has been built for the district by Mrs. Gilbert Elliot, and will be maintained by her during her life time, but which will have to be supported by the public at her death. In the course of some observations on behalf of the object of the meeting, his lordship paid a high tribute to the generosity of the medical profession for the ready help they always gave gratuitously to the institutions raised by the generosity of persons residing in various parts of the country. Sums amounting to £600 were promised during the meeting.

The Lunatic Asylum at Exminster.—The change in the dietary of the lunatics, consequent upon the abolition of the consumption of beer, and which has been approved by the Court of Quarter Sessions, consists of a more liberal diet generally, including butter for breakfast, and tea and coffee, or cocoa, instead of gruel issued with some of the other meals. The experiment has been tried, and only two patients expressed themselves strongly against it, and these were old drunkards.

Surrey Coroners.—The Surrey magistrates have assigned to Mr. Carter and Mr. Hull, the present county coroners, respectively, the districts of Newington and Kingston, and the following salaries have been fixed for the three new coroners to be appointed, namely, Camberwell £350, Croydon £360, and Guildford £270 per annum.

Edinburgh University.—According to the returns now made up, 3340 students matriculated in this University last year, being an increase of 103 on the preceding year. Of these 1730 were medical students.

The Present System of Teaching Children.—Dr. Farquharson, M.P., speaking at the Scottish Educational Congress in Aberdeen, strongly condemned the effect of the present system of teaching upon the health of children, and urged the appointment of medical inspectors of schools, whose duty it would be to watch over the health of the pupils. The professors and leading educationalists approved and supported this view.

Coroners' Inquiries into the Cause of Fires.—At the last meeting of the Metropolitan Board of Works, a letter from the Home Office was read, transmitting a copy of a communication from Mr. Payne, the coroner, and a draft Bill to enable coroners to hold inquiries as to the cause of fires where no death has taken place, and requesting the Board's opinion upon the subject. Referred to the Works Committee.

The Heads of Celebrities.—According to a writer in the recent number of the *Journal of Science*, the theory which Dr. Gilbert, physician to Queen Elizabeth, was the first to suggest, is not borne out by facts. The popular notion has been that men of great intellectual powers have large and massive heads. An examination of busts, pictures, medallions, intaglios, &c, of the world's famous celebrities almost tends the other way. In the earlier paintings, it is true, men are distinguished by their large heads, but this is attributed to the painters, who agreed with the general opinion, and misled to flatter their sitters. Instances are cited of great intellectual power of men with small heads. Contrary to the popular notion, there may be great men without big heads; in other words, a Geneva watch is capable of keeping as good time as an eight-day clock.

The Academy of Medicine, Paris.—For the year 1883 the Academy offers seventeen prizes, the total amount of money being over 60,000 francs. The largest prize is one of 25,000 francs (£1000), which will be given to anyone who, in the judgment of the Academy, has found a remedy against diphtheria.

COMMUNICATIONS have been received from—

Mr. D'Oyly Carte, London; Dr. A. Ernest Sansom, London; Mr. Eassie, London; The Registrar of the Apothecaries' Hall, London; The Registrar-General for Scotland, Edinburgh; Dr. R. H. Semple, London; Dr. Morell Mackenzie, London; Mr. J. Chatto, London; The Honorary Secretary of the Medical Society of London; The Honorary Secretary of the Pathological Society of London; Mr. L. G. Zceman, Amsterdam; Mr. M. D. Makuna, London; Accountant-General of the Navy, London; Mr. Malcolm Morris, London; Mr. Charles E. Paterson, Edinburgh; The Secretary of the Royal Institution, London; Mr. A. W. Bell, New York; Dr. Ward Cousins, Portsmouth; Mr. J. Knowsley Thornton, London; Messrs. Doulton and Co., Lambeth; The Secretary of the Liverpool Medical Institution, Liverpool; Dr. Cullingworth, Manchester.

BOOKS, ETC., RECEIVED—

Braithwaite's Retrospect of Medicine, vol. lxxxvi.—Notes from Sick Rooms, by Mrs. Leslie Stephen—Ueber die Wundbehandlung mit Naphtalin, von Dr. Carl Bonning.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Deutsche Medicinal-Zeitung—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—L'Impartialité Médicale—North of England Advertiser, January 6—American Journal of Neurology and Psychiatry—Medical News—Richmond and Twickenham Times, January 6—Analyst—Students' Journal and Hospital Gazette—Sanitarian—Revista de Medicina—Midland Medical Miscellany—Practitioner.

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ORIGINAL LECTURES.

THE LETTSOMIAN LECTURES
ON THE
TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

By A. ERNEST SANSOM, M.D. Lond., F.R.C.P.,
Physician to the London Hospital; Senior Physician to the North-Eastern Hospital for Children, etc.

LECTURE I.—ENDOCARDITIS.—JANUARY 8.

(*Concluded from page 33.*)

BUT there are other diseases besides rheumatism in the child with which Endocarditis stands in close relation. These are chiefly Scarlatina and Measles. In relation with Scarlatina, Endocarditis may occur either with or without the intervention of articular symptoms. Post-scarlatinal rheumatism is well known, and bears a close similarity to ordinary rheumatic fever; associated Endocarditis is therefore rendered probable. But I have shown from recorded cases that such Endocarditis may become manifest after Scarlatina, not only without the intervention of articular phenomena, but long after the period of fever has passed, and during a time when there is no elevation of the temperature of the body, no pyrexia whatever.(a)

Again, there is evident proof that Endocarditis can arise in close relation with *Measles*. I have recorded a case in which both Pericarditis and Endocarditis occurred a fortnight after the commencement of convalescence from Measles. At this time a perilous attack of Chorea developed. There was here no obvious manifestation of Rheumatism, nor hereditary tendency thereto. It appears to me that the influence of Measles in predisposing to Endocarditis has been much under-rated. And, *à fortiori*, the frequent sequence of these diseases, as observed in children, becomes an agency—and that, as I think very probable, not only to the production of the endocardial disease, but to acute rheumatism itself. To take examples—

1. Scarlet fever, measles, and subacute rheumatism in one year; mitral regurgitation.

2. Scarlet fever at age of two; second attack at eight, followed by measles and rheumatoid pains; mitral regurgitation.

3. Measles at age of two, scarlet fever at three; mitral regurgitation and aortic obstruction.

In nine other cases in which measles was noted in the previous history of cases manifesting endocardial murmurs, acute and sub-acute rheumatism were manifested in four.

After measles, just as after scarlatina, Endocarditis, or Pericarditis, or both combined, may develope, with no signs of pyrexia.

Excluding all these probable causes, however, there yet remains a very considerable minority of cases of Endocarditis in children in whom no traceable disease has led up to the valve-deterioration. The condition is only betrayed by various morbid conditions, the results or concomitants of the valvular disease. I have noted twenty-seven of such cases. They have been marked by (*a*) disorders of the nervous system—hemiplegia, hemianæsthesia, epilepsy, chorea; (*b*) disorders of nutrition—wasting, anæmia, etc.; (*c*) disorders of respiration or circulation—cough, dyspnœa, or the usual phenomena of progressive cardiac failure.

Sufficient is this evidence to prove, I think, that in the child Endocarditis can arise and progress without special symptoms, without pyrexia, without the disturbing influence of any acute disease. It may be asked, however, whether the form of endocarditis in such cases differs in any way from that which we know as the rheumatic form. The answer is given by the post-mortem evidence. There is no obvious difference from the essential features of rheumatic endocarditis, such as we find in the undoubtedly rheumatic subjects.

Such is the evidence—the important evidence, as I estimate it—to be obtained as to the rise and progress of Endocarditis from the clinical observation of the cases occurring in children. It becomes us, however, to revert to the general subject, to the disease as it is seen in adults, and to inquire whether there are any other diseases with which we find Endocarditis associated. In many acute fevers, typhoid for example, it is so rare that I consider it most probable that some other factor must have been in existence in the cases in which it has been observed. In *diphtheria* it has been said to be frequent. M. Labadie Lagrave has described it as occurring in fifty cases out of a hundred. In this country, however, observers have, so far as I am able to ascertain, noticed no such association. Certainly I have not myself, and I cannot refrain from concluding that special features (might it have been a relation with Scarlatina?) marked the epidemic, the cases of which M. Labadie Lagrave has so carefully recorded.(b) I cannot help thinking that the term *diphtheritic* as applied to *ulcerative* or *necrosing* Endocarditis has been productive of confusion.

An association between Septicæmia and Endocarditis has been noted, and also, as my own experience has confirmed, with puerperal conditions. M. Lancereaux recorded five cases in which it was thus observed. "In all those cases," he says, "the valvular affection manifests itself with characters of striking similarity; localisation to one portion only of the diseased orifice, exuberant vegetation, termination by necrosis, and ultimate phenomena of infection."(c) In fact, this is a variety of ulcerative Endocarditis which we shall hereafter consider.

And now let us approach the question of the *pathogenesis* of Endocarditis. Excluding the ulcerative form, which we can more conveniently discuss subsequently, and the form which is secondary to arterial degeneration (because I think it will scarcely be denied that the endocarditis is here due to the involvement of adjacent endocardium in the subinflammatory changes which are an essential feature in the aortic disease), there remains the large class which includes the exudative and the sclerous forms that I have described. Those are, I consider, from their clinical and pathological characters, to be grouped together as the *rheumatic form* of Endocarditis—the sclerous being the chronic form of the exudative.

Now, I think that our clinical experience has taught us that such Endocarditis may arise in an extremely insidious manner, that it may give no evidence of its rise and progress by signs nor symptoms, nor even by rise of temperature. It may probably be in existence at the very earliest period of an attack of rheumatic fever, and even with great probability precede it unnoticed (for such may be the significance of the muffled or prolonged first sound heard at the earliest period of such disease). Moreover, it may progress after the attack of rheumatic fever, causing gradual induration or retraction of the valve in a patient who may have been discharged from treatment as free from cardiac complication. Such is the disease—insidious in onset, course, and character—the causes of which we have to consider.

However occult its origin and course, we must allow that the inflammation of the endocardium is an integral part of the rheumatic process, that it is produced by the same agency which in many cases, though not in all, produces inflammation of the fibrous textures of the joints. Such morbid agent is, without doubt, distributed by the blood. The question occurs, Is it introduced from without or developed within? The view of its extrinsic nature has been forcibly argued lately, especially by Dr. Maclagan.(d) The hypothesis is that the *materies morbi* which produces it is a form of malaria, and, as such, is of the nature of a living, probably a fungoid, organism. Against such a view is, I think, the point which I have brought forward as so strongly

(a) "Lectures on Diseases of the Heart in Childhood," *Medical Times and Gazette*, October 25, 1879, page 472.

(b) "Des Complications Cardiaques du Croup et de la Diphthérie." Paris, 1873. *Cf.* Morell Mackenzie, "Diphtheria," page 54. London: J. and A. Churchill. 1879.

(c) "Anatomie Pathologique," page 537. Paris: Victor Masson et fils. 1871.

(d) "Rheumatism: its Nature, its Pathology, its Successful Treatment." London: Pickering and Co. 1881.

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borne out by observation—that Endocarditis is not a pyrexial disease. Our knowledge of the action of low organised forms upon the living body tells that they give rise to fever. It is, to my mind, highly improbable that proliferating germs introduced into the blood should cause an inflammation of the endocardium, and yet fail to increase the general temperature of the blood. Moreover, the hypothesis fails to explain, in my opinion, many of the phenomena which are explained by the older view that the origin of the *materies morbi* is from within.

Let us consider, therefore, the second proposition, viz., that the Endocarditis as well as the other phenomena of rheumatism are due to a *perverted retrograde metamorphosis*. The evidence seems to me to point to this theory as the true one. First we have hereditary proclivity. This, I consider, obtains, not only as regards rheumatism in general, but Endocarditis in particular. Secondly, proximate causes; those which I consider proven are sudden exposure to cold, the influence of certain acute specific diseases. What characterises those acute specific diseases, scarlatina and measles? An implication of the skin in a morbid process in both, of skin and kidneys in one. All such causes have one character in common—production of an impediment to elimination. In a large number of instances I agree, of course, that proximate causes are not in evidence. In the next place, the proved conditions of the disease. An extremely acid sweat is excreted; lactic acid has been demonstrated therein; but it is not proven that lactic is the *only* acid thus excreted. Certainly there must be some other agent to communicate the peculiar odour which the perspiration manifests. Again, the urine is abnormally acid. And the saliva, which is normally alkaline, is, in rheumatic conditions, decidedly acid. Furthermore, the blood is abnormal in that it contains an undue proportion of an excrementitious product, viz., fibrin; it is highly coagulable. What is not proven, howveer, is that the blood is *acid*; on the contrary, in rheumatism the blood-serum is alkaline.(e) At this step of the inquiry, experimental evidence comes to aid us. Dr. B. W. Richardson, to test the old theory of Prout, that lactic acid is the pathogenetic agent, injected a solution of lactic acid into the peritoneal cavities of animals, and found afterwards undoubted evidence of the production of recent Endocarditis in the valves of the *right side* of the heart. These observations have been confirmed by Rauch, but the conclusion that the lactic acid is the *vera causa* of the inflammation has been contested by Reyher on the ground that Endocarditis is common in dogs as an idiopathic disease. I think we may readily dismiss such an objection, from the fact that Dr. Richardson's observations give convincing proof of a *recent* inflammation as from an irritant cause, and they have been confirmed by evidence, which, though clinical, is also experimental. Dr. Balthazar Foster has shown that in one case, after injection of lactic acid in the human subject, phenomena in all respects corresponding with those of acute articular rheumatism were produced; "they came on when the acid was taken, and ceased when it was discontinued."(f)

This evidence, I take it, valuable as it is, is illustrative and analogical rather than direct and dogmatic. For me, at least, it shows that lactic acid can be *an agent* in the production alike of rheumatism and of endocarditis; but it does not prove that it is the *only* agent. We have no proof that the free acid exists in the blood in the disease, but yet it seems to me that we have full and sufficient proof that the normal retrograde metamorphosis is greatly altered; that the blood is changed; that in the course of metabolism many products are formed, with the result that lactic and other acids are excreted in abundance. Sufficient, this, I think, for our present purpose. Is it not probable that the pathogenetic agents are many—I mean, that there are numerous products between fibrin on the one hand, and the excreted morbid acid on the other, capable of giving the irritating impulse?

One step further in this inquiry. The *rôle* of the nervous system in this connexion may be a very important one, and we may ask whether there may not be a portion of the central nervous system specially concerned in the control of the chemical processes of metabolism, just as there is probably a centre which regulates the temperature of the body. Dr. P. W. Latham has advanced the theory that there is such a centre—that such a centre may be disturbed by external cold or by the accumulation of lactic acid in the blood. So he considers that the phenomena of rheumatism may be induced by an intra-spinal change, just as the arthropathies are induced in locomotor ataxy. And if the disturbance of such centre involve also the neighbourhood of origin of the vagus, cardiac, pulmonary, or pleuritic complications may be developed.(g)

I must now approach another part of my subject, and inquire concerning the efficacy of extant methods of treatment in regard to Rheumatic Endocarditis. It has been claimed of almost all methods of treatment of Rheumatism that have been advocated that they have been instrumental in controlling or preventing the cardiac complications of the disease. The individual experience of observers has been cited again and again to point the efficacy of this or that remedy or method in mitigating the chief danger of rheumatic fever. Yet proof of such vaunted efficacy has soon been found to be unsatisfactory, and it may be confidently asserted that no antidotal treatment is yet known—that we have, for instance, no drug which can influence Endocarditis as quinine influences ague, or as mercury and iodide of potassium influence syphilis. The discussion, so ably sustained in this Society during the last session, which has been fully reported, has put the claims of various forms of treatment of rheumatic fever to a numerical test.

The results of treatment by rest and mint-water, by alkalies, by blistering, and by administration of salicin and its compounds, were compared, and it is fair to assume that if any agent other than these had been efficient in the treatment of Rheumatic Fever or of Endocarditis, evidence would have made this apparent. The result of the discussion, which it is unnecessary to epitomise,(h) was to show a strong concurrence of testimony to the effect that the administration of salicin or the salicylates decidedly reduced the suffering and the fever of rheumatism, but in no marked degree influenced the development of endocarditis and other cardiac complications. *Primâ facie* this seems to be a strange conclusion, for one might imagine that an agent that subdued in such marked degree the pain and fever which must contribute to disturb the heart, even if it had no decided effect upon the rheumatic process within the heart, would, with great probability, influence for good the inflammatory process in pericardium as well as endocardium. The conclusion is forced home, however, alike by individual experience—for we find that pericarditis and endocarditis are shown by physical signs to arise and progress in patients who are fully under the salicin treatment—and by statistical inquiry from large numbers of cases treated by the salicin compounds compared with those treated in the pre-salicylic era, such as has been carefully followed out by Dr. Gilbart Smith.(i) Dr. Maclagan, to whom the profession and the public are indebted for the introduction of agents which have, at any rate, been proved to contribute to the comfort of suffering patients, himself allows that the hopes that they would ward off cardiac complications have not been realised.(k) He considers the reasons for such failure to be —(1) that endocarditis has often begun in an attack of rheumatism before the sufferings of the patient have been so pronounced as to call for treatment; (2) the inflamed endocardium can never, from the incessant motion of the heart, be placed in the conditions of rest which are necessary for cure. I endorse both these propositions, and will add to them.

To put the matter clinically or practically. We observe, let us assume, a patient in a first attack of rheumatic fever. He presents (A) a murmur indicating an endocardial complication. I think I must have convinced you that such endocarditis may have arisen not during the attack from which he is at present suffering, but from the disease acquired insidiously at some time previously. It is obvious that any remedy would fail to influence the cardiac complication in such a class of cases. Or, (B) a modification of sounds or

(e) *Cf.* Charcot, "Lectures on Senile Diseases," Sydenham Society's translation, page 162.

(f) *British Medical Journal*, December 23, 1871, page 722; and "Clinical Medicine," page 152 (London: Churchill, 1874).

(g) "Some Points in the Pathology and Treatment of Acute Rheumatism and Diabetes," *Lancet*, January 8, 1881, and *British Medical Journal*, January 14, 1882.

(h) *Vide Lancet* of December 17, 24, and 31, 1881, January 7 and 28, 1882.

(i) *Lancet*, January 28, 1882, page 135.

(k) "Rheumatism," page 266. Pickering.

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actual systolic murmur developing at the apex makes us suspect the present rise and progress of endocardial inflammation. But such may have had its commencement long before the advent of the other symptoms, for no sign will betray the gradual swelling of a valve. A swollen valve is not necessarily incompetent. On the other hand, a veritable systolic murmur at the apex is no conclusive proof of endocarditis, for it may be due to adynamia of cardiac muscle. Here, then, is a double source of fallacy in the statistics of the cardiac complications of rheumatism. Or, (C) the patient manifesting no evidence of valvular impairment is at the termination of his attack of rheumatic fever discharged as free from cardiac trouble. Sir W. Gull and Dr. Sutton have said that "if the patients pass the first few days of the rheumatic fever without the heart becoming involved, then they do not contract heart disease during the later part of the rheumatic attack." Is such a conclusion justified ?(l) I think not. A valve may be inflamed and give no evidence of incompetence; the patient may be discharged and show no signs of cardiac trouble, but a slow process of shrinking or sclerosis may be going on, and when the patient next presents himself there may be undoubted evidence of endocardial mischief. This is, I consider, by no means of infrequent occurrence, and is one reason why a second attack of rheumatic fever is attended with such notable numerical evidence of an increased ratio of cardiac complications.

For such reasons as these I think it impossible, the sources of error being so numerous, that we can get from statistical inquiry satisfactory evidence as to the efficacy of different plans of treatment in warding off endocardial disease, and I dissent from those who hold that a remedy which is efficacious in the treatment of acute rheumatism ought to show, on numerical inquiry, a favourable influence on the correlated heart disease. I consider the treatment by salicin and the salicylates, even though no good results are manifest as regards cardiac complications, to be the most favourable to the patient of all forms of treatment hitherto known.

In such case it may be legitimately asked whether I adopt an altogether pessimist view of the treatment of Endocarditis. Can nothing be done? My answer is—Much, but it must be in the direction of *preventive treatment*.

My own experience is strongly towards the conclusion that Endocarditis is more prevalent, as well as more extensive and severe, among the poor than among the well-to-do. This question is one that might with advantage be put to the numerical test; we greatly want the evidence of the family practitioner to compare with that afforded by our hospital statistics. The predisposing causes to the advent of Endocarditis, which, as I have shown, can arise without the intervention of obviously rheumatic phenomena, are most probably—(1) exposure to vicissitudes of temperature; (2) an irregular and improper dietary. These are the impulses to a perverted nutrition, resulting in the retention within the blood of those excrementitious products which we may call "the rheumatic poison." Attention to the clothing and proper feeding of infants and children constitutes, in my mind, therefore, the treatment of first importance as regards Endocarditis. There is no need nowadays to insist on the value of preventive treatment as regards the zymotic diseases. This is well recognised. Is it not quite as important as regards the subtle disease we are considering? I would, whilst recognising the difficulties of such proceeding, strongly recommend the periodic medical examination of children, even though they present no obvious signs of disease.

Of no less importance is the treatment in regard to the zymotic diseases which are correlated with Endocarditis, viz., Scarlatina and Measles. The subject of an attack of Scarlatina should be watched with great care for long periods after convalescence. Moreover, the slightest sign of throat-ailment, especially with children, should be looked upon with suspicion. I have no doubt whatever that in a large number of instances ulcerative tonsillitis of zymotic type occurs in children unnoticed and unknown, and that in many such a renal complication is instituted which is also neglected. The rise of Endocarditis in such a case is, as I have said, not during the period of fever. I do not recognise the influence of morbid germs in *directly* occasioning the inflammatory change in the valves; but subsequently, such may be developed even after long periods. The teaching I would enforce, therefore, is that the subject of Scarlatina or of the allied forms of throat-affection should be watched, protected, dieted, and treated for periods much longer than is now usual. And as regards Measles, there is, unfortunately, a widely spread tendency to regard this as a very slight ailment that requires little or no treatment. Experience teaches, however, that it is not only the immediate precursor of broncho-pneumonia frequently, and heart disease occasionally, but that it effects a deleterious change upon the powers of nutrition, which lasts, as in the case of Scarlatina, for long periods. The subsequent treatment, therefore, of the subjects of Measles should, in my opinion, be much more protracted than it is at present.

Such is an outline of what I consider the common-sense treatment of the first causes of Endocarditis. During its rise and progress in an attack of rheumatism, I prefer the treatment by salicin or the salicylates in sufficient doses (usually gr. xx. 4tis horis till subsidence of the pain and pyrexia, and afterwards the same dose thrice or twice a day). From the evidence of Dr. Isambard Owen there is a good case in favour of combining with this the administration of full doses of alkalies.(m) Vesication by application of liq. vesicatorius in the left axilla I think also of service.

It now only remains for me to allude to the clinical significance of *ulcerative endocarditis* with regard to indications for treatment. It happens sometimes that this affection arises and runs its course with little or no evidence that the endocardium is affected. Such cases often present a strong resemblance to typhoid fever. Hence treatment is of no avail—the disease is uniformly fatal. By far the most frequently the disease is engrafted, as it were, on chronic disease of the valves. It appears to me that such cases can be divided into two classes—the infective and the non-infective. In the infective cases there are extraordinary disturbances of temperature, multiple emboli, septicæmic signs, or even abscesses. It is in such that micrococci are discovered. I believe them to be associated with some subtle zymotic influence, or a virus, as in the puerperal cases. It is not that the micrococci induce the endocarditis, but they complicate the already existent endocarditis by bringing about necrosis of the diseased tissue. In other cases, though nearly all are characterised by embolism, the proof of infection and, as I think, the probabilities thereof are wanting. In a case lately under my care in the London Hospital there was no marked pyrexia whatever, the temperature never exceeding 101° Fahr., and for the most part keeping close to the normal. I consider it most probable that in some such cases the ulceration is induced by mechanical causes. Drs. Wilks and Moxon have pointed out that a great mass of vegetation may cause ulceration of the heart-wall by direct pressure or by a fibrinous clot swinging in the blood-current coming sharply into contact with the muscle, and so by friction start an ulcer.(n) In like manner, I think it very probable that a weighty vegetation or mass of vegetations upon a valve may, by agitation in the blood-current, so disturb the nutrition of the endocardium which constitutes its base as to start the process of necrosis.

The treatment of Ulcerative Endocarditis when once established is hopeless, but the lessons taught by a study of the cases are, I consider—1. That more than ordinary care should be exercised to keep the subjects of valvular disease of the heart from possible sources of infection; 2. That any threatening of endocarditis should be treated by the most perfect physiological rest attainable; 3. That nutrition should be sustained to the highest degree practicable.

(l) *Medico-Chirurgical Transactions*, vol. liii., page 80.

(m) *Lancet*, January 28, 1882.

(n) "Pathological Anatomy," second edition, page 120.

INFLUENCE OF ARSENIC ON DIABETES.—Dr. Longeville, in his thesis on this subject, states that in his experiments, performed in Prof. Quinquaud's laboratory, he found that arsenic was a great obstacle to the formation of sugar, as shown by administering it to dogs prior to puncturing the fourth ventricle. Clinical results, as far as observed in two diabetic patients upon whom the experiment was tried, corroborated this conclusion, for a few days' dosing with Fowler's solution, progressively increased from ten to thirty drops per diem, diminished the quantity of sugar by more than one-half. The quantity of the urine passed while under the influence of the arsenic was diminished in like proportion.—*Jour. de Thérapeutique*, December 10.

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ORIGINAL COMMUNICATIONS.

A CASE OF LITHOTOMY,

IN WHICH NO URINE PASSED THROUGH THE WOUND AFTER OPERATION; WITH PRACTICAL CLINICAL REMARKS.

By FRANCIS MASON, F.R.C.S. Eng.,
Surgeon to, and Lecturer on Practical Surgery at, St. Thomas's Hospital.

THE patient was a boy, aged four years, who, for so short a life, had undergone unusual vicissitudes. He was first admitted into St. Thomas's Hospital, about June last, for a fracture of the right femur, and when under treatment got an attack of scarlet fever, for which he was removed to the infectious block. He made a good recovery from the fever, and during his convalescence it was noticed for the first time that he had symptoms of stone in the bladder, and these symptoms were verified by the introduction of the sound. He was therefore transferred to the general ward, and operated on by the lateral method on October 11, 1882. The stone, of uric acid, was about the size of a small Barcelona nut. The patient made an excellent and rapid recovery.

Remarks.—In remarking on this case, Mr. Mason said: Gentlemen,—There are a few practical points in connexion with this and other cases of calculus in the bladder and their treatment by lithotomy to which I may briefly refer. First: With regard to the diagnosis. As I have already stated, this little boy had been in the hospital for some time without our suspicions being aroused as to his having a stone in his bladder, but I think that, under the circumstances of the complications to which I alluded, the oversight was reasonably pardonable. But there are other cases—those, I mean, in which the symptoms throughout are distinctly directed to the bladder—in which an excuse is not so justifiable. Many of you know of such cases; and I may mention two instances in adults which were admitted under my care, and in which the symptoms had existed previously to admission for nine months and four years respectively. In the former case the diagnosis was effected by one of our old pupils, Mr. Mavor, of Waltham Cross, who kindly sent the patient to me. The other was admitted for what he termed "weakness of his bladder," but the House-Surgeon, suspecting a stone, passed a sound and at once detected the nature of the case. It is, however, only right you should remember that there are certain cases of stone in the bladder in which the symptoms are very slight indeed—almost *nil*. I recollect one such example, in which a very able hospital surgeon declined to sound the patient because, as the surgeon thought, there were no symptoms. It so happened in this case that about a month or so afterwards another surgeon removed several stones—a perfect quarry—by lithotrity. So much, then, for diagnosis.

Secondly: With respect to sounding for stone. There is no advantage that I see in having the bladder full of urine or of water by injection; on the contrary, that condition, as a rule, increases the difficulty in detecting the stone, and especially so if it happen to be a small one. You often hear me say that searching for a stone in the bladder is not unlike trying to find a small piece of soap in one of the ordinary long baths well filled with water for the purpose of ablution. You know quite well that the soap eludes the touch, and in order to catch it the best plan is to diminish the quantity of water in the bath. Now, precisely the same result happens in the case of a stone in the bladder. If you partially empty the bladder by drawing off the urine with a catheter, ten to one the stone will be at once detected.

Thirdly: With regard to the operation. You may have noticed that I used an ordinary, but rather long, scalpel, and not the usual lithotomy-knife. I believe that with such a knife the staff is more readily struck with the first plunge of the knife, because it possesses a longer cutting edge. Yet, I do not attach much importance to this matter, and I mention it merely to show that the usual and accepted lithotomy-knife is not indispensable.

Fourthly: As to extracting the stone. There are various ways of effecting this. A very simple plan—rather illustrating the old proverb that "fingers were made before forks"—is this:—After having introduced the forefinger of the left hand into the bladder, and having got it well over and behind the stone, then introduce the forefinger of the right hand into the rectum, and making the points of the two fingers meet, squeeze out the stone, so to speak, through the wound. I endeavoured to effect the removal of the stone in this case in this manner, but failed because the bladder had been allowed, by some misunderstanding, to become greatly distended with urine, and thus I had some little difficulty in fixing the stone with my finger. Another method is to employ the scoop—of course, aided by the finger,—and so get the stone away. I am, myself, very partial to this plan, but I would advise you if you use a scoop to have an instrument with the scoop at one end only, and fastened to a strong, largish handle, which can be grasped in such a way as not to twist round in the palm of the hand. Again, the forceps are serviceable in other cases, especially those in which the perineum is deep. In using the forceps, it should be borne in mind to hold them properly, that is, with the thumb inserted into the ring handle, and all the fingers in the open handle. When introducing the forceps into the bladder, place the blades over the forefinger of the left hand, keeping them one above the other and parallel with the finger. It will be readily perceived that, if the finger be gently depressed, a gush of urine comes, and with it the stone is very likely carried to the orifice, and if at this moment the blades are made to enter the bladder, the stone will in all probability be grasped. Having now secured the stone, do not hurry in bringing it out; and especially do not hurry when the stone is at the neck of the bladder, for it is particularly at that spot that the blades of the forceps are apt to slip off the stone. Moreover, make the traction chiefly in the downward direction, slightly swaying the hand and forceps from side to side, and from above downwards.

And now a word or two respecting the case that has elicited these remarks. The wound I made near the bladder was rather smaller than I intended, so that my finger completely closed it, so as to prevent the exit of urine; but, by dilating it with my finger, the urine came away freely, and the stone having been fixed as already described, was removed with the aid of the scoop. The after-history of the case is briefly told, for the boy had no bad symptoms whatever. One curious circumstance, however, happened, and that is, that not a single drop of urine passed by the wound in the perineum. I think this is a rare circumstance after lithotomy, and perhaps not altogether desirable, especially in adults, as the condition might lead to urinary infiltration in the pelvis, with its disastrous consequences. I suppose that the rapid union of the wound was due partly to the child's age, and partly to the fact that a small incision was made near the bladder.

THE ÉCOLE POLYTECHNIQUE.—M. Cheysson, writing in the *Journal de la Société de Statistique* for December, observes that the recent statement of the Director of the École, that it is the most democratic school in the world, is literally true. The payment, to begin with, is only 1000 fr. per annum, which, of course, implies a great deficiency which has to be supplied by the State, the cost of the living of each pupil amounting to nearly 900 fr. Even at this low charge the doors of the École would be closed to many scholars destitute of means, but this is met by the large number of scholarships (*bourses*) attached to it, some of these being official, and many the gifts of persons whose names, however, are not allowed to transpire. The number of these scholarships has so increased that from thirty-three in 1850 they have risen to 101 in 1881. In 1850 the pupils were ninety in number, so that the scholarships constituted one-third (36·66), and in 1881 they had increased to 221, the scholarships constituting nearly one-half (45·70 per cent.). The École may therefore be now considered as accessible to youths of merit in the humblest ranks of society. As a guarantee against abuse the names of all the scholarship-owners are published in the *Journal Officiel*. Every year a hundred young men who have entered the École under these conditions are sent to occupy important posts in the Army, the Administration, or in industrial pursuits. "Thus has the democratic character of this great institution become more and more marked, and it has proved to be the most successful of the creations of the National Convention, and one of the forces and glories of our country. Instead of being the appanage of any privileged class, the École Polytechnique has admirably solved the problem of a fusion of classes without distinction of origin, on the basis of work, merit, science, and patriotism."

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ON TRANSFUSION.

By J. F. LE PAGE, L.R.C.P.E., etc.

Convinced that, in the conservative practice of the future, transfusion will hold a place of no little importance, and will be more and more extensively resorted to, and seeing that the means at present at our disposal for the performance of the operation are not altogether satisfactory, I have devised an apparatus in which there is an endeavour to combine absolute safety with great facility in use. Of the transfusors which have been at our service, that of Dr. Aveling is perhaps, all things considered, the most serviceable. But it has the disadvantage of requiring very complex manipulation. To put it concisely, each of them requires, in its use, that the surgeon be aided by skilled assistance, whilst, at the same time, there is no safeguard against the injection of a minute quantity of air, however careful and adept the operator may be—an accident which, in all probability, would prove fatal to the patient. The accompanying illustration shows how these disadvantages are overcome. One hand alone is needed to operate the transfusor, and the other hand is at liberty to attend to the efferent tube, whilst the attention of the surgeon may be divided between the recipient and the donor of the blood. If any portion of air should at first remain adherent, and, of course, unseen, on the inner surfaces of the tubes, and during the passage of the blood be carried along with its stream, the course is with certainty arrested by the glass air-receiver, into which it must rise.

As to the *modus operandi*. The case contains the apparatus, knife, forceps, and a small bottle—which latter is intended to hold a compound powder composed, say, as follows:—Carbonate of soda ten grains, phosphate of soda two grains, chloride of sodium thirty grains. One-fourth of the powder should be dissolved in about two ounces and a half of water at a temperature of 100° Fahr.; a few drops of alcohol may be added, and the vessel containing the solution placed in another vessel partly filled with water at a temperature somewhat higher. Then, having attached the receiving and delivering tubes, the two extremities of the instrument must be placed in the inner vessel with the air-chamber downwards; now press the lever, press the elastic ball, release the lever, release the elastic ball, and after repeating that process once or twice, turn both taps. The apparatus is now ready for use. Raise the patient's arm to the horizontal position, so as to facilitate the transmission of the blood to the heart, and, having inserted both tubes, one into the supplying vein, and the other into the receiving vein—the right median basilic is perhaps the best—turn the taps, and, in the same order, press the lever, press the ball, release the lever, release the ball, and so on. Precisely one quarter of an ounce passes out each time. It is expedient, having commenced the transmission of blood, to complete the process without arrest, lest coagula should form.

The apparatus is made by Messrs. Arnold and Sons, and their name is quite sufficient guarantee for excellence of workmanship. I must, however, say that my thanks are due to them for so faithfully, so well, and with such precision and care, elaborating from my drawings an instrument of some elegance.

A word as to the cases in which transfusion is indicated. My special intention is that of supplying the obstetrician with a safe and facile means of transfusing blood after post-partum hæmorrhage, where the diastaltic system is practically dead, and the heart is dynamically incapable of action in consequence of the absence of fluid to act upon. But transfusion is indicated in many other cases than that of uterine hæmorrhage, leading to this condition; for instance, when, after excessive hæmorrhage, the vital fluid is not reproduced, and the nutritive process is so impaired that the persistent anæmia would be the forerunner of phthisis or other grave disease did we not supply red corpuscles to carry oxygen, with which to re-establish those functions which are essential factors in the formation of hæmoglobulin. And it is certainly indicated in some cases of hæmorrhage from the bursting of an aneurism, or where a main artery has been divided. With its aid, life may at least be prolonged when the stomach and rectum refuse to retain nutriment, in the exhaustion from marasmic disease.

It may also be resorted to in the asphyxia of new-born infants, the injection being made through the umbilical vein, a little blood having been previously allowed to escape from the umbilical artery. For this purpose a small quantity of blood taken from the placenta and defibrinated will answer very well. In chronic as well as in acute anæmia we may transfuse, for where the whole blood is altered by toxic or pathologic causes it is manifestly advantageous to improve its quality by the admixture of healthy blood. It may also appear indicated after hæmorrhages from the stomach and intestines, after hæmoptysis, and after some surgical operations. I would go so far as to suggest, on physiological grounds, its occasional indication in hæmorrhagic fever. In the young who are robust, absorption and nutrition will soon replace the normal quantity of fluid, although for a time it will be inferior in quality to that which was lost, containing less than the due proportion of oxygen carriers, the red corpuscles. In those previously suffering from anæmia, and in the aged, whose blood is very slowly reproduced, it appears to me that the operation may, with very great promise, be repeated even more than once, at intervals of a few days. In cases of poisoning, when the nature of the poison is unknown, or when an antidote would not be effective, or in pyohæmia, might not occasionally a life be saved by alternate depletions and injections of pure blood? In epilepsy it has been used with marked success. And as in puerperal eclampsia we may presume on an excess of carbonic acid, and a deficiency of oxygen, may we not here also find the operation of no little service? I should remark that Professor Schäfer has most conclusively shown that the action on the blood corpuscles of beef peptones, milk, and some other fluids, when used in lieu of blood, is most injurious.

It has been urged in disparagement of the operation that during transfusion very painful symptoms are experienced, followed, after its performance, by alarming prostration and hæmorrhagic fever. This we may admit as in some cases substantially correct. But what is the cause of all this, but that the vital powers are so stimulated to reassert themselves, that the heart and arteries, certainly with intermissions, are making very violent efforts to drive along the small quantity of blood which the system contains!

The inference is clear that this most valuable operation has not been so frequently performed as it should have been, and that many invaluable lives have been lost which might have been saved by the immediate restoration of the failing powers of the heart and nervous system, which it most strikingly effects.

Durham.

City of Dublin Hospital.—At the usual monthly meeting of the directors, held on Friday, January 12, Dr. William Josiah Smyly, F.R.C.S.I., was elected Gynæcologist to the Hospital in the room of Dr. Arthur Vernon Macan, lately appointed Master of the Rotunda Lying-in Hospital, Dublin.

Properties of Quassine.—Dr. Delmis (*Gaz. des Hop.*, January 11) states that this, the active principle of *Quassia amara*, is a valuable preparation, being a bitter tonic, with aperient and stomachic properties. It should not be administered during the acute period of diseases, but in general debility, atonic dyspepsia, anorexia, chlorosis, spasmodic vomiting, prolonged and difficult convalescence (especially after fevers), it is of great utility. Frémint's pills each contain two centigrammes of pure amorphous quassine, and one or two of these should be given before each of the principal meals, the maximum quantity taken being six pills per diem. It is preferable to take one on getting up, two at mid-day, two at six o'clock, and one at bedtime.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF CANCER OF THE PANCREAS, WITH SECONDARY NODULES IN OTHER INTERNAL ORGANS AND IN THE SKIN—DEATH—AUTOPSY.

(Under the care of Dr. CHARLTON BASTIAN, F.R.S.)

[Reported by Mr. W. D. HALLIBURTON, B.Sc., late House-Physician.]

MARY G. was admitted to University College Hospital on June 5, 1882; she was sixty-four years of age, and a nurse by occupation. She was married, and had had twelve children. There was no family history of cancer. Since Christmas, 1881, patient had had pain in the right hypochondriac and epigastric region almost constantly, relieved often by pressure; not worse after taking food, liquid or solid. There was no history of hæmatemesis; nor had sickness occurred until the day before her admission into the hospital. Accompanying the pain there was gradually increasing weakness and notable wasting; the skin also had taken on a slight yellowish tinge.

Condition on Admission.—Skin yellowish, pale, and with great loss of elasticity. Heart and lungs healthy; arteries rigid and tortuous. There was constant aching pain in the epigastric region; no abdominal tumour was made out. The pulsation of the aorta could be plainly felt through the abdominal wall. There was marked wasting and considerable prostration.

During the five months she was in the hospital the pain continued in the same situation. The weakness and emaciation increased, until on November 18, 1882, the patient died of pure asthenia. With the exception of an occasional trace of bile in the urine, that secretion remained natural. Towards the last there was also some œdema of both lower limbs. Frequent aperients or enemata were needed to counteract constipation, throughout her stay in the hospital. Nothing distinctive was noted in regard to the character of the stools. During the last few days of life the temperature was subnormal; otherwise, with the exception of an occasional rise to 99·2° or 99·4° Fahr. in the earlier part of the time she was in the hospital, her temperature remained normal.

About a month after admission there was much pulsation in the epigastric region, and a distinct expansile swelling was felt there, so that at that time a diagnosis of aneurism of the abdominal aorta was made; this seemed to be confirmed by the presence of a loud systolic bruit. This lasted for some weeks, and then gradually got less; and in two months more both pulsation and bruit had disappeared.

For three months previous to death a hard rounded new growth was felt under the skin over the spine of the right scapula. It was freely movable, and not attached to subcutaneous tissues; it was about the size of a large filbert. During the last few weeks of life, similar but smaller new growths appeared in other parts; one on the back of the left forearm, several on the skin of the abdomen, two or three in the situation of the right axillary glands, and the last to appear was one under the chin. Breasts healthy. Vomiting was a very occasional and never a marked symptom. Hæmatemesis never occurred.

Treatment.—Morphia injected subcutaneously to relieve pain; at times, hot fomentations over the abdomen for the same purpose; tonics and, in the later stages, stimulants (brandy and ammonia). Aperients were also occasionally necessary. Her diet was light and nutritious.

Autopsy, thirty-nine hours after Death.—Heart: Very small; muscular substance pale; valves healthy. On the posterior surface of the left ventricle there was a small white nodule under the pericardium, about half an inch in diameter, growing inwards for a fifth of an inch into the muscular substance. Aorta: A few patches of degeneration were present, especially about the origin of the intercostal arteries; about the region of the cœliac axis the aorta was in close connexion with, and in great part enveloped by, a new growth, in which the pancreas was involved, but no sort of dilatation of the vessel was here found. Lungs: Hyperæmic at bases; otherwise normal. Stomach: About one-third of the normal size; the lesser curvature, especially near the cardiac orifice, was closely adherent to the new growth which implicated the pancreas. In this situation the walls of the stomach were distinctly infiltrated with new growth over an area one inch and a half long by three-quarters of an inch broad. There was some very slight ulceration of the mucous membrane at one place. On section through the new growth the head and a portion of the body of the pancreas were found to be infiltrated with it; it was hard and semi-cartilaginous in consistence. Intestines: Healthy. Liver: About half the natural size; it contained, both on the surface and in its interior, numerous white nodules of new growth, varying in size from a mustard-seed to that of a small walnut. Around the nodules in some places the liver tissue was very hyperæmic; in the rest of the organ the tissue was pale, and the lobules were well-defined. Spleen: Small and bloodless, containing no new growth. Kidneys: These organs showed, both on the surface and in the interior, numerous whitish nodules of new growth, mostly about the size of a pea. Ovaries: Small and shrivelled. Uterus: Free from all new growth. Skull-cap: Thicker and heavier than natural; under the pericranium in the right parietal region was a small nodule of new growth, half an inch across and a twelfth of an inch in thickness. Brain: Free from all new growth. The subcutaneous growths were white in colour, and presented the same naked-eye characters as those of the liver and kidneys. That from behind the shoulder was very hyperæmic in its interior.

On microscopical examination of the new growths, they were all found to present the same structure—viz., that of scirrhous cancer. The stroma was very dense, and the cells few in most organs. In the stomach the cells were more numerous. In the growth involving the pancreas the connective tissue of the stroma was very dense indeed. In the subcutaneous nodules there were the same general characteristics as seen in those in internal organs, but the spaces were larger, the cells more numerous, and the strands of connective tissue composing the stroma were not so thick, and did not contain so many fibres as in the other nodules. In the growth from behind the shoulder there was much congestion, and small hæmorrhages had occurred in a few places.

Remarks (by Dr. Bastian).—Cancer of the pancreas is a notably obscure disease, and this case formed no exception to the general rule. Continual pain, with paroxysmal exacerbations from time to time, was the dominating symptom, though this was accompanied by slowly progressive wasting and asthenia. The absence of sickness and the absence of hæmatemesis during the first six months of the disease, together with the absence, when the patient came under observation, of any distinct tumour or swelling, threw doubt upon the existence of cancer of the stomach. And when, after she had been in the hospital about a month, it was found that sickness (without blood) had only occurred on a few occasions, and that the pain was not aggravated by food, this doubt became confirmed. Then it was that what appeared to be a slight dilatation of the aorta was detected immediately under the left ribs, with distinctly expansile pulsation and loud systolic bruit; these corresponding closely, as to site, with the place of maximum pain and tenderness. I felt pretty confident at this period that there was a small dilatation of the abdominal aorta, and this view was also entertained by Mr. Christopher Heath, who was good enough, at my request, to examine the patient. As she was then lying almost motionless all day long, and was taking an amount of food not much in excess of that recommended by Tufnell in such cases, nothing else seemed advisable or necessary on the score of the supposed aneurism. About this time my vacation occurred, and on my return to the wards after an interval of about seven weeks, all signs pointing to the possible existence of an aneurism had disappeared. Still the pain persisted, though no tumour or distinct swelling within any part of the abdomen could be detected. The emaciation and asthenia had also distinctly increased. Shortly after this period several nodules of new growth showed themselves beneath the skin.

The *post-mortem* examination throws full light upon the clinical obscurities of the case. The cancer may have originated in a lymphatic gland between the root of the liver and the pancreas, or it may have commenced in this organ itself. At all events, an infiltrating growth was produced,

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extending beyond the confines of the pancreas, and matting adjacent organs and parts together. This growth was firmly adherent to the vertebræ, and in it the aorta and cœliac axis were pretty completely embedded. Still, the growth was not thick enough to be detected in its actual situation, located as it was, in part, beneath the lower margin of the thorax, and overlapped by liver and stomach—that is, it was not detectable by such an amount of pressure as could be borne by, or safely applied to, the patient. This simulation of aortic aneurism has been noted before in other cases of carcinoma of the pancreas, and in this particular case it is easy to see how the simulation may have arisen, and also how it may subsequently have disappeared. When the new growth first began to envelope the aorta near the cœliac axis, it gave the impression of a slight dilatation of the vessel, and led also to the production of a distinct systolic bruit. Subsequently, when the vessel became more thickly embedded in the new growth, the expansile pulsation gradually disappeared, and with it the systolic bruit. The nodules in the liver were much too small to be detected during life, and those in the kidneys produced even no appreciable alteration in the renal secretion. Albumen was absent, and the quantity of urine was not notably increased or diminished. The clinical obscurities of the case were therefore great, even up to the last, though they became less after the appearance of the subcutaneous nodules.

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Medical Times and Gazette.

SATURDAY, JANUARY 20, 1883.

BACTERIA AND PUERPERAL SEPTICÆMIA.

A recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains an account of an experimental investigation carried out at Berlin by Dr. Ferdinand Karewski into the effects of inoculation of puerperal secretions. Similar experiments had been previously made by Scherer in 1843, Rokitansky the younger, and still more recently by Kehrer, then of Giessen, now of Heidelberg. We noticed at the time the researches of the latter, the fullest and best of any. In this country, Braidwood and Vacher have investigated the action of lochia, as part of an inquiry into contagium generally; and their results, so far as they concern puerperal secretions, agree with those of the observers previously mentioned. The chief point in which Karewski thought the experiments of his predecessors so far defective as to make it worth while to repeat them, was that enough care was not taken to prevent the accidental admixture of germs from the atmosphere, or from instruments, etc., with the lochia inoculated. Karewski, in performing his inoculations, used a special and most ingenious instrument devised by himself, with the object of removing the lochia, for the purpose of experiment, from the puerperal woman. We need not describe this instrument in detail; it will be enough to say that the lochia were sucked up into a glass bulb exhausted of air, and that this bulb, and every pipe, joint, and stopcock in the instrument, were most carefully rendered aseptic, so that the disease-producing power of the lochia could not have been imparted to that fluid by any admixture of germs not present in it as it lay in its parent vagina.

The first branch of Karewski's researches was the microscopic examination of the lochia. In this investigation he employed the method of Ehrlich. He found, as might have been expected, the lochia at first showing numerous red blood-corpuscles; and, as each day went by, the number of red corpuscles diminishing, and that of white corpuscles and bodies resulting from the disintegration of blood corpuscles increasing. But the special object of the investigation was to detect the presence of micro-organisms. Vibriones had been observed in the lochia by Mayrhofer, who attributed puerperal fever to them. Hausmann, on the contrary, asserted their innocence on the ground that he detected them in the non-pregnant female. Rokitansky found them present in all the lochia of all puerperal women that he examined, and agreed with Hausmann that there was nothing about these organisms characteristic of the puerperal state. Karewski, too, has invariably found them in the greatest multiplicity of forms and sizes in the healthy as well as in the sick, even in blood taken from the vagina two hours after delivery. But he also found that in all cases the preponderating bacterium was of a spherical shape and of a definite size. He did not find the bacteria varied in number from day to day according to any definite law; nor could he trace any distinct difference between septic and healthy lochia. The bacteria, however, are much more abundant in putrid lochia. The putrid smell of lochia, Dr. Karewski remarks, is no criterion of its virulence in producing disease.

The second division of Karewski's inquiry was the experimental one. His experiments differed from Kehrer's in this, that he employed not only rabbits, but guinea-pigs and dogs, and he did not confine himself to lodging lochia under the skin, but inoculated the cornea, and injected lochia into veins and into the vagina. As an example of his care, we may mention that he made more than two hundred observations to determine more accurately than had previously been done the normal temperature of rabbits.

Like Kehrer, Karewski found that the subcutaneous injection of lochia produced persistent elevation of temperature in the animals experimented on. But he did not find such a regular increase in the severity of the fever produced, with each successive day of the lying-in, as Kehrer described. On the whole, Karewski's experiments clearly showed that the later lochia produced worse symptoms than the earlier; but there was not a constant gradation. Karewski thinks the explanation of this probably lies in the fact that Kehrer filtered the lochia before injecting, which he himself did not. It is possible, he suggests, that the virulent element may be in greatest abundance in the solid particles, which would be detained by the filter; and that the larger pieces would come away on the earlier days. The other phenomena which followed inoculation were that the animals became quiet, lost appetite, and wasted; then in most of them came intestinal catarrh. Around the point of infection there was diffuse infiltration, swelling,

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and suppuration, which increased until the animal perished. The fever following subcutaneous injection did not seem to be secondary to local inflammation, for it came on before such changes were perceptible, and it did not correspond in severity to the magnitude of the local effects. The different animals employed showed different resisting power to the poison employed: rabbits sank from the injection either of normal or of septic lochia; guinea-pigs withstood healthy lochia, but succumbed to that of septic patients; while dogs were comparatively indifferent to either. This fact shows how careful it is necessary to be in the interpretation of experiments on animals. The injection of lochia into veins led to changes in the lungs, ending in caseation, and to inflammation of serous membranes. Lochia from septicæmic patients produced also symptoms of putrid intoxication.

These, then, are the chief facts, previously recorded by others, and confirmed by Karewski, for which this author now sets himself to find an explanation. He asks, What is the agent present in the lochia which produces these morbid processes? He says that the germ theory is at present a kind of battle-ground. On the one hand we have an almost fanatic enthusiasm, which will attribute every disease to germs; and, opposed to this, a nihilism, to which the presence of the germs denotes nothing but that they have found a pasture which will nourish them. Before we can accept the view that any particular organism is the cause of puerperal septicæmia, it must be shown that the parasite is present in all cases of the disease; that it is present in such quantity and distribution that it can explain all the phenomena of it; and that a well-characterised organism shall be shown to belong to the particular disease in question.

We have before mentioned the spherical bacterium which Dr. Karewski found in the lochia. Examining the bodies of animals which had died from inoculation of lochia, he found the same bacterium present in every organ of the body; this bacterium being the only discoverable parasite. He has, therefore, no doubt that the morbid processes caused by inoculating the lochia are due to the action of definite organisms. He propagated these organisms by inoculation into the cornea as well as under the skin of animals.

His hypothesis of the origin of these bacteria is not very far-fetched. He supposes that they are derived from the atmosphere; that they get into the vagina when this canal is opened up during parturition; and he points out that the conditions within the vagina as to warmth and moisture are highly favourable to the life, growth, and propagation of organic forms; and that under such circumstances they may, so to speak, cultivate themselves, and change under cultivation till an exceedingly virulent bacterium is the result. If we admit that such is the case, it explains why some lochia should be more dangerous than others, and why the later lochia should be more noxious than the earlier.

We will quote in substance the final conclusion of Dr. Karewski:—"The production of the lochia supplies the investigator with an infecting agent, of which the steadily increasing noxious effect can be studied as that of no other can be, because this secretion arises always from the same wound-surface, and is not exposed to any influences which can disturb the series of experiments, whereas all other wound-secretions are rendered unfit for experimental purposes by modern methods of treatment. The vagina is a bacteria-cultivating apparatus, which, because it is a natural one, gives the most far-reaching information. The results of cultivation in it have a more convincing force than those attained by any artificial process." Finally, Dr. Karewski expresses an opinion that the subject is worth further investigation, and modestly offers his own researches as a contribution towards the attainment of exact knowledge.

It would be rash at present to attempt to appraise the value of Dr. Karewski's results. It seems to be so easy to find bacteria, or something like them: it is so difficult to be sure that such a body, when found, is really the *fons et origo* of the disease which accompanies it. But it is certain that puerperal fever sometimes arises from contagion, it is almost certain that contagion means the transference of germs, and it is perfectly certain that these germs will never be found unless they are looked for. For these reasons, regarding Dr. Karewski's researches as an attempt to solve a problem which requires solution, we have thought them worthy of notice.

CRIMINAL IMBECILES.

According to Dr. Gover, Medical Inspector of Local Government Prisons, there are at Parkhurst Prison about 140 imbecile, as distinguished from lunatic, convicts. At Woking Prison, in a division apart from lunatics, there are about forty of the same class; and there seem to be more at Dartmoor, and probably at Millbank. Dr. Guy finds that altogether there are in convict prisons 200 imbecile men, and thirty-one imbecile women, undergoing sentences of penal servitude. The following extract from the evidence of Dr. Gover ("Report of Commission on Criminal Lunacy") gives one some idea of what a criminal imbecile really is:—"I was a week or two ago at Woking, inspecting the prison in the ordinary way, and I picked out half a dozen typical imbeciles. I sent for their caption papers, or penal records, as we call them, and this was the result in those six cases:—Thomas Thomas, a draper's assistant, four previous convictions, and one sentence previously of penal servitude; Thomas Hughes, a labourer, three previous convictions, and one previous sentence of penal servitude; Thomas Trayner, a pedlar, two previous sentences of penal servitude, with innumerable previous convictions; John M. Flanagan, three previous convictions, and two previous sentences of penal servitude; Philip Foley, three previous convictions; John Chambers, one previous conviction." Dr. Gover admits that these imbeciles have had more than the average number of convictions, and a return giving the number of weak-minded or imbecile prisoners received into local prisons shows that these must have been exceptionally bad cases. At the same time, though we bear in mind that a correct average might be reached only by making a considerable deduction from the criminal record of this batch of imbecile convicts, the question continues to be quite a natural one—Should 231 imbecile convicts (of which Dr. Gover's cases are striking examples) be allowed, at the close of their sentence, to return with absolute freedom to mingle with, and in all likelihood to injure, the honest and intelligent members of society? That they are, and will be, discharged from prisons direct to ordinary life, is an undoubted fact. "If," says Dr. Gover, "their imbecility is not so marked as to constitute insanity they are set free." With regard to such cases, the reference transmitted to the Departmental Commission on Criminal Lunatics was to all appearance a plain and simple one. It called for inquiry "whether special provisions should be made for the care and custody of imbeciles and lunatics who are habitually criminal." The Commissioners, however, on entering upon this part of their work, found that they had a complicated subject to deal with, and with regard to it they appear to have adopted the advice of the Scotch clergyman, who urged his people never to be cast down by difficulties, but to "look them boldly in the face and —pass on." "It was not foreseen," the Commission reports "that the question would present itself under so many aspects and assume such a breadth and importance, and we therefore have considered it desirable not to wait for further evidence before reporting. . . . If it is thought necessary to examine the subject more fully, we submit that it would be

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expedient to appoint a separate Commission exclusively devoted to this inquiry." The difficulty experienced in answering the question with regard to the custody of imbeciles arose mainly from the fact that it involved a suggestion whether persons should not be deprived of their liberty, on account of something which was neither crime nor insanity—on account of a weakness of mind, not amounting to lunacy, which had either led to, or had been associated with, the committing of crime. By Dr. Guy, and by Dr. Gover and others, the difficulty appears to have been regarded as an easily surmountable one; and Dr. Guy submitted to the Commission a scheme for the detention in State institutions of all imbecile convicts who have completed sentences of penal servitude. His scheme does not embrace the corresponding disposal of imbeciles committed to county and borough prisons, but any plan for the disposal of convicts would—in a modified form, perhaps—have to embrace them also.

It appears that the difficulty which the Commission declined to face had already been half solved. One of the Acts which provide for the discharge and removal of criminal lunatics includes among criminal lunatics, for the purposes of that Act, "any person sentenced or ordered to be kept in penal servitude who may be shown to the satisfaction of the Secretary of State to be unfit from imbecility of mind for penal discipline." Strange to say, this method of dealing with criminal imbeciles has been altogether neglected. It seems to provide the means of treating as imbeciles all criminals whom humanity would wish to see excluded from penal discipline, namely, those whose mental state renders them unfit for it. Apparently it would admit of such imbeciles being, like criminal lunatics, sent at the close of their sentence to county and borough asylums, where a considerable proportion of them might, without the introduction of any new principle into jurisprudence, be permanently detained with benefit to themselves and the public. Dr. Guy, however, takes a much more sweeping view of the case than even this neglected clause of the Act provides for. He proposes to place in a State institution all imbeciles who have committed crimes, entirely irrespective of their fitness or unfitness for penal discipline. He shares with Dr. Gover very extreme ideas about the universal and comprehensive depravity of imbeciles; and those who cannot admit, or at any rate do not recognise, the possibility of such a being as a harmless imbecile, cannot fail to have very pronounced views as to how the whole class ought to be dealt with. When the matter is regarded only from one point of view, it seems evident that cases such as those referred to by Dr. Gover, and other cases in which imbecility is characterised by an utter inability to earn an honest livelihood, a dangerous tendency to the imitation of criminal acts, or a weakness of personality which makes the subject a mere tool for other criminals,—might humanely and with advantage to the public purse be detained in special institutions. But if such imbeciles are amenable to penal discipline, they should be subject to punishment, inasmuch as it is healthy for the weak-minded as well as for the strong-minded to be taught that crime and punishment are almost as certainly connected as antecedent and consequent. Of course such punishment should be, and in fact constantly is, modified to suit particular cases of mental and bodily weakness. Those, again, who can be certified as being unfit, through imbecility of mind, for penal discipline would surely be suitable subjects for such asylums as are already half full of imbeciles.

But there must always be a large number of more or less weak-minded criminals with whom justice must deal practically as if they were of average intellect. Of course it would not be difficult for a theologian or a logician to prove that in every instance crime must be due to unsoundness of mind, and that unsoundness of mind must always lead to crime. Dr. Gover, however, could not be drawn into the expression of any such view. The common sense of the matter seems to be that if a weak-minded man has still mind enough to know the relationship between crime and punishment, he should be punished in such a modified manner as skilled observation of his case may indicate to be proper. If he is so imbecile as to be unfit for penal discipline, there can be little doubt of his being a fit subject for a lunatic asylum. These two extreme classes being provided for, the only part of the deferred difficulty which would remain for settlement would be, whether imbeciles who are considered suitable for penal treatment, and who repeatedly and immediately after their release from convict prisons fall into crime, should not also be permanently detained in some institution. The great difficulty in their case is that the law as it stands at present does not recognise such imbeciles as being at the close of their sentence, either criminals or lunatics. Thus there is no sufficient ground for detaining them. As Dr. Mitchell says in his complete answer to Dr. Guy's memorandum: "He (Dr. Guy) desires to retain a permanent control over those weak-minded convicts who are regarded as fit for penal discipline, and who are subject to that discipline during the currency of their sentences. . . . He proposes that this deprivation of liberty and life-long imprisonment should not follow the judgment of any court, but should be decided on by the authorities of convict prisons." When one thinks only of the strong cases, so numerously quoted by Dr. Gover, of imbeciles who are certain to return either to local or convict prisons immediately after their discharge, a certain amount of favour may be extended to Dr. Guy's proposal. Taking a wider view of the subject, however, most men will be inclined to think, with Dr. Mitchell, that it is not possible to advocate the sequestration, under the jurisdiction either of a lunacy or a prison board, of any class of persons, whether weak-minded or not, who are fit for penal discipline. The adoption of such a principle would be a very serious step. Under whatever system it were worked, the onus of the decision would rest upon medical men, who would thus be placed in the position of scientific magistrates pronouncing perpetual sentences. When we read the returns in which medical officers, chaplains, and governors summarise the mental state of prisoners, and find them giving opinions which not only disagree, but are actually antagonistic to each other, we can see how unsatisfactory the debateable ground between criminality and imbecility would be for the foundation of this most novel and most melancholy kind of an asylum—namely, an asylum for the life-long detention of miserable beings who had not been sufficiently criminal to deserve penal servitude for life, nor sufficiently insane to be suitable for a lunatic asylum. It may be said that the restraint and confinement of these unfortunates would be a good thing for society. But so also would the similar restraint and confinement of drunkards, epileptics, and some other classes, who perhaps do as much towards the deterioration of future generations as is done by doubtful imbeciles. Dr. Guy's principle might, in fact, be applicable to many purposes and many classes of people, but fortunately it is not likely to meet with any large amount of approval; and some less sweeping measure may be found to provide sufficiently for the custody and care of criminal imbeciles.

TRANSFUSION.

THE question of the treatment of cases of excessive loss of blood by means of injections of alkaline solutions of common salt must be held to be well worthy of consideration.

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Schwarz wrote on the subject in 1881, recommending this method of treatment as a safe and rapid means of saving life, and a review of his book will be found in our pages for December 17, 1881; and he has since made a further contribution to the subject (*Berliner Klinische Wochenschrift*, 1882, No. 35); and in the *Deutsche Medizinal-Zeitung*, No. 46, is an abstract of two cases by Kümmell. The advantages that a simple non-coagulable and easily prepared fluid possesses over even defibrinated blood cannot be too highly estimated; and if, as is maintained, the real want of patients suffering from acute anæmia is not so much blood-discs as blood-pressure, the employment of an ordinary salt solution presents an easily prepared agent ready to hand in all emergencies. It is obvious, however, that a trustworthy conclusion as to the value of the proposed remedy can only be arrived at by its practical employment. Schwarz recommends intravenous injection of the fluid as in ordinary blood-transfusion. In both Kümmell's cases the solution was thrown into the radial artery—*i.e.*, the intra-arterial method of Bischoff. In the first example the transfusion was resorted to for hæmorrhage after the operation of nephrectomy; a 6 per cent. solution of chloride of sodium made alkaline by a few drops of caustic soda was injected to the amount of about 160 grammes, at a temperature of about 40° C., and at a pressure of about one metre. The immediate effect was recovery from the collapsed condition, but the patient died the next day in consequence of disease of the other kidney. In the other case, in which the operation was performed on account of acute anæmia due to hæmorrhage from a resected knee, about 500 grammes were introduced, the pressure not being measured. The heart was in a weak state. The general effect was all that could be desired, but a swelling in the hand was noted, which was no doubt due to rupture of capillaries by the force of the injection; this swelling diminished, but gangrene of the hand set in, which necessitated amputation of the forearm. In the part cut off, thrombosis of the ulnar artery was found. The mummification was attributed to the combined action of the high pressure at which the fluid was injected, and the cardiac debility, aided by the anatomical arrangement of the vessels in the hand. The author comes to the conclusion that it is better to open the median basilic vein than to use the intra-arterial method. There seems to be some ground for believing that intravenous injections of solutions of common salt, properly performed, have been occasionally of real life-saving value; or, at least, that enough encouragement has been met with to justify a more extensive trial of this method of treatment.

In the same number of the *Deutsche Med. Zeitung* an abstract of some remarkable observations by Giulio Dozzi is given. Two cases are mentioned in which blood was transfused into the cavity of the peritoneum, one of which ended fatally in twenty-four hours, the other after ten days. Unfortunately, no other particulars are given. This operation has been done twenty-seven times in Italy, four times with fatal ending; and in two cases there was complete restoration to health. The apparent benefit from this proceeding was in most cases not lasting; and the operation had to be repeated at definite intervals, which, as the earlier cases seemed to give rise to no dangerous symptoms, it was thought could be safely done. But the good results in the first cases were not maintained. It would appear from what follows that the intra-peritoneal injection was used to overcome the anæmia of chronic affections, for, looking to the lessening success of this method of treatment, Dozzi asked himself whether the introduction of similar quantities of blood into the intestinal canal might not be productive of less brilliant but more useful results. Four cases were experimented on. The first was a boy aged thirteen years, brought very low by pellagra; a litre and a half of blood was injected eight times in a fortnight, with complete restoration of health. The second instance was of much the same kind, and eleven enemata of blood were given. The third was the case of a woman aged forty years, suffering from splenic leukæmia; here twenty-eight injections were given in two months; the patient greatly improved, and the spleen was reduced in size. The last was also a case of leukæmia, in which thirty introductions of blood were performed, with slow but sure improvement, the spleen lessening in size, and finally the blood returning to its normal state. The blood, injected by an enema apparatus, was taken from sheep or oxen whilst being slaughtered; it was defibrinated, and kept warm, if necessary, in a water-bath, the quantity used varying from one litre and a half to two litres. The patient gradually became able to retain this large quantity. We are warned that too much pressure must not be used, lest the blood should get into the higher parts of the alimentary tract, where it would be rather digested than absorbed. In this country we know practically nothing of the intra-peritoneal method of injection, but we should have thought that the procedure could scarcely be regarded as beneficial, or even as harmless. Enemata of blood may be nutrient, but they cannot be called transfusions in the ordinary sense of the term, and we confess to a doubt whether blood can be simply absorbed, even from the large bowel; further, this method of treatment was practised on cases widely different from those of acute anæmia. If such modes of administering the blood of animals be of therapeutical value, they probably are not so by such direct means as Dozzi seems to suppose. Moreover, because diseases get well whilst a certain treatment is in progress, the success need not depend on that treatment. Lastly, the facts given are not sufficient to prevent some doubt of the accuracy of the diagnosis of splenic leukæmia in the above instances.

THE WEEK.

TOPICS OF THE DAY.

An unfortunate illustration of injudicious vaccination was afforded at an inquest recently held by Dr. Danford Thomas, at the Islington Coroner's Court, on the body of a child a month old, the daughter of Charlotte Williams, a single girl apparently not more than seventeen years of age. The child was born on the 8th of last month in St. Pancras Workhouse, and, a week after it was born, was vaccinated with other infants; it was only an eight-months child. The mother left the workhouse on the 23rd ult., and five days afterwards, finding the arm was swollen from the elbow to the fingers, she took the child to Dr. Chalmers, of Caledonian-road, who attended it until the 8th inst., when it died. Dr. Ballard, who was present to watch the inquiry on behalf of the Local Government Board, asked witness if she herself had not been ill, but this she denied. Dr. Chalmers stated that the deceased appeared to have been ill some days before it was brought to him; it was a small, puny child. It bore two vaccination marks of the circumference of a shilling each, on the left arm; these had got into an inflamed and unhealthy condition. At first he was under the impression that death resulted from the depressing effects of vaccination upon the system, but subsequently, in conjunction with Dr. Pepper, he made a post-mortem examination, and he attributed death rather to suppurative meningitis. Vaccination performed on children so newly born, and in such a weak state as the deceased was, ought to be very judiciously done, due regard being had to the constitutional condition of the child,

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which, in the present case, must have been wholly unsuitable for the operation. In answer to Dr. Ballard, Dr. Chalmers said he believed that the direct cause of death was suppurative meningitis; and, considering the weakly condition of the child, he was induced to think that this was brought about by the absorption of poisonous material from the ulcerated state of the arm. Dr. Pepper gave similar evidence. Pus, he said, covered the brain of the child. The immediate cause of death was inflammation of the membrane of the brain, which, in all probability, was due to the absorption of poisonous matter from the wound in the arm. Certainly it would have been wise to postpone the operation until it could have been performed under more advantageous circumstances. Dr. Dunlop, medical officer of St. Pancras Workhouse, deposed to having vaccinated the child; it was customary, he said, to vaccinate children born in the workhouse about seven days subsequent to their birth, because the parents might leave within a fortnight, or even earlier, and the children thus escape vaccination. The jury ultimately found that death was caused by suppurative meningitis, following ulceration of vaccine vesicles on the arm, and they were of opinion, from the results of the post-mortem examination, that it would have been well to postpone vaccination in the present case.

The Chairman of the Public Health Committee of Edinburgh has just made public a statement concerning the notification of infectious diseases in that city. The experiment, he says, has been carried on in Edinburgh since 1879 with great success, and his last report to the Town Council showed that during the year 1882 no fewer than 7063 intimations had been sent in to the authorities by the medical practitioners of the city, and that not the slightest objection had been raised to the system of notification by any of the numerous medical men or by the ratepayers. Personally, this gentleman testifies to the great assistance the arrangement has afforded the Health Committee and their officials in preventing the spread of infectious diseases; on a former occasion he alluded to outbreaks of small-pox, which the early information, thus obtained, enabled them to stamp out; and last year he had to record that several outbreaks of typhus, which formerly was the great scourge of Edinburgh, were promptly dealt with and localised, so that both mortality and expense were saved to the citizens. The death-rate of Edinburgh for 1882 was 18·54 per 1000, and zymotic diseases contributed 9·90 per cent. of the mortality as compared with 13·20 per cent. in 1881.

In pursuance of a resolution passed at a recent meeting of the Lambeth Vestry, a deputation waited upon the Metropolitan Board of Works, at their last meeting, to present a memorial praying the Board to take the necessary measures for acquiring a portion of the Lambeth Palace Grounds as a place of recreation for the district. It was represented to the Board that this was not the first time the subject had been brought forward by the parish, as a similar application was made to the Government some years ago, after the death of Archbishop Longley, when they were informed that their request had come too late, as a new Archbishop had already been appointed, and nothing could be done. Application had already been made to Mr. Gladstone, but his reply was that he was waiting to see what action was taken in the matter by the Metropolitan Board of Works. The memorial was eventually referred to the Works and Purposes Committee for consideration. In reference to this subject the Committee has already presented a report, recommending that the Vestry of Lambeth be informed that in the event of Government assenting to the land in question being opened as a recreation ground, the Board will be prepared to place it in proper condition before handing it over to the Vestry of Lambeth, to be maintained in perpetuity by them. The report was agreed to, as was a motion that the Works Committee be authorised to confer with the Prime Minister or any other authorities on the subject.

Mr. Justice Hawkins has recently expressed a strong condemnation of the manner in which coroners' inquiries are conducted. At the Central Criminal Court, last week, a woman was indicted upon a coroner's inquisition for killing and slaying a man; on the case being called on, Mr. Poland, who appeared for the prosecution, informed his Lordship that as the grand jury had ignored the bill he should follow the usual practice, and offer no evidence. Mr. Justice Hawkins commented upon the slovenly way in which the coroner's depositions were taken; and remarked that had there been a little more care on the part of the summoning officer, the coroner's jury would never have come to the conclusion they did. This case showed, he observed, how very little reliable the verdicts of coroners' juries were. Their work was done in a very hasty manner, and on the present occasion he quite agreed in the course adopted by the grand jury. The evidence of the additional witnesses examined by the grand jury had given a different complexion to the case than that put upon it by the coroner's jury, and a verdict of "Not guilty" must be returned.

Amongst other business brought forward at the last meeting of the City Commission of Sewers, was a proposition for still further improving that portion of the City devastated by the great fire in Wood-street. The present idea is to widen the last-named thoroughfare by five feet in the process of rebuilding, but a deputation, headed by the Lord Mayor, Mr. Samuel Morley, M.P., and others, waited upon the Commission to suggest that, for sanitary and all other arrangements, the thoroughfare should be widened so as to provide for two seven-feet footways, and not less than three vehicles in the roadway. Eventually the matter was ordered to be referred to the Finance and Improvement Committee to consider and report. The Select Committee on Electric Lighting reported that they had requested the Remembrancer to advise them upon certain points, and he had informed them that a licence would in all probability be granted, making it compulsory to supply electric lighting in a small area, and permissive to supply outside that compulsory area; such permissive powers to be reasonably and fairly exercised at the discretion of the Commission; and it was suggested that the Board of Trade would not interfere except in the event of real and serious neglect or unfairness. This report was ordered to be adopted. Dr. Sedgwick Saunders, the Medical Officer of Health, reported that during three weeks fifty-five deaths had been registered, thirty-five being due to diseases of the respiratory organs, consequent mainly on the recent sudden changes and variations of temperature. Forty-six births had happened in the same time.

The Army Medical and Transport Inquiry Committee have held several meetings at the War Office since we last reported: amongst the officers examined may be mentioned Brigade-Surgeon Veale; Brigade-Surgeon Clarke, of the Royal Military College, Sandhurst, late Staff-Officer Army Hospital Corps in London; and Surgeon-Major R. Anderson, who was in medical charge on board Her Majesty's ship *Malabar*, on her homeward journey from Egypt with invalids, when it was reported that the treatment of the sick on board was not satisfactory. This officer gave an emphatic denial to all the allegations, and said there was not the slightest truth in the reports published on the subject. In addition, we believe, Surgeon-Major Beattie, who was attached to the 72nd Highlanders during the campaign, and Mr. E. M. Crookshank, House-Surgeon of King's

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College Hospital, who was present at Ismailia and Tel-el-Kebir, were also examined.

The health of our soldiers in Egypt is far from satisfactory: the returns of sick for the whole of the forces, dated January 12 last, show that 28 officers out of 382, or 7·3 per cent., and 1675 men out of 12,633, or 13·2 per cent., were then in hospital. The average of the cases among the cavalry is nearly 21, and among the artillery nearly 19 per cent. The sick-list for the first fifteen days of January at Cairo alone shows 518 fresh admissions, and 11 deaths, of which 10 were occasioned by enteric fever. Opinions differ much, the *Times* correspondent says, as to the number of English troops necessary to preserve order in Egypt; but it appears to be universally admitted that the present strength is far above what is absolutely required for that purpose. Throughout the recent disturbances Cairo was represented as the most orderly place in Egypt, yet over 10,000 men are at present stationed there; moreover, this is what is known as the healthy season at Cairo, so that a much larger sick-list will have to be faced if the troops are kept in occupation there after the hot season begins. The present arrangements seem to cause a very grievous waste of health and strength unnecessarily.

Owing to a case of small-pox having been imported into the small village of Tividale, Rowley, upwards of fifty cases have broken out, and already four deaths have taken place. The hospital for infectious diseases is full of patients, and the sanitary authorities have been obliged to provide additional hospital accommodation. The rapid spread of the disease is said to be due to the recklessness of the people and the inclemency of the weather.

EXECUTIVE COMMITTEE—GENERAL MEDICAL COUNCIL.

At a meeting of the Executive Committee of the General Medical Council, held on Friday, the 12th inst., official notification was received of the appointment of Dr. Fergus as Crown Nominee on the General Council for five years from November 30, 1882; and of Dr. Pyle as representative of the University of Durham for the term of five years from December 12, 1882. The names of thirty-one practitioners were ordered to be restored, on payment in each case of the prescribed fine of five shillings, to the Medical Register, from which they had been erased in conformity with the provisions of Section 14 of the Medical Act. The Committee received, and duly acknowledged, for the General Council, a copy of the "Pharmacopœia of the United States of America" (sixth decennial revision), presented, through the Foreign Office, by the Committee of Revision and Publication. From the Privy Council the Executive Committee received a despatch to the Secretary of State for the Colonies from the Governor of Malta, enclosing a scheme for the reorganisation of the Faculty of Medicine in the University of Malta; and requesting that steps might be taken to procure the recognition of the medical degree of the University by the General Medical Council. The Earl of Kimberley had already replied that the General Medical Council have not the power to comply with the request made, or, indeed, to recognise the degrees of any foreign or colonial university as the qualification for registration in the general Medical Register of the United Kingdom; and had further said, "But I am not without hope that the law on the subject may before long be altered, when the claims of the University of Malta will doubtless receive due consideration at the hands of the General Medical Council." The Executive Committee endorsed the reply made by the Colonial Secretary, and forwarded to the University of Malta, without any observations on their scheme, copies of the "Recommendations of the General Council on Education and Examination," as a standard of comparison. The Committee remitted to the Liverpool Medical Defence Association the penalty inflicted on an illegal practitioner at the suit of the Association. A series of elaborate statements, duly audited, of the receipts and expenditure of the General Council, and of the English Branch Council, was laid before the Committee by the Treasurers. The general financial condition appears to be a very flourishing one]: on January 1 of the present year, the English Branch Council, after investing £4000 in Consols, had a balance to the good of nearly £3000; the Scottish Branch, a small balance, after investing £1200; and the Irish Branch, a balance of more than £300, after investing £150. The Branch Registrar for Ireland had written to the Registrar, stating that Dr. G. Hornidge Porter, of Dublin, had requested that the words "*hon. causâ*" should be inscribed after his qualification "Mast. Surg., 1873, University of Dublin." He was very anxious they should appear, having been omitted when the qualification was first registered. But the Committee ruled that "the words '*honoris causâ*' being words not authorised by the Medical Act as an addition to any registrable title," they cannot be inserted in the Medical Register. A scheme for a preliminary examination was submitted by the University of Durham, and it was approved, and "included in the list of preliminary examinations recognised by the Council." Some dental business was transacted.

THE ROYAL COLLEGE OF SURGEONS.

At a quarterly meeting of the Council of the Royal College of Surgeons of England, held on the 11th inst., reports were received from the several annual committees. Mr. Christopher Heath, of University College Hospital, was elected a member of the Court of Examiners, in the vacancy occasioned by the resignation of Mr. Luther Holden, late President of the College. Mr. Holden has resigned also his office as a member of the Board of Examiners in Dental Surgery; and the vacancy thus created was filled up by the appointment of Mr. John Wood, F.R.S., of King's College Hospital.

FRIENDLY SOCIETIES IN FRANCE.

In the annual report on friendly societies for the year 1881 some particulars are given of the working of the Sociétés de Secours Mutuels in France—establishments which correspond to the friendly societies in this country. The Chief Registrar acknowledges his indebtedness for this information to Baron Henri Chadenet, Sous-Directeur, Ministère de l'Intérieur. In France these societies are divided into two classes—"approved" societies, and "authorised" societies; the former number 4790, the latter but 1987. Their total funds amount to nearly four millions sterling, of which sum the "approved" societies hold over three. The increase of funds in the year 1880 amounted to nearly £142,260. The report contributed by Baron Chadenet gives an infinite amount of detail as to rates of contributions, entrance-fees, fines, State subventions, donations, bequests, benefit and management expenditure, the number of sick and number of days' sick-pay, medical fees, cost of drugs, mortality, and other matters; whilst much of it, on the other hand, is absolutely foreign to English friendly society law and practice. It is somewhat remarkable to find that the department of the Seine, which includes the capital, whilst heading, in point of numbers, the list of departments as respects "authorised" societies with 323, stands only fourth (with 231) on the list as respects "approved" societies. This class is headed by the Gironde (which includes Bordeaux) with 266, followed by the Rhône (including Lyons) with 255, and the Bouches du Rhône (including Marseilles) with 248.

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THE PRINCE OF WALES ON GUILDS OF HEALTH.

In connexion with the subject of the "Sanitary Inspection of Houses," which has for some time engaged the attention of the Society of Arts, the following letter from the Prince of Wales was written early last year to the late Sir Henry Cole, and has lately been made public:—"Dear Sir Henry Cole, I have read with much attention your proposal to establish guilds of health throughout the United Kingdom. So wide a question as that of national health, affecting in so high a degree the prosperity and happiness of the country, is one in which I naturally take a deep interest, and I can only repeat, what I feel sure has occurred of late to all thoughful persons, that every effort which tends to direct closer attention on the part of the public to the preservation of health, and to the wide diffusion of a knowledge of simple rules bearing on the subject, is deserving of sincere encouragement. It is satisfactory to note that the support already accorded to the projected guilds of health comes from many of the highest authorities upon sanitary knowledge in this country; and, I am glad to find, as President of the Society of Arts, that the Society, in continuance of a work successfully commenced by it some years ago, is arranging to discuss the means for promoting the formation of these guilds in all parishes, in cities, towns, and villages. The labours of the Legislature to improve the broad conditions of health generally throughout the United Kingdom, and the efforts of local sanitary authorities, should be supplemented by the knowledge and exertions of every individual. I conceive it to be most desirable that everyone should make him or her self acquainted, not only with the elementary rules which science may give us, but also with the work of existing organisations for the preservation of good health; and I do not hesitate to express the opinion that it would be a most humane deed to set in motion measures by which everyone could be encouraged and assisted in obtaining practical information in connexion with this subject. I wish all success, therefore, to the guilds of health, and I shall be glad if you will request the Council of the Society of Arts to keep me informed from time to time of the progress of the movement for promoting their organisation and establishment."

THE HOUNSLOW CASE.

The inquest on the death of the late Dr. Edwardes, of Hounslow, was resumed on Tuesday, when Mrs. Bignell, the person who brought the charge against Dr. Edwardes, gave her evidence; but we cannot say that it gives the impression of being particularly trustworthy. On Thursday a long letter from Dr. Whitmarsh appeared in the daily papers; but as the adjourned inquest is still going on, we forbear comment upon the case. We must, however, protest against the disgraceful scenes that are allowed in the Coroner's Court.

THE COOMBE LYING-IN HOSPITAL, DUBLIN.

On Monday, the 15th inst., the annual meeting of the friends of this old and deserving institution was held. The chair was occupied by the Right Hon. Charles Dawson, M.P., Lord Mayor of Dublin. From the annual report it appeared that the work done by the Hospital during the year had been considerably more than in any previous one, 608 women having been treated in the lying-in department, and 131 in the wards for diseases peculiar to women; while 2020 women were attended at their own homes, 2182 at the dispensary, and 5865 received medical attendance at the general dispensary. The sanitary condition of the house had been very satisfactory, the mortality among the women confined n the Hospital not having exceeded 1·1 per cent. The increased demand on the resources of the Hospital had involved additional expenses; and the grant from the Hospital Sunday Fund was nearly £100 less than that of the previous year, the result being that the charity closed the year with a balance against it of £1154 4s. 10d. The Board had to acknowledge with gratitude the receipt of a munificent donation of £1500 from Mrs. Robert Tighe, in memory of her husband. The Board determined to erect a tablet in the Hospital, commemorating the gift, and to name one of the wards the "Robert Tighe Ward." The Board had during the past year to lament the deaths of the two eminant physicians, Dr. M'Clintock and Sir Edward B. Sinclair, who were the consulting obstetricians to the Hospital.

THE FUNCTIONS OF THE SEMICIRCULAR CANALS.

Dr. P. McBride has communicated to the January number of the *Journal of Anatomy and Physiology* a new theory as to the function of these organs. After premising that the generally accepted view is that they are peripheral organs of a sense which enables us to estimate our position in space, he expresses the opinion that this is probably correct as far as it goes, but that it is inadequate to account for all the facts connected with their physiology. After briefly referring to the minute anatomy of the internal ear, he says:—"The function of equilibration could, it seems to me, be carried on just as well if they (*i.e.*, the semicircular canals) were altogether shut off from the auditory apparatus. We must therefore assume that they have another part to play in the animal economy. It seems probable that this other function is to produce, through the ampullar nerves, reflex rotation of the head and eyes towards a point from which a sound proceeds, and that, further, the afferent impulse may, in the lower animals, co-ordinate and brace the muscles necessary for escaping from a danger of which sound is the first indication." This theory he founds on the following propositions:—1. The semicircular canals are so placed that every sonorous vibration capable of being perceived as sound must necessarily cause movement of the endolymph which they contain, and of the perilymph which surrounds them. 2. If their function be purely that of equilibration, the semicircular canals occupy an unnecessarily exposed position. 3. The results of experiments show that stimulation, whether mechanical, chemical, or thermal, applied to the semicircular canals, produces rotation towards the side stimulated. The various arguments he brings forward in support of these propositions are all directed to show that the nerve-endings in the semicircular canals are stimulated, more or less, every time a sound is perceived, and that the effects of stimulation are rotation of the head, eyes, and body towards the stimulated side, with increased activity of the muscles of that side. Dr. McBride arrives at the conclusion that one function of the ampullar nerves is to convey directly to motor centres stimuli, by the reflex action of which on the muscular system the animal is placed in a better position (1) for appreciating a repetition of the sound; (2) for seeing the place in which a sound originates; (3) for escaping from the cause of alarm.

THE "NEW YORK MEDICAL JOURNAL."

This well-known and excellent journal, which has been so long carried on as a monthly publication, commences its thirty-seventh volume in the weekly form. Besides it there are the following weeklies issued in the United States:—The *New York Medical Record*, the *Philadelphia Medical News*, the *Philadelphia Medical and Surgical Reporter*, the *Boston Medical and Surgical Journal*, and the *Louisville Medical News*. To these is soon to be added the weekly *Journal of the American Medical Association*.

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THE MUSEUM OF THE COLLEGE OF SURGEONS.

On Saturday last, with no pomp, and little circumstance beyond the importance and impressiveness of the locality and the wealth of its contents, the Museum of the Royal College of Surgeons was again opened to the Fellows and Members of the College, and of the sister College of Physicians; and since then it has been open to the students of medicine of all ages, from the youth just entered at a medical school, to the grey-haired practitioner. It had been closed for rather more than four months, which may have seemed to eager students and disappointed would-be visitors a very long period. But everyone who considers what an immense, arduous, and responsible work it must have been to remove, examine, and replace in due order and place, and with improvements in arrangement, every one of the thousands of specimens contained in the Museum, will feel that the highest credit is due to the Curator and to everyone concerned, both for the thorough and admirable way in which the work of cleaning, re-painting, and re-arrangement have been done, and for the comparatively short time in which all the work has been effected.

DUBLIN HOSPITAL SUNDAY FUND, 1882.

The Honorary Secretaries have published a full list of the subscriptions, collections, and donations to this Fund for 1882. The total amount collected was £4174 6s. 10d., of which about £4000 will be available for distribution amongst the participating institutions. Considering the state of Ireland, and the relative scarcity of money resulting therefrom, this is a very satisfactory outcome of the collection, and reflects the greatest credit on the Honorary Secretaries, Lord Brabazon, Dr. Grimshaw, and Messrs. Robert O'Brien Furlong and Thomas Pim.

THE PARIS WEEKLY RETURN.

The number of deaths for the first week of 1883, terminating January 4, was 1099, and among these there were from typhoid fever 71, small-pox 11, measles 9, scarlatina 1, pertussis 7, diphtheria and croup 40, dysentery 1, erysipelas 10, and puerperal infections 6. There were also 41 deaths from acute and tubercular meningitis, 165 from phthisis, 51 from acute bronchitis, 79 from pneumonia, 75 from infantile athrepsia (30 of the infants having been wholly or partially suckled), and 32 violent deaths. The number of deaths registered this week is lower than the mean of the last four weeks. A slight increase of deaths (71 in place of 66) from typhoid fever has taken place this week, and 155 cases were admitted during the week, in place of 145 of the preceding week. The births for the week amounted to 1155. [The particulars regarding the sexes have not come to hand this week.]

THE EXCRETION OF LIME SALTS IN PHTHISIS.

This subject, which possesses clinical as well as pathological interest, inasmuch as it bears upon treatment, has once more been investigated by Professor Senator, of Berlin (*Centralblatt f. die med. Wiss.*, 1883, page 11). It is no new observation that the amount of lime in the urine is increased in phthisis, but Schetelig had recently questioned the correctness of the conclusion. Both relatively and absolutely, however, the calcareous salts appear to increase in the urine during tuberculosis. There are very wide limits within which the amount of this excretion varies in health, viz., from ·081 to ·77 grammes in twenty-four hours. Still, this maximum, even, is exceeded in phthisis; and the continuous observation of an individual over a lengthened period also demonstrates a positive increase. The source of the lime salts cannot be found in the food, neither can it be referred to the wasting of the lungs, for these organs actually show an increase, and not a diminution, of their calcareous constituents when tuberculous. Senator suggests that the bones are to be credited with the excessive discharge, inasmuch as they manifestly waste in phthisis: the yellow marrow becoming red, and the lime salts being very probably set free in the process.

THE CLINICAL SOCIETY.

The annual meeting of this Society was held on January 12, when the election of officers formed part of the business of the evening. The ballot closed at half-past nine, at which time the scrutineers (Drs. De Havilland Hall and Charlewood Turner) examined the box, and reported that the list of officers for the ensuing year was precisely the same as that recommended by the Council, and which may be found on page 16 of our issue of January 6. The report of the Council was read by Mr. Warrington Haward, and showed a continuance of successful work, with an increase in number of the members of the Society, which now reached 264 resident and 81 non-resident members. The report also expressed the deep regret of the Society at the loss of its first President, Sir Thomas Watson; and the names of Professor Pirrie (an honorary member), Dr. Peacock, and Mr. Clover were also mentioned. The finances of the Society were shown by the report of the Treasurer (Mr. Christopher Heath) to be in a very satisfactory state. Dr. Duffin proposed, and Dr. Meadows seconded, the resolution that the annual report be accepted, adopted, and printed in the next volume of the Society's *Transactions*. Mr. Gant, in an appropriate and graceful manner, proposed, and Mr. Howard Marsh seconded, in well-chosen terms, a vote of thanks to the retiring President, who thanked the Society for the cordial and kind consideration which had always been accorded him. The usual votes of thanks to the other retiring officers were given, and the meeting adjourned.

BRITISH MEDICAL BENEVOLENT FUND.

The annual general meeting of subscribers to the British Medical Benevolent Fund was held on January 11 at 63, Montague-square, the house of the Hon. Secretary (Mr. Malcolm Morris); Dr. G. C. Jonson taking the chair, in the unavoidable absence of the President, Sir George Burrows. The financial statement was submitted, and the annual report of the Committee was read by the Treasurer (Dr. Broadbent), from which it appeared that the donations during the year 1882 had amounted to £803, the subscriptions to £1152; the former being less than in 1881, the latter more than in any previous year. The action of the Metropolitan Counties Branch of the British Medical Association, in permitting contributions to the Fund to be collected at the same time with the subscriptions to the Association, had brought a considerable number of new subscribers. The disbursements during the year had been, in grants, the unprecedented amount of £2134, in annuities £938 10s., a total of more than £3000; and the entire expense of collecting and distributing this sum had not amounted to £132, *i.e.*, not 4½ per cent., including the printing and postage of a voluminous report, and the postage and stamps employed in the distribution of over £2000 by Dr. G. C. Jonson, Chairman of the Committee, in weekly or monthly instalments. The expansion in the operations of the Fund, while affording full satisfaction to the Committee, was a source of anxiety, as constant effort was required to obtain the means of meeting the growing demands. During the year the expenditure had exceeded the income by more than £300. The number of annuitants on the list was now forty-eight, of whom

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eleven had been elected during the year, one at the age of ninety-three, two aged eighty-four and eighty-three respectively, two aged seventy-eight; only four were less than seventy, and of these one died of joy on hearing of her election, and another only lived a month. Grants were made at the monthly meetings to 170 applicants, all of whom were in distress—some in positive misery. It was pointed out that, while from some towns large sums were sent up by hon. local secretaries, and many suitable cases for relief, from others the Fund received nothing, and, for want of local representation, many poor suffering members of the profession in those neighbourhoods must be cut off from the benefits of the charity. Dr. Fleetwood Churchill and Mr. Malcolm Morris joined the Committee; and Mr. Ed. East, Clifton-gardens, was appointed Hon. Secretary for Cases, in the place of Mr. Malcolm Morris, resigned.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

The usual quarterly Court of Directors was held on Wednesday, January 10; Dr. Pitman, Vice-President, in the chair. Grants to the amount of £1262 were made to sixty widows, five orphans, and three orphans on the Copeland Fund. There were no fresh applications for relief. The death of one widow in receipt of £40 per annum was reported. The expenses of the quarter were £80 10s. The deaths of four members and the resignations of two were announced, and one new member was elected. A Christmas present of £320 had been made in December last to the widows and orphans already on the funds of the Society.

PROVISION FOR THE RELATIVES OF DECEASED FIREMEN.

At the last meeting of the Metropolitan Board of Works, the Fire Brigade Committee reported that engineer John Bailey died on December 20 from the effects of exposure and chill at the fire in Wood-street, and recommended that an annuity of 25s. a week be granted to his widow; also that fireman Henry Berg died on December 28 from injuries received at the burning of the Alhambra Theatre, and recommending that the sum of £100 be granted to his mother. It will be matter of much satisfaction to the public to learn that these recommendations were almost unanimously agreed to. We think it will be universally admitted that the members of our fire brigade are not at all too well remunerated when the onerous nature of their duties is taken into consideration; and the knowledge that those they leave behind them, in the event of fatal accident, will be in some sort provided for, will at any rate not diminish the gallant exertions or the ready calm courage of a body of men who have always proved themselves indefatigable and self-sacrificing.

TUBERCULOSIS OF THE FALLOPIAN TUBES.

Dr. Justus Schramm, of Dresden, contributes to a recent number of the *Archiv für Gynäkologie* a short paper on the above subject. Out of 3386 autopsies upon women, he found this condition present 34 times, or about 1 per cent. There were of these 806 who died from pulmonary phthisis or from tuberculosis of other organs, so that the proportion in which the tubes were affected in them was 4·2 per cent. In the 34 cases of tuberculosis of the tubes, the uterus was affected 7 times, there was tubercular disease of the peritoneum 21 times, and more or less advanced lung disease in 29. Both tubes were diseased in 27 of the cases, the left alone in 5, the right alone in 2. The large majority of Dr. Schramm's cases occurred between the ages of twenty and forty. In only one of the 34 was there reason to think that the disease of the tubes was primary; but in this case the bowel and peritoneum were also affected, the greater amount of disease in the tubes being the only reason for thinking them the part first affected. It is remarkable that, while tuberculosis of the urinary apparatus is not uncommon in men, it seems to be very rare in women. Dr. Schramm says that only one case has been seen in the Dresden Hospital during the last twenty-two years. Perfectly healthy Fallopian tubes are seldom found, according to our author; and he quotes Hennig, who thinks that catarrh of the tubes is present in about a quarter of all cases (whether of dead bodies or of living women is not stated). The latter author also thinks that the tubes are the subject of catarrh oftener than any other part of the genital mucous membrane. Dr. Schramm finds that tuberculosis of the tubes originates in catarrh, and that it commonly begins in the ampulla. The walls become thickened, the tube filled with pus, and then caseation takes place, followed by ulceration of the mucous membrane. Miliary tubercles are not common; when present they are seen towards the abdominal end around the caseous knots. Histolcgically their structure is the same as that of tubercle in other parts. For a detailed account of this, as well as of the changes in the blood-vessels (which are also analogous to those elsewhere seen), we must refer our readers to Dr. Schramm's paper.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

We understand that the Council of the Royal College of Surgeons in Ireland have decided that the resolution adopted on December 14, 1882, declining to recognise certificates of lectures delivered at night after April 1 next, shall not be enforced until November 1 following.

THE COLLECTIVE INVESTIGATION OF DISEASE.

The President (Dr. Bridgwater) and the Council of the Metropolitan Counties Branch of the British Medical Association, invited the profession to meet them in the large theatre of the Royal School of Mines, on Wednesday evening last, the 17th inst., for the purpose of hearing addresses by Sir James Paget and Sir William Gull on the collective investigation of disease. The great importance of the subject, and the necessity of scientific care and accuracy in any and every attempt to carry it into practice, are well recognised by medical men, and this recognition, together with the eminence and fame of the speakers, attracted the most representative men of the metropolis as well as of the provinces, and a very large and influential meeting was the result. After a few appropriate remarks, the Chairman called on Sir William Gull, who delivered an excellent and characteristic address. He began by saying "the movement was of the greatest possible value both to the profession and the public." He referred to Sir James Paget's Bradshawe Lecture, in which the cause of morbid anatomy was so ably put forth, and said that though the present subject was far removed from that, yet it could not get on without it, and that sooner or later our collective observations would have to be compared with the result of morbid anatomy. There are many "every-day" diseases which have not as yet been submitted to a scientific inquiry, and he feared that until the sun of science had risen much higher than at present, we should remain in ignorance of their real significance. He appealed, especially to general practitioners, for help in this research. The real field of pathology lay in general practice, for there are seen the beginning, the course, the termination of cases. Hospital experience was worth very little without a good admixture of general practice to correct it. Men with hospital appointments were apt to see only the severer cases, isolated cases, and were unable to get at early and

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reliable family history, which was absolutely necessary to the proper adjudgment concerning any form of disease. Moreover, hospital cases passed out of observation without leaving behind any perfect record. "One might as well attempt to measure the size and force of a river by gauging it at its entrance to the sea, as attempt to get good pathology from the post-mortem alone." How was it that disease varied so much in its spread—in its intensity? What was idiosyncrasy? How was disease modified by locality or occupation? These were questions which the general practitioner alone had the means of solving. Disease appeared like a sphinx; and nature, when inquired of, never gave an answer when an evasion was possible. Yet this was not so in reality. Prejudice was the sphinx, and education arrived at the solution. The vital point was to question aright. The Baconian aphorism, "He who questioneth much shall learn much," is only partially true: it depended on who was putting the question. Many dangers beset this kind of work,—and Sir William instanced the research concerning the contagiousness of phthisis. What was meant by phthisis—all destructive changes beginning at the apex; or acute cases; or cases which began as bronchitis or pleurisy; that which occurred in old age, or in earlier life? To rightly estimate all these points would be a great difficulty, and the greatest care would have to be exercised. He next referred to the great importance of family history, with a view to trace, if possible, the variations of the same dyscrasia in different individuals of the same family, and at different ages. How was it that some persons were more susceptible to the influence of poisons than others: had their predecessors, so to speak, been vaccinated, and thus acquired for their descendants an immunity which others, not so vaccinated, did not enjoy? Thus the peculiar fever which visitors to Rome got so frequently was not endemic among the stationary population, and the water was perhaps the purest drinking-water that was anywhere to be obtained. So, in other places, new comers were liable to diseases which residents appeared to be quite proof against. Finally, Sir William spoke of the necessity of studying little ailments that have no pathology. Very much light would be thrown upon them, as many were very obscure, and their treatment very unsatisfactory.—Sir James Paget said he could not add much to what had already been said, without inflicting a useless repetition. He agreed with every word Sir William Gull had spoken. He was delighted to find that the profession was alive to its own shortcomings, and confessedly ignorant of much which, until lately, we thought we knew accurately. This was the first essential to successful inquiry. No state of ignorance was so profound as that which left us without any doubts. Practitioners who think lightly of pathology, and pathologists who think lightly of practice, can never be successful in their work. As to the best method to pursue, Sir James said, that is best which a man can do best, whether as the result of compulsion from his surrounding circumstances, or from choice. Darwin had made his name immortal as much from the manner in which he had worked, as from the matter at which he worked. His latest work on earthworms was an instance of this; he chose everyday things, which other people thought too insignificant: the material of this work was at the disposal of the simplest ploughman, if he had care to utilise it. Sir James feared that a great deal of work was lost because no records were kept; and records were not kept, often because the matter seemed too trivial for record: this was a vital mistake. He urged on the whole profession the vast importance of helping on this great movement, feeling sure that it would carry with it its own reward, by giving us greater pleasure in the performance of our every-day duties. Professor Humphry paid a well-merited compliment to Dr. Mahomed for the energy and enthusiasm which he had displayed in the development of the present movement; and after the usual votes of thanks the proceedings terminated.

THE PROFESSION AT LIVERPOOL AND THE COMPULSORY NOTIFICATION OF DISEASE.

We have received from the Medical Institution of Liverpool a copy of a correspondence that has recently taken place between Dr. Davidson of that city, and Dr. Littlejohn of Edinburgh. It relates to a letter addressed by the latter to the *Glasgow Herald*, containing a passage reflecting very seriously upon the professional spirit of the medical men of Liverpool, in connexion with their opposition to the compulsory notification of infectious diseases. As Dr. Littlejohn did not retract his charges when called upon to do so by Dr. Davidson, the Medical Institution of Liverpool, at their meeting on Thursday, January 11, passed a resolution very strongly condemning his action. Pressure upon our space prevents us from publishing the correspondence and resolutions in full, but we heartily sympathise with our brethren in Liverpool in the unmerited attack that has been made upon their character.

A LOSING CONTRACT.

The Leamington Town Council some years since entered into an arrangement with the agent of Lord Warwick's estate, for the disposal of the sewage of the borough, but which has, so far, resulted in a considerable loss to his Lordship. The agent has now applied to the Corporation for a reconsideration of the contract, alleging an erroneous estimate of the scientific referees as the ground of the application. The contract has been in force eleven years, and it has yet sixteen years to run. The application was referred to the consideration of the General Purposes Committee.

LATENT CANCER OF THE STOMACH.

M. Raymond (*Progrès Médical*, No. 52, 1882, and No. 1, 1883) has made some interesting remarks on the difficulties that are met with in diagnosis in these cases. These remarks were called forth in connexion with a patient who had been under his care for about six weeks, and the prominent features of whose case were cachexia, generalised œdema, and a serous diarrhœa. No physical signs of disease could be made out to explain these grave symptoms. After referring to pernicious anæmia, Bright's disease, and showing that they could, with certainty, be excluded, he comes to latent cancer of the stomach; and here, he says, there are usually two grand fundamental symptoms—dyspepsia and cachexia: dyspepsia characterised by anorexia, gastralgia, vomiting, and diarrhœa or constipation; and cachexia, as shown by œdema, local or general, and by wasting and loss of strength. But in his patient there was no dyspepsia, and therefore the idea of cancer of the stomach was dismissed. This conclusion was not justified by the result. Of course, if malignant disease never affected any part but the pylorus or cardiac orifice, it could be readily understood that dyspepsia would be a necessary consequence of its existence. At the post-mortem examination all the viscera were found healthy except the stomach; and this showed, when opened, a number of submucous greyish tumours, varying in size from a small apple downwards, most numerous at the posterior aspect of the greater curvature. They were non-pedunculated, and there was no ulceration over any of them. The walls of the stomach were somewhat thickened, but the cardiac and pyloric orifices were free. On microscopical examination, these tumours were composed of an

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alveolar stroma, enclosing large cells of very varied forms, some flat, others rounded. It is somewhat strange, perhaps, that the secretion of gastric juice was not more interfered with than it seems to have been. Such a case as this is quite beyond the reach of legitimate diagnosis with the means at present at our disposal.

THE *London Gazette* of Tuesday last announced that the Queen has been pleased to grant to the following medical officers in Her Majesty's Naval and Marine Forces, Her Majesty's Royal licence and permission to accept and wear the insignia of the several classes of the Orders of the Osmanieh and the Medjidie attached to their respective names, which His Highness the Khedive of Egypt, authorised by His Imperial Majesty the Sultan, has been pleased to confer upon them in recognition of their distinguished services before the enemy in the late campaign in Egypt:—Third Class Medjidie—Fleet-Surgeons Daniel O'Connor, M.D., and Henry N. M. Sedgwick; Fourth Class Osmanieh—Staff-Surgeons John Lambert and Edward E. Mahon; Fourth Class Medjidie—Staff-Surgeon Charles C. Godding and Surgeon Charles A. Macaulay, M.D.

WE have to record that Sir John Forsyth, C.B., K.C.S.I., late Principal Inspector-General of Her Majesty's Indian Medical Department (Bengal), and Honorary Physician to the Queen, died at Brighton, on the 14th inst., in the eighty-fourth year of his age. He was appointed Companion of the Most Honourable Order of the Bath (Civil Division) in 1862, and a Knight Commander of the Most Exalted Order of the Star of India in 1881.

THE Army Medical and Transport Inquiry Committee sat on the 16th inst., when the examination of medical officers with the British forces in Egypt was continued. It is understood that the medical branch of the inquiry will be concluded in a day or two, and that the report will be drawn up without delay. It may be expected, it is said, not later than the end of next month.

COUNT MÜNSTER, the German Ambassador, has consented to preside at the anniversary festival of the German Hospital at Willis's Rooms on May 1.

WE are glad to know that Sir Erasmus Wilson has continued to improve steadily in health and strength since he turned his back upon the fogs and smoke of London, and determined on a long residence at his house at Westgate. He is well able to be out and about, and he has fully resumed the revision and enlargement of his work on Egypt. He does not, like our Prime Minister, indulge in cutting down trees,—his work in life has been conservation, not destruction, and in truth it would not be easy to find trees to cut down at Westgate,—but he reads the lessons in the beautiful chapel he presented to the Margate Infirmary; and he presided, with all his wonted geniality and felicity, at a dinner given to the poor of Westgate and adjoining districts on Christmas-day.

IT is worth noting that the phenomenal and startling death-rates of Glasgow have never, according to Dr. J. B. Russell, the Medical Officer of Health, arisen from epidemic disease (at least, during the last twenty years), but have been due to cold; and that the very highest arose from the accumulation of smoke overhead in the foggy calm of continuous frost.

FROM ABROAD.

THE LAST ILLNESS OF M. GAMBETTA.

THE *Union Médicale* of January 9 publishes the following interesting article:—

"While awaiting the official history of this disease at the hands of the medical attendants of M. Gambetta, we may furnish our readers with the following information which has reached us from an authentic source.

"The wound caused on November 27 by the ball of a revolver, which, entering by the palmar surface of the hand, passed out at the dorsal surface of the forearm, was nearly healed by December 10. On the 13th, after rather a full meal, M. Gambetta felt a somewhat severe pain in the left flank, which, after lasting about half an hour, gradually disappeared of itself. For several years past already a similar pain had very often manifested itself about an hour after meals. M. Gambetta on these occasions placed his hand quickly on his right side, towards the region of the liver, and made some pressure there, after which the pain gradually went away. The frequent recurrence of this pain had to some extent imparted to him a gesture which became habitual to him, and which consisted in the application of the palm of the right hand to the right side of the abdomen. On this occasion the region remained painful for a longer time than usual. On the 16th, M. Gambetta received some friends, became fatigued, and remained somewhat late in his garden, feeling, as he said, so well in the open air. In the evening he was seized with shivering and fever, the temperature rising to 40° C., and the pain of the abdomen becoming severe. During the following days the symptoms of a perityphlitis manifested themselves, following the track of the ascending colon. Inflammation then spread to the wall of the abdomen and the iliac fossa, inducing gangrene, and death on December 31. On different occasions during two years the urine had been examined by Dr. Siredey, who believed his illustrious patient to be diabetic, but did not detect sugar. On December 18, fifteen grammes per litre was found, but on this occasion alone, none being subsequently detected. Albumen, on the other hand, was found at every examination. At the autopsy, performed forty-eight hours after death, the putrefaction of the liver and kidneys prevented any exact examination being made. Recent inflammation of the peritoneum was found, arising probably on the last day, in the vicinity of the ascending colon. A subperitoneal inflammation of the whole of the right hypochondrium existed, especially around the large intestines (pericolitis); and there were two large gangrenous patches in the wall of the abdomen, above the groin, and in the costo-iliac space. Old adhesions existed between the biliary vesicle, which was much thickened, and the angle of the colon, and between the appendix vermiformis and the cæcum. Nowhere was there a collection of pus, but while detaching the peritoneum there accumulated about two spoonfuls at the peritoneo-parietal juncture. Finally, a more important lesion was an old contraction of the last five centimetres of the ileum and the ileo-cæcal valve—forming so narrow a stricture that the end of the little finger could not traverse it. This stricture was evidently the cause of the pain which came on after meals, at the time when the digested food was passing from the small into the large intestine. It was more violent during convalescence, because M. Gambetta, who had adhered to a somewhat rigorous diet during the cicatrisation of the wound, recurred too quickly to his habitual regimen. There then occurred a kind of intestinal obstruction, caused by the old stricture, which, not having been dilated by food during a fortnight, offered an obstacle to the passage of digested matters. The pain was more acute and of longer duration than it usually had been, because on this occasion the intestine underwent a sudden dilatation. What took place then? Perhaps a contraction of the adjoining intestine; perhaps a slight laceration, which became the point of departure of the phlegmon found to exist on the following days. The respiratory organs were sound. The brain, the convolutions of which were most distinct, only weighed 1160 grammes, which is the weight of a small ordinary brain; but it is the opinion of the *savants* of highest authority, that the development of the intellectual powers is not in absolute relation to the weight of the brain. No one will deny that those of M. Gambetta

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were most remarkable. The case, then, may be summed up thus:—A seton-like wound of the hand and forearm, which was healed by December 10; intestinal obstruction on the 13th, which probably induced the phlegmon in the vicinity of an old stricture of the intestinal canal—a phlegmon which, occurring in an obese, albuminuric, and perhaps diabetic subject, became diffuse, gangrenous, and fatal. It has been said that M. Gambetta was syphilitic; that is possible, but no trace of the diathesis was found either during his last malady or after his death. The conduct of the surgeons in attendance, who maintained an almost absolute expectation, has been variously criticised. The opinion of other bolder surgeons has been brought forward, who would not have hesitated to have sought for pus, cost what it might. But, looking at the constitutional condition of the patient as regards obesity, albuminuria, etc., we have every reason to believe that those who would have been enterprising enough to seek for pus, which nowhere existed as a collection, would have exposed themselves to the risk of making (to employ the happy expression of one of the consultants) an autopsy on the living."

Hysterical Breast.

We take the following particulars from a clinical lecture delivered by Prof. H. C. Wood at the Philadelphia University Hospital, and reported in the *Medical Times* for October 7:—

"The case (a woman twenty-four years of age) is one of importance, because it represents a class of cases which are not very rare, and which are often horribly misunderstood and wretchedly maltreated. There had been some talk of having this breast amputated, when really there is no organic trouble at all. . . . The diagnosis between this condition and organic tumour can almost always be made by paying attention to the following points:—In the first place, in regard to tenderness, the pain is more marked from merely touching the part than it is from strong pressure. In organic tumour the pain is proportionally increased by pressure. Again the character of the swelling is an aid in diagnosis. It is a diffused swelling, and lacks limitation. It also varies much in size at different times. It can be seen at one time, and not at another. An organic tumour is persistent in form and hardness. In the neurotic breast the pain is very much affected by the weather and by fatigue. You notice that this lady has large, full eyes with drooping eyelashes. Whenever you see these in the Anglo-Saxon race, especially in a female, you have a person of an hysterical temperament; and a neurotic element will enter into the diseases of such a person. . . . There is one form of neurotic affection of the breast which is not often alluded to in the books, and which often gives rise to a good deal of alarm. You know that at puberty, when the system is expanding from childhood to womanhood, the breasts swell. If the person be of a neurotic temperament, there frequently is a good deal of disturbance of the part, the breasts becoming swollen and very tender. If both breasts swell at the same time, and all the genital organs unfold themselves simultaneously, this condition is not so likely to occasion alarm; but in neurotic young girls there is often irregularity, so that while one breast remains unaffected, the other may suddenly grow hot, become swollen and exceedingly tender, developing into a condition very similar to, if not identical with, that of the neurotic breast. . . . . I have in a number of instances seen the same condition in boys; for even in the male at puberty the breasts occasionally swell, and sometimes secrete a few drops of a serous fluid. These cases of neurotic breasts are usually quite amenable to treatment, but sometimes are very intractable. The treatment should be addressed to the local disorder, and also to the condition of the system. In many cases a galvanic current will rapidly bring relief. Why this is I do not know, any more than I know why it will relieve some cases of neuralgia. The method of application is by placing a large sponge connected with the positive pole over the breast, and allowing the patient to hold in the hand a small sponge connected with the negative pole. The current is then allowed to pass for twenty minutes steadily through the part. Great relief will often be experienced at once. When you obtain temporary relief after a few minutes' application, a repetition of the treatment is almost always followed in the course of two or three weeks by a permanent cure. The current should be of such strength that the patient can feel it, and that it will produce redness of the skin without causing pain. It should be applied daily for about fifteen or twenty minutes. The application of belladonna often affords relief. The treatment of the neurotic element is the same as you employ in other cases of nervousness with failure of nerve-power. You do all that you can to build up the strength and constitution of the patient. You accomplish this first by attention to hygiene, and in the second place by tonics, which you do not use if there are any signs of irritation of the gastro-intestinal canal. In many of these cases there is disorder of the intestinal tract. Do not use tonics in such a case. They are probably the worst abused of all drugs. A person is suffering from debility and disordered digestion, and he is immediately put on the use of tonics. This is like trying to put out a fire by pouring burning benzine on it. You not only waste your time, but you increase the gastro-intestinal trouble. Debility is not a disease; a cause for it can generally be found. If you remove the cause the debility will take care of itself. As there seems to be no trouble with the stomach and bowels in this patient, I shall give her arsenic and iron in combination with some bitter tonic. In the majority of these cases you will find the best treatment to be the so-called rest-treatment, which is a long process of rest, high feeding, and administration of tonics, with what may be called artificial exercise."

REVIEWS.

Metropolitan Sewage and What to Do with it. By Ed. Monson, Ass.M.Inst.C.E. London: Prentice and Monson. 1882. Part I., pp. 72. 8vo.

A spirited attack, though of small literary merit, on the course pursued by the Metropolitan Board of Works in respect of the London sewage. After an enumeration of the Commissions appointed and Acts passed on the subject from 1807 to 1858, Mr. Monson asserts that the sewage difficulty, as it is called, is in great measure owing to the erroneous views held by the Metropolitan Commissioners of Sewers in opposition to the General Board of Health, who had clearly enunciated the correct principles of town sewerage. "The General Board of Health," he says, "advocated the separate system and the removal of excreta by suspension in water. The Metropolitan Commissioners of Sewers, on the other hand, advocated the combined system. The former recommended the use of small glazed earthenware pipes for sewers; the latter recommended large brick sewers. The one recommended that the sewer be laid at the back of the houses, so as to avoid the presence of sewage-gas in the dwellings; the other laid their sewers under the streets in front of the houses, and beneath each house they carried a long drain from back to front." The Metropolitan Board of Works adopted the scheme of the Commissioners, and their example has been followed by other towns.

The pollution of the Thames by the discharge into it of 280,000 tons yearly of solid matter is in direct contraversion of Section 135 of the Act 18 and 19 Vic., c. 120, from which they derive their powers; and like pollution is prohibited by Section 17 of the Public Health Act of 1875, which applies to every town *except the metropolis*. The Metropolitan Board of Works assert that the discharge of sewage, so far from filling up the river, causes a scour: so it does at the point of discharge, but only to create huge banks of mud, held together by gelatinous organic matter at a short distance outside. Another great mistake has been the covering over and turning of natural water-courses into the sewers. To exclude the rainfall altogether from the sewers is neither practicable nor desirable, but the essence of the separate system is to keep the surface water and natural water-courses free from sewage, leaving them to feed the rivers instead of swelling the bulk of the sewage. Mr. Monson illustrates the principles and demonstrates the economy of the separate system by a description of the works recently carried out at Halstead.

He then describes the London system of high-level, middle, and low-level sewers, the last of which are not sewers at all, but elongated cesspools, in which there is no movement of the fluid save what is produced by the pumping-engines at the end. Not being in duplicate, they are never

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entirely emptied, and the deposit is constantly putrid and offensive in the extreme.

All sewers ought to be self-cleansing, whereas, so great is the deposit in these, that not fewer than 130 men are constantly employed by the Board of Works, besides those in the service of the vestries. Since, under any circumstances, the low-level sewer must be pumped, its sewage should be kept at the lowest possible volume; instead of which, besides numerous rivulets now enclosed, the whole of the sewage of the western district is poured into it, after having been raised nineteen feet at the pumping-station in Chelsea.

The pollution of the river, the deposit in the sewers—leading to the production of fœtid gases, which enter houses from the drains necessarily carried beneath them,—and the heading up and overflow of sewage from channels calculated to carry off but a quarter of an inch of rain per day when two inches sometimes fall in the same time, or during thunderstorm in an hour or two, are among the evils entailed by the obstinacy of the Metropolitan Commissioners and the Board of Works. To obviate the flooding from the sewers, they are now constructing storm relief or overflows at a cost of £700,000, having already exceeded their original estimate by a million and a half, although much of the first scheme remains unexecuted.

Mr. Monson's suggestions include the disconnexion of the western from the eastern sewerage systems, and the disposal of the former in one of the following ways:—(1) To carry it fieldwards for irrigation purposes; (2) to pump it into the high- and mid-level sewers instead of the low-level; or (3) to convey it by a new sewer eastwards through London, north of the city. Instead of, as at present, bringing the whole of the sewage to a single outfall, he would take advantage of the facilities presented by the three (or four) sewers at different levels for utilising or disposing of the sewage in as many separate extra-metropolitan areas, and perhaps in different ways, according to local circumstances—in one by direct irrigation, in another by some process of precipitation, and in all allowing only a purified effluent to pass into the rivers. He would restore the natural water-courses to their proper function of conduits for surface-waters, and while, as far as possible, excluding drift from the sewers, would arrest so much as did enter by catch-pits.

We may add that not only does Mr. Monson evidently know what he writes about, but that he was one of the engineers invited to send in plans for the drainage of the lower Thames Valley.

A Concise Handbook of the Laws relating to Medical Men. By James Greenwood, of the Inner Temple, Barrister-at-Law. London: Baillière, Tindall, and Cox. 1882. Pp. 214.

The intention of this book is best described in a motto from Locke which stands upon the title-page: "A short and plain epitome containing the most material heads." The merits of the book, considered as a work of reference for lawyers, it is not our province to discuss, and moreover it does not seem designed for that purpose. It is a clearly written summary of the legal position of medical men—their rights, duties, and responsibilities in the exercise of the different branches of the profession, as defined by law. The least satisfactory chapter in the book is that on the lunacy law; which Mr. Greenwood has for some reason seen fit to entrust to a well-known specialist: we think he would have done better to have written it himself.

The Pharmacopœia as a Student's Manual. An Introductory Address delivered before the Students' Association of the School of Pharmacy of the Pharmaceutical Society of Great Britain, November 16, 1882. By John Attfield, Ph.D., F.R.S.

This address is valuable, not only to those to whom it was addressed, but to a much wider circle. Professor Attfield commences by telling us what the Pharmacopœia is and what it is not, and then he goes on to show how, in his opinion, it may best be studied: he advises the student to split it up, so to speak, into its component parts, grouping together first the chemical substances, then the vegetable products, and then the compounded drugs or mixtures. He points out that much instruction may be got by studying the meanings of the various terms, and ascertaining the geographical *habitats* of the minerals and plants. These notes and tables, however, to be of any value, must be the work of the student himself; copying from another epitome is of no use. We cannot better conclude this brief notice of Professor Attfield's interesting and able address than in his own words:—"A true student of the Pharmacopœia, he never ceases to be its student; but his attitude towards it of thorough loyalty ever merges into one of good and intelligent scepticism—an attitude which provokes sound experimental research, and results in improved processes and products."

GENERAL CORRESPONDENCE.

BRITISH MEDICAL BENEVOLENT FUND.

Letter from Dr. Broadbent.

[To the Editor of the Medical Times and Gazette.]

Sir,—In connexion with the annual general meeting of the British Medical Benevolent Fund, will you permit me, through your columns, to appeal—

First, to the honorary local secretaries, through whose exertions so large a proportion of the contributions to the Fund is collected, to send in their lists to the Honorary Financial Secretary, Mr. George Field, 31, Lower Seymour-street, as soon as possible.

Secondly, to the subscribers generally, that they will transmit, with as little delay as may be, their subscriptions, and especially subscriptions in arrear, to the Honorary Financial Secretary, or myself, or to the local representative of the Fund. More than one-fourth of the subscriptions for the last year, and for many preceding years, remain unpaid, and we are in this predicament—either we must drop the names out of the published list, and so displease many who have no intention of deserting the charity, or we must retain all names in the absence of an intimation that a subscription is withdrawn, and thus issue a list to some extent fictitious. If our receipts corresponded with our subscription-list, our expenditure would not have outrun our income by £300 in the past year, as has been the case.

Finally, let me appeal to the profession for increased support. It is a great thing that the Committee of this Fund is enabled, by the generosity of their brethren, to distribute more than £3000 to distressed members of the profession in the course of a single year, but more is needed. To many the aid given by weekly or monthly instalments, supplementing feeble efforts to earn a living, is the only barrier against real want; in other cases it enables a struggling medical man or widow to tide over a crisis and prevent ruin; many instances, again, are known in which it has helped to support orphans who now, mainly through its instrumentality, are doing well for themselves. It is in the cases in which permanent good may be done that most money is required. I am, &c.,

Seymour-street, January 15. W. H. Broadbent.

THE ROLL OF THE EDINBURGH MEDICAL GRADUATES.

[To the Editor of the Medical Times and Gazette.]

Sir,—The University of Edinburgh has published, in an octavo volume, a list of all its graduates in medicine from the earliest recorded down to our day. This roll of names has been very useful to the graduates themselves, who, without the trouble of producing their diplomas or writing to the Registrar for a certificate of their having graduated, can at once refer any inquirer to the authentic printed list as a handy means of setting the question of their graduation at rest. The biographer also is enabled, by this means, to ascertain the date of graduation and the subject on which the graduate wrote his thesis. In short, it is a useful book of reference both to the physician and to the medical historian, who hitherto have been unable to refer to any similar authoritative record of the other Scottish Universities of St. Andrews, Glasgow, and Aberdeen, which might well follow in this particular the good example of their younger sister.

I am, &c., J. S.

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PROVINCIAL CORRESPONDENCE.

GLASGOW.

January 17.

DR. J. G. LYON'S SUCCESSOR—THE EXAMINATIONS OF THE FACULTY OF PHYSICIANS AND SURGEONS—VITAL STATISTICS—THE GLASGOW CONVALESCENT HOME AT LENZIE—THE LOCK HOSPITAL.

THE vacancy caused by the death of Dr. J. G. Lyon, a certifying factory surgeon, has been filled up by the appointment of Dr. Mather. As is usual in such cases, the number of applicants was very large; and I understand that most of them applied six months ago in anticipation.

The professional examinations in the Faculty are now going on. Last week twenty candidates of various stages presented themselves for examination, and were all rejected. This ought to show the stringency of the Faculty, and should counteract the prejudice which prevails south of the Tweed against that body—a prejudice which has been kept up by recent utterances of some parties who wish to push the new Medical Bill through Parliament. It is generally thought here, however, that such wholesale slaughter is not only objectionable, but is also calculated to deter many deserving men from presenting themselves for examination.

By the recent health-report the death-rate has been thirty-one, one less than the preceding week. The weather has been wet, with freedom from fogs and frosts. This has a tendency towards lessening the mortality of the city.

The eighteenth annual general meeting of the subscribers to the Glasgow Convalescent Home, Lenzie, was held yesterday afternoon, when the annual report was read; and also the Treasurer's statement of affairs. During the year, 1453 patients had been admitted into the Home, being 72 in excess of last year. The total expenditure for the year was £2085 2s. 3d., as compared with £2067 6s. 6d. in 1881. The patients cost per head £1 8s. 8d. annually. The revenue account for the year was less by about £84 than the expenditure, which is accounted for by the falling off of annual subscriptions, which amounted to only £1061 8s., as against £1197 4s. in 1881. The subscriptions from *employés* in public works, and collections from churches and schools, amounted to £243, as against about £230 in the preceding year. The total revenue from all sources for 1882 was £2000, while in 1881 it was £2118.

The seventy-seventh annual meeting of the Lock Hospital in this city was held on Tuesday, the 16th. The medical officer's report states that during the past year 352 fresh cases were admitted, and a like number discharged cured, leaving twenty-two patients in the Hospital at the close of the year. The annual average cost of regular patients cured was £1 17s. 6d., the average length of residence in the house thirty-one days, and there was an average of thirty patients in the wards nightly. As in former years, by far the larger number of cases were for the first time, being almost wholly young persons, and numbering 251; while for the second time there were 96, for the third time 21, for the fourth 5, for the sixth 1, and for the eighth 1. The amount received from subscribers exceeded that of 1881 by about £10; but, on the other hand, there had been an increased expenditure of about £24.

THE ANTI-VACCINATION AGITATION IN GERMANY.—The Anti-Vaccination League, which seems to be taking a little rest in France, continues its agitation in Germany. It is not only syphilis which vaccination is accused of transmitting, but (according to a letter addressed to the Paris Académie de Médecine by the French Ambassador at Berlin) likewise other redoubtable diseases, especially scrofulous affections. This new ground of accusation is derived from Dr. Koch's experiments, and the authority which this *savant* enjoys explains the emotion which has laid hold of public opinion. Thus a true shower of petitions seems to have fallen on the Reichstag, which has appointed a committee to examine them. The conclusions of this committee point to the organisation of a complete investigation of the results furnished by the law of compulsory vaccination in Germany, and of a proposed law relating to epidemic diseases in general. The materials accumulated by this committee will be laid before the Reichstag by the Government. —*Gaz. Méd.*, January 13.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 9.

JOHN MARSHALL, F.R.S., President, in the Chair.

TWO CASES OF SO-CALLED ERYTHEMA GANGRÆNOSUM.

MR. T. COLCOTT FOX read this paper. The term *Erythema gangrænosum* has been applied to cases belonging to the same category, but the inflammatory patches in these cases presented very different degrees of severity, and were not all gangrenous. The term has been used in this paper simply to draw attention to the class of case to be discussed. *Case* 1 was a lady, aged forty-seven, in whom gangrenous patches continued to evolve, off and on, from June, 1877, until the present time. The patches were limited to the regions of the chest and the arms, and occurred over and over again about the site of former patches, sometimes for a time forming only on one arm, then on the other, and then about the chest, but a sort of symmetry was often kept up. The formation of patches was very frequent at first, but as the general health improved and the habit of intemperance was avoided, the patches were seen less frequently. She showed none of the ordinary signs of hysteria, but at one time had an attack of paraplegia lasting two or three months. *Case* 2 was a girl, aged seventeen, of an extremely hysterical and neurotic temperament, in whom severe inflammatory vesicating areas (not gangrenous) continued to form for many months. They occurred with fair symmetry over the body and extremities, but there was here also a marked tendency for the patches to recur about the sites of former lesions. In neither of these cases was there any cachectic condition sufficient to account for the severity of the lesions, and the surfaces healed fairly well. *Remarks.*—The question at issue is whether there exists an idiopathic affection consisting in the continued evolution of inflammatory areas of different degrees of intensity, and often gangrenous, such as have been described under the term erythema gangrænosum, or whether these cases should not invariably be pronounced to be artificial. In support of the first proposition there are only five cases on record of a similar nature in which malingering has not been actually proved, but these cases are all surrounded by the greatest suspicion, for they occurred in females, generally young, and decidedly hysterical or eccentric. The sites of attack and mode of evolution of the patches were most peculiar; there was an entire absence of any enfeebling condition sufficient to account for the occurrence of gangrene, and at the same time a healthy reparative process went on; and the patches were such as might be produced by a caustic agency. Dr. Fagge's case of gangrenous patches occurring in a man in the last stage of tubercular phthisis, Charcot's acute bed-sores, and varicella and vaccinia gangrænosa, are examined in support of the possibility. In opposition to the first proposition, and support of the second, there are a number of cases on all fours with the others as regards site and mode of evolution of the eruption, the sex and character of the patient, etc., in which malingering has been proved from the simple erythema produced by mustard, and the excoriations brought about by rubbing, to the gangrenous patches caused by the application of nitric or sulphuric acids.

Dr. THIN said that Dr. Neumann had recently exhibited to the Vienna Medical Society a case of spontaneous superficial gangrene, occurring in a young woman. Professor Billroth and some other authorities had refused to admit the genuineness of this affection, and they maintained that the lesion must be produced in some mechanical way. Nevertheless, chemical examination had failed to detect in the sloughs any traces of chemical reagents.

Mr. SAVORY referred to cases under his own care of special liability to gangrene from exceedingly slight causes. He felt, therefore, that there must be some peculiar idiosyncrasy in cases like those of Dr. Fox. In his own cases he had found that the patients were intemperate, and it was

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probable that the vitality of their tissues was thus lowered. He pointed out a method by which deceptions might be easily found out. In all cases produced by corrosive liquids the lower edge of the sore was always regular and crescentic in outline, whereas in real cases the margin would generally be found irregular in shape.

Dr. BUZZARD referred to cases; after which

Dr. FOX briefly replied.

A CONTRIBUTION TO THE PATHOLOGY OF DIPHTHERITIC PARALYSIS.

Dr. PERCY KIDD read this paper. Facts were brought forward in support of the view that diphtheritic paralysis is founded on a distinct anatomical lesion of the spinal cord. The lesion affects the anterior horns, and consists in alterations in the shape of the motor nerve cells, and in changes in their cell protoplasm. The affected cells are, as a rule, more or less globular in shape and devoid of processes. The changes in the cell protoplasm are divisible into two groups. In the first, which is more common, the cell substance has become pale and indistinct, and the nucleus is either absent or only faintly visible. In the second, the cells are more granular than usual, and often show a well-marked nucleus. In both cases the cell degeneration has an atrophic tendency. In some cases sections from special parts show a numerical atrophy of motor nerve cells. These changes are not found throughout the spinal cord, but are limited to certain regions. The localisation of the nerve lesion corresponds with the distribution of the muscular paralysis during life. There is no distinct affection of the neuroglia. The changes are purely parenchymatous. A similar degeneration of the motor nerve cells has now been found in fifteen cases, viz., by Vulpian in two cases, Déjerine in five cases, Dr. Abercrombie in seven cases, and, lastly, by the author in one case, which is the subject of the present paper. The disease may be described as a polio-myelitis anterior. It is considered highly probable, if not actually proved, that the above lesion is a constant one, and is the immediate cause of the paralysis.

Dr. BUZZARD, without being an expert microscopist, could nevertheless see and appreciate all the changes described by Dr. Kidd in that particular case; he nevertheless thought that the author had been rather too absolute and dogmatic in attributing diphtheritic paralysis to a similar lesion in all cases. Nothing had been said about the paralysis of sensation, while, as a matter of fact, this symptom was often a very marked one. The pathological changes described by Dr. Kidd would not account for this. He asked whether the nerve-trunks had been examined.

Mr. R. W. PARKER asked in what respect these lesions differed from those of infantile paralysis. It was true that in certain clinical details these two forms of paralysis resembled each other, and it was not strange, therefore, that their morbid anatomy also agreed. But whereas in diphtheritic paralysis absolute recovery took place even in severe cases, in infantile paralysis, when at all severe, perfect recovery was scarcely ever met with. If these spinal changes were as profound as in infantile paralysis, how was it that such complete recovery was possible even in the severer forms of diphtheritic paralysis?

Dr. FELIX SEMON considered the view of an anterior polio-myelitis as too narrow to include all the cases. He related a case of bilateral recurrent laryngeal paralysis occurring after an attack of pharyngeal diphtheria, which he thought could only be due to a medullary lesion. He suggested that in such a case the afferent fibres of the vagus had been influenced by the diphtheritic inflammation, and that the motor centres of the laryngeal nerves had been influenced in some reflex manner.

Dr. DOUGLAS POWELL thought that death in this case was no doubt due to an affection of the respiratory muscles from a lesion in the spinal cord. He had, however, had cases in which death seemed due to peripheral rather than to cerebral lesions.

Mr. HORSLEY presumed that Dr. Kidd did not mean that other lesions might not exist in some cases. He showed specimens of spinal cord sent to him by Dr. Mott, of Liverpool. There were vascular engorgement of the cord and medulla, atrophy of the inner group of ganglion-cells of the anterior horns in the lumbar region, with increase of nuclei in the posterior horns.

Dr. KIDD then replied, and the meeting adjourned.

THE OPHTHALMOLOGICAL SOCIETY.

THURSDAY, JANUARY 11.

WILLIAM BOWMAN, Esq., F.R.S., President, in the Chair.

THE GROWTH OF THE CRYSTALLINE LENS.

At the commencement of a very interesting paper on this subject, Mr. PRIESTLEY SMITH quoted a passage from the chapter by Otto Becker in the handbook of Graefe and Saemisch, to indicate the present position of knowledge on this subject; and then proceeded to describe an original research carried out during the last two years. He had examined 142 lenses, removed in their capsules, shortly after death, from the eyes of eighty-three adult subjects. Special precautions were taken to avoid changes from absorption or evaporation of moisture. Each lens was accurately weighed; its volume was then measured by means of a specially devised instrument acting by displacement of fluid along a graduated tube; finally, it was measured as to its transverse diameter. The author's aim had been to examine at least twenty transparent lenses in each decade of adult life; this had been accomplished up to the age of seventy, but between seventy and ninety the numbers were not yet fully made up. Detailed tables were appended to the paper, and the general results were demonstrated to the meeting by charts and diagrams. He had found that the average weight of the lens continually increased, the increase being, roughly speaking, at the rate of 1·5 milligrammes each year; the volume of the lens also continually increased, and in about the same proportion, the increase being at about the rate of 1·5 cubic millimetres each year. By calculation from the weights and volumes, it was found that the specific gravity remained, on the average, about the same throughout life, though there were lenses of low and of high specific gravity in each decade. Reservation, he considered, was necessary in accepting linear measurements of the lens after its removal from the eye; but, from the data obtained, it was demonstrable mathematically that the enlargement of the lens was not by any means limited to the transverse diameter. The continuous growth of the lens sufficed to explain the acquired hypermetropia of old age, without assuming that the lens changed its form; it was also, in the author's opinion, the cause of the shallow anterior chamber of the senile eye, which had hitherto been attributed to an advance of the whole lens, a supposition which could not be reconciled with the acquirement of hypermetropia. The continuous enlargement of the lens, though hitherto unobserved, and though apparently separating this organ from every other in the body, was readily intelligible from a physiological point of view; for the lens is, by development, a cuticular structure, the cells of which, unlike those of the cuticle, multiply within a closed capsule, and cannot be thrown off as they grow old, the older cells being surrounded by the younger. In the tabulated results, the relation of senility to the development of cataract came out clearly. Lenses which showed any opacity were distinguished from the others, and were found, when tabulated, to be, on the average, smaller than transparent lenses of the same age. As this difference was present even when the opacities were very slight, it seemed likely that a period of diminished rate of growth preceded the formation of the opacities of senile cataract. The opacities were in most cases limited to the equatorial zone, where the capsule and cortical layers of the lens were subjected to the traction of the suspensory ligament. This supported the conclusions recently published by Becker concerning the formation of opacity by separation of the fibre-layers at the equator. The bearing of the continuous enlargement of the lens upon certain other morbid conditions was reserved for future consideration. The instrument used in the investigation was shown to the Society.

Mr. BOWMAN congratulated the Society on the excellent paper which they had just heard; he thought it would prove a standard paper, and would be constantly referred to both from a physiological and pathological standpoint. He congratulated Mr. Priestley Smith on the definite results at which he had arrived.

Mr. HIGGENS asked if Mr. Priestley Smith, in the course of his investigations, had formed any opinion as to why old people often became less presbyopic, and also why old people slightly cataractous often became myopic. If he had

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understood the paper rightly they ought to tend to become hypermetropic.

Mr. BOWMAN, remarking on the gradual increase in the size of the lens, observed that the capsule would gradually become stretched as the lens grew in size, and said it would be interesting to know what modifications the capsule of the lens underwent during this process. There might be a difference of elasticity either by accretion or by alteration in its constitution. These were matters in which there was room for future investigation.

Mr. PRIESTLEY SMITH thanked the Society for the way in which they had received his paper, and the President for the terms in which he had spoken of it. He had no explanation to offer in respect of the questions put by Mr. Higgens. The two points to be taken into consideration were, he thought, the increased hardness of the lens, and the diminished tension of the capsule. He thought that perhaps photography would give more definite results in helping us to appreciate changes in the shape of the lens. He had purposely avoided at present bringing forward any pathological considerations that might arise in connexion with this subject.

A Case of Paralysis of the Third Nerve, with Cerebral Symptoms.

Dr. DAVID LEES showed a living patient, a girl, aged six years and a half, who had been brought to the Hospital for Sick Children on November 10, 1881, on account of a squint of the right eye, and shaking of the left arm and leg. The squint had been noticed by the mother three months earlier, and the shaking began a fortnight after the squint. She had had three fits when a year and a half old, but none since; and had had slight headache over the right eye for the fortnight before she was brought to the hospital. There was complete paralysis of the third cranial nerve on the right side; the pupil was dilated, and did not respond either to light or in accommodation; the upper lid drooped slightly, but no affection of the fifth or seventh nerves could be discovered; both optic discs were normal. The movements of the left upper limb consisted in slight forward and backward movements of the whole limb in a vertical plane, together with short flexions and extensions of the wrist; they were rhythmical and uniform, and occurred when the limb was not used; and the mother stated that they did not quite cease during sleep, but that they were worse when the child was excited; there was no distinct paralysis of the limb; similar, but less decided, movements affected the lower limb. No history of congenital syphilis could be obtained, but an infant brother of the patient was subsequently found to be suffering from snuffles, and to have had some rash on the buttocks. After treatment for twelve months with iodide of potassium, the shaking of the limbs could no longer be detected, and the squint had entirely disappeared, leaving only a little weakness of the internal rectus. The right pupil, however, remained dilated and motionless; it measured six millimetres, while the left measured two and a half millimetres. The power of accommodation was entirely lost in the affected eye; vision with that eye was very imperfect, but, by using a convex lens of six dioptrics, she could read small type. Her condition remained unaltered up to the time she was shown to the Society. The case, Dr. Lees thought, presented the group of symptoms to which Mr. Hutchinson had given the name of ophthalmoplegia interna; and which he attributed to disease of the lenticular ganglion; but this case seemed to support the theory that the symptoms were due to a cerebral lesion, probably near the nucleus of the third nerve, below the aqueduct of Sylvius.

Dr. HUGHLINGS-JACKSON asked if there had been any severe headache or optic neuritis. As was well known, paralysis of the third nerve on one side, with paralysis of the limbs on the other, pointed to a lesion of the crus; but this case was different from any that he remembered to have seen previously, for there had been rhythmical movements, but no true paralysis. Usually such movements without any paralysis were due to malingering or hysteria, but in this case such an explanation could not be put forward on account of the coincidence of opposite third-nerve paralysis.

Dr. STEPHEN MACKENZIE asked whether the ocular disturbance came on exactly at the same time as the rhythmical movements: if so, the probabilities would be in favour of a single lesion; but if otherwise, then there must have been two distinct lesions.

Mr. JONATHAN HUTCHINSON said that this case differed in an important particular from those which he had grouped together under the name of ophthalmoplegia interna, and he could not admit that it belonged to the same category. In his own cases there was no dilatation of the pupil, whereas in this child the pupil was now moderately, and had been extremely, dilated, showing that the radial fibres of the iris had not been deprived of their nerve-supply. As regarded the question of syphilis, he had been struck on first seeing her by her physiognomy; he thought both the forehead and complexion very suggestive of inherited syphilis, and said that the permanent teeth would be looked for with great interest.

Dr. BUZZARD thought there might have been some loss of power before the movements of the left side came on, as sometimes occurred in such cases, so that it might be regarded as a case of post-hemiplegic trembling. He had tested the tendon reflex in this child's wrist, and found no difference between the two sides. Had there been any such lesion as a gumma in the crus cerebri, he considered that there ought to have been some increase of tendon reflex on the affected side. He was inclined to regard the eye condition as due to an independent lesion of the nerve itself.

Mr. BRUDENELL CARTER asked whether eserine had been tried, and, on learning that it had not, observed that very frequently non-recovery of paralysed parts resulted from disuse, and, in view of the dilatation of the pupil, he suggested the use of eserine to prevent the muscle from wasting, and to recall to the nerve-endings their functions. He thought that very likely there was no central lesion left now.

Dr. DAVID LEES, in reply, said that he had purposely postponed the trial of eserine until after the child had been shown to the members of the Society. The commencement of the symptoms he could not answer for accurately; it was merely a matter of history, but, according to the mother's account, the eye symptoms were noticed a fortnight before the trembling. There had never been any optic neuritis, but two weeks before she came under observation the mother said she had had pain over one eye. He had thought that inasmuch as there was fixity of pupil, with loss of accommodation, the case might be regarded as one of ophthalmoplegia interna. As regarded the question of there being one or two lesions, he said that the symptoms came on at or about the same time, and that they improved at the same rate. He inclined to believe in a lesion of the nucleus of the third nerve, which, by presure or in some other way, had caused irritation of the motor fibres of the opposite limbs.

A Case of Paralysis of the Sixth Nerve, with Choreiform Movements of the Face.

Dr. LEES also exhibited a boy, aged eleven years and a half, who had had convergent strabismus from the age of three years. On examination in December, 1882, it was found that the left eye could not be brought to the outer side of the median position; there was no other interference with ocular movements; pupillary reaction was good, and the optic discs were healthy, but each presented a crescent. Spasmodic contractions of the facial muscles, chiefly on the right side, occurred at irregular intervals. These choreiform movements, as well as headache, which he had suffered from for some months, were probably due to the hypermetropia and astigmatism with which both eyes were affected. There was no paralysis of the seventh nerve.

Movements of the Eyes provoked by Pressure on a Diseased Ear.

Dr. HUGHLINGS-JACKSON read a paper discussing this subject, and relating the details of a case which, he said, resembled one reported by Schwalbach, and was important as giving a demonstration that ear disease was one cause of, or one factor in producing, vertigo. It was a clinical illustration of one of Cyon's experiments on the semicircular canals of rabbits. The patient was a woman, aged forty-nine, who had suffered from otorrhœa on the right side from childhood. She had recently become subject to attacks of auditory vertigo, and had a peculiar unsteady gait, resembling that produced by alcoholic intoxication. Pressing on the tragus of the right ear caused certain definite movements of both eyes: first, the eyes moved slowly to the left; then they moved back again, by jerks, to the right; at the same

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time she felt giddy, and there was apparent displacement of objects to the left. This displacement was synchronous with the slow movement to the left. The patient was examined by Mr. Laidlaw Purves and by Mr. Couper; and, under treatment, by syringing the ear, and the internal administration of quinine, she improved so that only the very slightest movements of the eyes were producible by the pressure spoken of. Dr. Jackson referred to certain researches by Dr. James, of Boston, U.S.A., which seemed to show that deaf mutes were not easily made giddy by rotatory movements, and were not at all liable to sea-sickness. In conclusion, he thought that the procedure mentioned in this case might probably be helpful in the diagnosis of some difficult cases; and that the different results obtained at different periods in such cases would be some measure of the patient's progress.

In reply to the President, Dr. Hughlings-Jackson said that the slow movement of the eyes was from right to left, and that apparent movement was to the same side, and, according to the patient's statement, coincident in time. He referred to a note on this subject by Professor Donders, of Utrecht, which he had communicated to the Society during the last session, and which appeared in the last volume of the Society's *Transactions*.

A New Method of determining the Relation between Convergence and Accommodation.

The Secretary read a paper by Dr. Maddox, descriptive of a new method of testing the ordinary relation between convergence and accommodation, and exhibited an instrument designed by himself for this purpose.

A Case of Peculiar Growth developing from a Cilia in the Anterior Chamber.

The account of this case, contributed by Mr. Rockliffe (of Hull), was read by the Secretary. The patient was a man aged twenty-three. In August, 1881, he received a vertical lacerated wound in the outer third of the cornea, and the lower lid was injured at the same time. Six weeks after the accident an eyelash could be seen in the anterior chamber, reaching from the angle of the chamber to the middle of the pupil. There was a slight pink zone around the cornea and cataract. An attempt to remove the eyelash at this time failed. In September, 1882, the eye became acutely inflamed, and at the inner end of the eyelash was a peculiar white woolly growth. This growth rapidly increased, and on October 18, 1882, Mr. Rockliffe opened the anterior chamber, when the tumour, with the eyelash firmly adherent to it, was carried out with the gush of aqueous. Dr. Brailey examined the mass, and reported that it consisted of flattened epithelium-cells exactly like the more superficial cells of the conjunctiva; it seemed possible that the cells of the root-sheath had proliferated within the anterior chamber.

Mr. Henry Power said that he had seen a similar case. The patient was a boy, who accidentally thrust a knife into the eyeball; an eyelash was carried on to the iris, and continued to grow in that situation; it was removed without difficulty.

Mr. Couper remarked that, in a case under his care, Mr. Nettleship had examined the material that came away with the lash when it was removed, and had found that it consisted of cholesterine, as though some of the sebaceous cells of the sheath of the hair had been carried with it into the anterior chamber and there developed. The hair had become coiled up in the angle of the chamber, and was not visible, being concealed by the tumour which had formed about it, and which, prior to removal, was supposed to be a syphilitic gumma. This mass was removed with a portion of the iris, and then the eyelash was found adherent to it. The patient recovered with good vision.

ACADEMY OF MEDICINE IN IRELAND.

Obstetrical Section.—Friday, Dec. 22.

John Denham, M.D., President, in the Chair.

Dr. Denham, after some preliminary observations, took for the subject of his inaugural address "The Progress made in Obstetric Medicine during the last Fifty Years," selecting as the basis of his remarks a comparison of the Rotunda Hospital Reports of Drs. Collins and Shackleton with those recently published by Dr. George Johnston. Dr. Collins, during his seven years' Mastership, had 16,414 deliveries, in which the crotchet was used 118 times, and the forceps or vectis 27 times. The number of deaths amounted to 164. Dr. Shackleton reported 13,748 deliveries, with the use of the perforator in 130 cases and of the forceps in 200 cases, and the loss of 163 patients. Dr. Johnston reported 8908 deliveries: 28 craniotomy, 90 version, and 750 forceps cases. He lost altogether 169 patients. Commenting on these figures, Dr. Denham observed that it was patent that by the more frequent use of the forceps in modern obstetrics much had been done for relief, without adding to the dangers of labour; and that great numbers of children were now delivered alive who under the old practice would have had to be destroyed. The beneficial results of the introduction of chloroform, the greater use of sea-tangle nets, the operation of ovariotomy, followed as it has been by so many new operative procedures, were briefly alluded to as having done much to bring gynæcologists into the front ranks of bold and successful operators, and to break down the barrier which at one time existed between this and other branches of the profession.

Dr. Roe exhibited a series of three frozen sections through a full-time stillborn fœtus which he had lately made—(1) section through medial horizontal plane of fœtal head; (2) section through shoulder-joint and upper part of chest; (3) section through level of third costal cartilage.

Dr. Poole showed, for Dr. Kidd, two Dermoid Ovarian Cysts removed from an unmarried patient, aged thirty-eight. Growth of tumour noticed for three years. The larger tumour involved the left ovary, and weighed on removal about 6 lbs. It was composed of numerous loculi of various sizes, some containing glairy mucoid fluid, and others masses of sebaceous matter mixed with hairs. Hard centres of ossification were felt in a portion of the cyst-walls; one of the larger cysts contained a matted mass of long dark hairs, on removing which a mass of bone was found jutting sharply into the cavity, and bearing on its apex two closely united teeth. The smaller tumour belonged to the right ovary, and consisted of two cavities, one containing sebaceous matter with a few hairs, and in one part of its walls a mass of bone; the other containing a quantity of light-coloured hair and several teeth irregularly set in a bony wall.

Cicatricial Occlusion of the Vagina.

Dr. More Madden reported an exceptional case, illustrating the occurrence of vaginal occlusion after parturition, which recently came under his care in the gynæcological ward of the Mater Misericordiæ Hospital. The patient, aged thirty-eight, had been years married, and had given birth to four children. She never had any difficulty in parturition, and her recoveries were always rapid. Six months before admission she had a miscarriage in the fourth month. This was caused by over-exertion, and presented nothing peculiar. Up to this time her general and uterine health had been excellent. Two months after miscarrying she began to complain of obscure pelvic pain, with sense of local fulness and bearing down. Her menses did not return, and as she had previously been very regular in this respect, she naturally supposed herself to be again pregnant. The pelvic pain increasing, however, after months, and being now attended with dysuria and troublesome tenesmus, as well as obvious impairment of her general health, she, for the first time, sought medical advice. When admitted into hospital, her general symptoms and history suggested retroversion of the gravid uterus. On examination this was found not to be the case. The pelvic cavity was filled by a large globular tumour, which extended backwards so as to flatten the rectum against the sacrum, and upwards and forwards so as to displace the bladder. The entrance to the vagina was thus obstructed, so that the finger could only be passed in for an inch and a quarter. A large quantity of retained menstrual fluid, thick, and like treacle, was evacuted. On the day following the operation she had rigors, her pulse and temperature ran up, the abdomen became tympanitic, there was considerable uterine pain and tenderness, and for the ensuing week her life hung in the balance from severe metro-peritonitis. This, however, ultimately subsided under treatment, and she made a perfect recovery.

A discussion followed, in which Drs. Atthill, Kidd, J. A. Byrne, and the President took part.

Dr. More Madden briefly replied.

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Breaking Strain or Tensile Strength of the Umbilical Cord.

Dr. Neville read a paper on this subject, founded upon 125 experiments made by him on the fresh cords of full-time children. Having explained the method of making these experiments, in which only the twelve to fourteen inches of the cord nearest to the placenta were tested, he stated his conclusions as follows:—In 100 cords from which the blood had been allowed in great part to escape before subjecting them to strain, the average tensile strength amounted to 12·5 lbs.; one cord bore a strain of 27 lbs.; nine cords a strain varying from 20 to 25 lbs.; eighteen of from 15 to 20 lbs.; forty-eight of from 10 to 15 lbs.; twenty-three of from 5 to 10 lbs.; and one of less than 5 lbs. In the case of twenty-five cords tested without allowing any escape of the blood contained in them, the average breaking strain was found to be very little above 11 lbs., or nearly 1¼ lbs. less than in the other case. The cords belonging to males were found to have an average strength of 1·5 lbs. more than those of female children. Multiparity made no appreciable difference in strength. The strain was always gradually increased until the cord broke; the rupture was most commonly found to be first marked on the outer aspect of the cord where an umbilical vein projected in a varicose manner. Thin straight and wiry cords, possessing a comparatively small amount of Whartonian jelly, and whose surfaces were least marked by varicose projections, habitually bore the greatest strains. The rather small literature on the subject was summarised; especially a paper by Pfannkuch (*Archiv für Gynäkologie*, Band. VII., Heft. 1), who studied the effects of a sudden strain caused by the falling of the child's body, if delivered when the woman was in the upright position. Dr. Neville considered the question of a gradual drag as affecting inversion of the uterus. Assuming as conditions a strong funis abutting at or near the centre of the fundus on a firmly adherent placenta, and a flaccid pliable uterus wanting in contraction and retraction, he thought improper traction on the cord very likely to terminate in inversion. Inversion is a rare accident, because these conditions are rarely met with in combination, and because real fundal attachment of the placenta is particularly uncommon, notwithstanding text-book statements to the contrary.

Drs. Macan, Atthill, and Fitzpatrick spoke on this paper.

Dr. J. R. Kirkpatrick exhibited a specimen of a Mummified Fœtus, with the placenta and membranes belonging to both children of a twin pregnancy which had gone to full time. There was a single placenta and double membranous sac, that portion of the placenta which belonged to the mummified fœtus being shrunken and degenerated. The fœtus appeared to have died about the sixth month, and to have been since retained without occasioning any pathological symptoms. It was first born, after which the other child, presenting by the shoulder, was turned, and born alive and healthy. The living child, a female, weighed eight pounds. The placenta was quickly afterwards naturally expelled. The mother was a healthy multipara, aged thirty-three years, her six previous labours having terminated normally.

The Actual Cautery and the Thermo-cautery.—At a clinical lecture at La Charité, M. Desprès observed that punctuated cauterisation, performed by means of a small cautery heated to a dull red, with which the parts wherein it is sought to establish a revulsion are gently touched in succession, has, since the time of Nélaton, entered into general practice—advantageously, in many instances, replacing blistering. Of late this form of cauterisation has been performed by means of the thermo-cautery; but this practice is not so good as the one which it displaced. First, platinum requires a much higher temperature to redden it than iron, the consequence of which is that the thermo-cautery produces a much more severe burn than the iron cautery—the parts touched being burned to the fourth degree, and the heat radiating beyond them Consequently, elongated burns are produced, which leave indelible cicatrices. Secondly, the pain produced is very severe, while patients bear a repetition of the actual cautery with little or no fear. They always give the preference to this.—*Gaz. des Hop.*, January 11.

OBITUARY.

JAMES ARTHUR WILSON, M.D. Oxon., F.R.C.P. Lond.

We regret to have to record that Dr. James Arthur Wilson, who was for many years Senior Physician to St. George's Hospital, died, at Redlands Bank, Holmwood, Surrey, on December 29 last, in the eighty-eighth year of his age. Dr. Wilson, who was born in London in the year 1795, was the son of Mr. James Wilson, a distinguished surgeon, and Teacher of Anatomy at the Hunterian School in Great Windmill-street, the colleague, and successor as Teacher of Anatomy, of Dr. Matthew Baillie. Dr. Wilson was admitted a scholar of St. Peter's College, Westminster, in 1808. In May, 1812, he was elected to Christ Church, Oxford; in 1815 he took his A.B. degree, passing out as fourth in the first class in the classical, and second in the first class in the mathematical examinations. He proceeded A.M. in May, 1818; M.B. in May, 1819; and M.D. in May, 1823. In 1819 and 1820 he was in Italy, in medical charge of Lord and Lady Spencer. In June, 1821, he was elected to Radcliffe Travelling Fellowship, and having been also nominated to a "Faculty Studentship," remained a student of Christ Church. In the early part of 1822] he again went abroad, in observance of the requirements of his Radcliffe Fellowship, and, with occasional intervals, resided on the Continent for the following five years. In 1824, Dr. Wilson was a candidate of the Royal College of Physicians of London; and was elected to the Fellowship in 1825. He served the office of Censor in 1828 and in 1851; delivered the Materia Medica Lectures in 1829-32; and the Lumleian Lectures in 1847 and 1848, "On Pain"; and in 1850 he delivered the Harveian Oration, which is said by a good judge to be "one of the most original and noteworthy in matter and style of any that have been spoken within the present century." In 1829, Dr. Wilson was elected Physician to St. George's Hospital, and in that office served the charity faithfully and well till 1857, in which year he resigned the appointment. Dr. Wilson was an excellent anatomist, and for some time was a teacher of anatomy. The learned Librarian of the College of Physicians, and author of the Roll of the College, says in his biographical sketch of Dr. Wilson, he was in the first half of the century "one of the very few Fellows of the College who lectured on anatomy, a science which, following in the steps of his father, he taught earnestly and well. To the period of his life when so occupied, and to his 'demonstrations' of structure with exposition of its corresponding use, Dr. Wilson in his retirement, and now an octogenarian, looks back with satisfaction, strong in the belief that the human body, with life *in* or *out* of it, in its range and completeness of organ and function, is a problem for poet and philosopher for all time to come." Dr. Wilson was author of a work on "Spasm, Languor, Palsy, and other Disorders termed Nervous, of the Muscular System," published in 1843, and of "A Series of Essays on the True Character of the Erysipelas and Rheumatic Fevers." His "Oratio Harveiana" was published in 1850, and he contributed to the medical journals papers "On Liability of the Muscles in Disease," in 1844, and "Observations on the Nature and Treatment of Asiatic Cholera," in 1848; and in 1833 he contributed to the pages of the *London Medical Gazette* a series of learned and vigorous letters, which are memorable in the history of the College of Physicians. Under the signature of "Maxilla," the classical rendering of his own initials (J. A. W.), Dr. Wilson addressed his friend "Vestibulus" (Dr. George Hall, of Brighton) on the subject of the reforms needed in the College, treating of the position and mode of selecting the "elects"; and especially urging, with great force and cogency, the necessity of widening the *eligibility* to the Fellowship by abandoning the exclusiveness which, contrary to the spirit of the original charter of the College, denied it to all physicians other than graduates of Oxford and Cambridge. The subject was followed up by Dr. Wilson himself, and one or two other Fellows, in the College itself for some years, till at last the changes advocated were carried out. Dr. Wilson retired from practice several years ago; but held to the close of his life the honorary office of Consulting Physician to St. George's Hospital, to which he was appointed when he resigned the Physicianship in 1857.

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ROBERT ELLIOT, M.D. Edin., F.R.C.P. Lond.

Dr. Robert Elliot, who died at his residence in Carlisle, on the last day of 1882, was one of the best-known, most highly respected, and energetic physicians in the North of England. The family of Elliots to which he belonged have for three generations supplied able and successful practitioners of medicine for the service of the public, and he himself was the last of three brothers, all of whom, as well as their father, were members of the medical profession, and all practised in Carlisle. Dr. Robert Elliot was born in or about 1811. He studied at Edinburgh, and took the degree of M.D. of the University of Edinburgh in 1836, and then spent three years in enlarging his medical knowledge at Paris and Heidelberg. In 1839 he settled as a general practitioner at Gateshead, and soon obtaining considerable repute there, he was appointed Lecturer on Materia Medica and Sanitation in the Newcastle Medical College—an office which he filled with marked ability for about eight years. He was also an Examiner on Medicine in the University of Durham. About the year 1847, Dr. Elliot removed to Carlisle, to share in the burdens and the success of the large practice the family had so long had there, and he speedily made his influence and energy as a practitioner, and a sanitarian, felt in the city and its neighbourhood. He was the first Medical Officer of Health to the Urban District of Carlisle, and held that office from his first appointment to the time of his death, a period of eighteen years. He was indefatigable in his advocacy of the principles and practice of hygienic reform, public and private; and his annual reports as Medical Officer of Health always showed remarkable mastery of his subject, as well as thoroughness of work. Besides publishing various articles on directly medical subjects, he contributed largely to the literature of sanitation, publishing papers on, "Sanitation," the "Effects of Trades on Health," "Ventilation of Dwellings," "Purification of Rivers," "Utilisation of Sewage," and like subjects. He took also an active interest in local movements for the improvement, physical and moral, of the working classes, helping to found reading-rooms and libraries, but wisely leaving them, when founded, to be managed by the working men themselves. For some years Dr. Elliot had retired from general practice, but had a considerable reputation as a consulting physician. He filled the office of Mayor of Carlisle in 1856. He was also Coroner and Justice of the Peace for the city, and was Consulting Physician to the Carlisle Dispensary, the Fever Hospital, and the Hospital for Chronic Diseases.

MEDICAL NEWS.

King and Queen's College of Physicians in Ireland.—At the quarterly examination for the certificate in Sanitary Science, held on Thursday and Friday, January 11 and 12, the following candidates were successful:—

Atkins, George Purcell, L.K. & Q.C.P., 1882, Dublin.
Power, John Byrne, L.K. & Q.C.P., 1871, Kingstown.

At the First Professional Examination, held on Monday and Tuesday, January 9 and 10, the following candidate passed:—

Stolte, Augusta, London.

At the usual monthly examinations for the Licences of the College, held on Monday, January 9, and the three subsequent days, the following were successful:—

For the Licence to practise Medicine—

Cuthbert, William Thomas, Dundrum, co. Tipperary.
Delamere, Percy Herbert, Rathmines, Dublin.
Hunt, Johnson Gore, Kilmacthomas, co. Waterford.
Irwin, Alan Montgomery, Donadea Rectory, co. Kildare.
Morrison, Francis Saunderson, Warrenpoint, co. Down.
Newell, Percy, Dublin.

For the Licence to practise Midwifery—

Cuthbert, William Thomas.
Delamere, Percy Herbert.
Hunt, Johnson Gore.
Newell, Percy.
Pigot, Edward Francis, M.B., B.Ch. Dub., Dublin.
Strenge, Samuel, M.D., M.Ch. Royal Univ. Ire., Belfast.
Wilson, West Wheldale, M.B., B.Ch. Dub., Fahan, co. Derry.

The following Licentiates in Medicine, having complied with the by-laws relating to Membership pursuant to the provisions of the Supplemental Charter of December 12, 1878, have been duly enrolled Members of the College:—

Smyly, Philip Crampton, 1860, Dublin.
Robson, William Edward, 1869, Dundalk.
Weddick, John, 1874, Dublin.
Perceval, Montagu W. C., 1877, Greenwich.
Stoker, George, 1878, London.

Royal College of Surgeons of England.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 10th inst., and when eligible will be admitted to the pass examination, viz.:—

Banerji, Umadas, student of the Calcutta School.
Bryant, S. William, of the Edinburgh School.
Corner, Frank, of the London Hospital.
Coulan, Claude, of St. Bartholomew's Hospital.
Ellis, D. Mackay, of St. George's Hospital.
FitzHenry, G. William, of St. Thomas's Hospital.
Hailey, P. O. Ward, of Guy's Hospital.
Hughes, H. Lewis, of the London Hospital.
Humphreys, Y. M. Jones, of the Liverpool School.
Jeffree, Frank, of King's College Hospital.
Ruel, C. Perival, of University College Hospital.
Sugden, E. Brewitt, of King's College Hospital.
Warwick, F. James, of the Cambridge School.
Wood, Edward, of King's College Hospital.

Nine candidates were referred for three months, and one for six months. The following gentlemen passed on the 12th inst., viz.:—

Baggetts, J. George, student of King's College Hospital.
Beck, G. Strange, of the Toronto School.
Benson, T. Henry, of Guy's Hospital.
Bradbury, J. Augustus, of Guy's Hospital.
Cade, H. Lowlese, of St. Thomas's Hospital.
Cotton, J. Mitton, of the Toronto School.
Davis, G. William, of St. Thomas's Hospital.
Denton-Carden, H. W., of the London Hospital.
Haydon, Frank, of the Westminster Hospital.
Lucas, J. R. G. Chick, of St. Bartholomew's Hospital.
Partridge, H. Moxey, of St. Bartholomew's Hospital.
Prosser-Evans, J., of University College Hospital.
Richards, G. Frederick, of St. Bartholomew's Hospital.
Richardson, F. William, of King's College Hospital.
Smith, F. Osborne, of St. Bartholomew's Hospital.
Strathy, P. John, of the Toronto School.
Trevor, E. Fitzgerald, of University College Hospital.

Six candidates were referred for three months, and one for six months. The following gentlemen passed on the 15th inst., viz.:—

Anderson, A. R. Steele, student of the Cambridge School.
Avarne, A. Blair, of the London Hospital.
Bewsey, S. Thomas, of St. Mary's Hospital.
Cave, F. Evans, of Guy's Hospital.
Du Boulay, H. Housemayne, of Guy's Hospital.
Dundas, M. George, of Guy's Hospital.
Edwards, Richard, of the Middlesex Hospital.
Going, J. Andrew, of the London Hospital.
Harston, L. de C. Eagles, of St. George's Hospital.
Iredale, Thomas, of St. Bartholomew's Hospital.
Jones, S. Lloyd, of University College Hospital.
Luckham, L. Stephenson, of University College Hospital.
McOscar, John, of the Middlesex Hospital.
Purnell, Purnell, of Guy's Hospital.
Valpy, C. Edward, of St. Bartholomew's Hospital.
Venis, Walter, of King's College Hospital.

Seven candidates were referred for three months. The following gentlemen passed on the 16th inst., viz.:—

Bowden, Walter, student of University College Hospital.
Butt, F. Charles, of Guy's Hospital.
Churcher, H. Richard, of St. Bartholomew's Hospital.
Clift, S. Leonard, of University College Hospital.
Cooke, C. Michael, of St. Mary's Hospital.
Curgenven, J. Sadler, of St. Bartholomew's Hospital.
Dickinson, Charles, of St. George's Hospital.
Evans, D. Morgan, of Guy's Hospital.
Fairbank, R. Stephens, of King's College Hospital.
Foster, F. Wheldale, of Guy's Hospital.
Gidley, G. George, of King's College Hospital.
Hubbard, A. John, of St. Thomas's Hospital.
Hutton, C. Copley, of St. Bartholomew's Hospital.
Mudge, Z. Belling, of St. Bartholomew's Hospital.
Rigg, V. John, of King's College Hospital.
Sutton, Alfred, of Guy's Hospital.
Trist, H. Browse, of St. Bartholomew's Hospital.
Williams-Freeman, J. Peece, of University College.

Six candidates were referred for three months.

Apothecaries' Hall, London.—The following gentleman passed the examination in the Science and Practice of Medicine, and received a certificate to practise, on Thursday, January 11:—

Humphreys, Charles Style, 3, Chichester-street, S.W.

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BIRTHS.

BEADLES.—On December 27, at Park Lodge, Forest Hill, the wife of Arthur Beadles, M.R.C.S., of a daughter.

CRIBB.—On January 6, at Bishop's Stortford, the wife of Henry Cribb, L.R.C.P., of a daughter.

CULLINGWORTH.—On January 10, at 260, Oxford-road, Manchester, the wife of Charles James Cullingworth, M.D., M.R.C.P., of a daughter.

DOLAN.—On January 8, at Horton House, Halifax, Yorkshire, the wife of T. M. Dolan, F.R.C.S., of a son.

HOWSE.—On January 12, at 10, St. Thomas's-street, Southwark, the wife of H. G. Howse, M.S., F.R.C.S., of a daughter.

SEALY.—On November 30, at Nelson, New Zealand, the wife of William B. Sealy, M.D., of a daughter.

WOOD.—On January 14, at Bethlehem Royal Hospital, the wife of W. E. Rumsden Wood, M.A., M.D., of a son.

MARRIAGES.

CLEGG—MORGAN.—On January 11, at Islington, J. Hague Clegg, M.R.C.S., of Stockton-on-Tees, to Alice Louise, third daughter of Charles Jeffrey Morgan, Esq., of Barnsbury-park.

JAGOE—CAMPBELL.—On November 21, at Petersham, Sydney, Henry Jagoe, B.A., M.B., Surgeon-Major A.M.D., to Mary Louisa, youngest daughter of the late Robert Campbell, Esq., Colonial Treasurer, of New South Wales.

LLOYD—UNDERHILL.—On January 10, at West Bromwich, Wilson Lloyd, J.P., F.R.G.S., of Myvod House, Wood Green, Wednesbury, to Margaret Emily, second surviving daughter of Thomas Underhill, M.D., J.P., of Summerfield, West Bromwich.

RAYMOND-BARKER—CRAWFORD.—On January 9, at Brighton, Edward Raymond-Barker, eldest son of the Rev. Frederic M. Raymond-Barker, M.A. Oxon., of Bisley, Gloucestershire, etc., to Rose Mary, youngest daughter of Mervyn Archdall Crawford, M.D. Cantab., F.R.C.P., of Millwood, Wilbury-road, Brighton.

STATTER—MEW.—On January 10, at Newport, Isle of Wight, William Aked Statter, L.R.C.P., of Thornhill House, Wakefield, to Marion Effie, eldest daughter of Joseph Perker Mew, Esq., of Newport, Isle of Wight.

STOKES—PERRY.—On January 11, at Highbury New-park, Henry Fraser Stokes, L.R.C.P., M.R.C.S., of 2, Highbury-crescent, N., to Ellen Mary, eldest daughter of the late William R. Perry, Esq., of Crouch Hill, Hornsey, N.

UPTON—BRINTON.—On January 10, at Wiebbenhall, Worcestershire, Alfred Upton, L.R.C.P., M.R.C.S., of Brighton, Sussex, to Norah, only daughter of the late Alfred Brinton, Esq., of Kidderminster.

WELLS—WOOSNAM.—On January 10, at Weston-super-Mare, Albert Primrose Wells, B.A. Cantab., L.R.C.P., of Brighton, to Grace, youngest daughter of the late Major-General J. B. Woosnam, Royal (Bombay) Horse Artillery.

WHITFELD—MORGAN.—On January 10, at Dilwyn, Herefordshire, William Clarke Whitfeld, F.R.C.S., of St. Ethelbert-street, Hereford, to Esther Grace, eldest daughter of the Rev. T. Morgan, M.A., vicar of Dilwyn.

DEATHS.

MACKINNON, CHARLES, Inspector-General of Hospitals, Bengal Medical Establishment (retired), at Millbrook Lawn, Regent's-park, Millbrook, near Southampton, on January 9, in his 83rd year.

OTTLEY, WALTER, M.B., F.R.C.S., at 98, Ladbroke-grove, Notting Hill, W., on January 14, aged 33.

PRIDDLE, SOPHIA, wife of George Luke Priddle, M.R.C.S., at Commercial-road East, on January 11, aged 54.

WYBRANTS, JONATHAN, M.D., Coroner for the County of Somerset, at Shepton Mallet, on January 1, in his 66th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

CENTRAL LONDON SICK ASYLUM DISTRICT.—Assistant Medical Officer and Dispenser. (*For particulars see Advertisement.*)

DENTAL HOSPITAL OF LONDON, LEICESTER-SQUARE, W.—Assistant Dental Surgeon. (*For particulars see Advertisement.*)

LONDON LOCK HOSPITAL, MALE HOSPITAL, AND OUT-PATIENT DEPARTMENT, 91, DEAN-STREET, SOHO, W.—House-Surgeon. Salary £50 per annum, with board and residence. Applications, with testimonials, to be sent in on or before January 23.

UNIVERSITY COLLEGE, LONDON.—The Jodrell Professorship of Physiology will be vacant at the close of the session. An endowment (which is at present of the value of £264 per annum) is attached. Applications will be received by Talfourd Ely, M.A., Secretary, on or before January 24.

DR. FORMAD'S RULES FOR EXAMINATION OF THE URINE.—Dr. Kempe, of Philadelphia, furnishes to the *Louisville Med. News* (December 23) the following rules from a private lecture delivered by Dr. Formad "On the Pathology of Renal Diseases":—"1. Sediment in the urine has no significance unless deposited within twenty-four hours. 2. Albumen in the urine does not indicate kidney disease unless accompanied by tube-casts. The most fatal form of Bright's disease—contracted kidney—has little or no albumen. 3. Every white crystal in urine, regardless of shape, is a phosphite, except the oxalate of lime, which has its own peculiar form—urine alkaline. 4. Every yellow crystal is uric acid if the urine is acid, or a urate if the urine is alkaline. 5. Mucous casts, pus, and epithelium signify disease of the bladder (cystitis) or of other parts of the urinary tract, as determined by variety of epithelium. 6. The urine from females can often be differentiated from the urine of males by finding in it the tesselated epithelium of the vagina. 7. Hyaline casts (narrow), blood, and epithelial casts signify acute catarrhal nephritis. Much albumen. 8. Broad hyaline casts, and epithelial dark granules and oil casts signify chronic catarrhal nephritis. At first, much albumen; later, less. 9. Hyaline and pale granular casts, and little or no albumen, signify interstitial nephritis. 10. Broader casts are worse than narrow casts, as far as diagnosis is concerned, for the former signify a chronic disease. 11. The urine should be fresh for microscopical examination, as the micrococci will change hyaline casts into granular casts, or devour them entirely in a short time. 12. Uric acid in the urine may, in Trommer's test for sugar, form a protoxide of copper, this often deceiving the examiner into the belief that he has discovered sugar. Thus, when urine shows only a trace of sugar, other methods of examination must be used—preferentially the lead test. 13. The microscope gives us better ideas of the exact condition of affairs in the examination of the urine than the various chemical tests."

APPOINTMENTS FOR THE WEEK.

January 20. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Mr. R. Bosworth Smith, "On John Lawrence at Delhi and its Neighbourhood."

22. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. (Dr. A. Ernest Sansom, "On the Treatment of some Forms of Valvular Diseases of the Heart—Mitral Regurgitation." (Lettsomian Lectures—II.)

23. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. W. C. Williamson, "On Primæval Ancestors of Existing Vegetation."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Sir Henry Thompson, (1) "On Three Cases of Polypoid Tumour of the Bladder—Removed by Operation"; (2) "On an Operation for Exploring the Bladder by Perineal Section of the Urethra, and for Removing Vesical Tumour, Impacted Calculus, etc.; with Cases."

24. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

HUNTERIAN SOCIETY (Royal Institution) (Special Council Meeting, 7½ p.m.), 8 p.m. Mr. G. T. B. Stevens, "On a Case of Bullet-Wound of Skull." Dr. Woakes, "On Vertigo, and the Group of Symptoms sometimes called Menière's Disease."

25. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Dewar, "On the Spectroscope."

26. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

ROYAL INSTITUTION (Council Meeting, 8 p.m.), 9 p.m. Mr. G. J. Romanes, "Recent Work on Starfishes."

QUEKETT MICROSCOPICAL CLUB (University College, Gower-street), 8 p.m. Mr. J. G. Waller, "On an Undescribed Sponge of the Genus Hymeraptria."

CLINICAL SOCIETY OF LONDON, 8½ p.m. Opening Address by the President. Dr. Longhurst, "On the Activity of the Infective Power of the Poison of Scarlet Fever during the Pre-eruptive Stage of the Disease." Mr. Shuter, "On Sub-periosteal Amputation at the Hip-joint (patient to be shown)." Dr. Broadbent, "On a Case of Supposed Hydrophobia treated by Chloral, with Recovery." Dr. S. West will show a Case of Diffuse Scleroderma. Dr. Lediard (Carlisle) will show a Case of Osteitis Deformans.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, January 13, 1883.

BIRTHS.

Births of Boys, 1425; Girls, 1383; Total, 2808.
Corrected weekly average in the 10 years 1873-82, 2786·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	777	790	1567
Weekly average of the ten years 1873-82, corrected to increased population ...	893·1	886·8	1779·9
Deaths of people aged 80 and upwards ...	...	...	67

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	3	3	3	3	...	3	...	3
North ...	905947	1	11	11	2	8	...	3	...	2
Central ...	282238	...	9	...	2	1	...	...	...	1
East	692738	1	8	5	3	10	...	1	1	1
South	1265927	5	15	12	4	7	...	5	2	5
Total	3816483	7	46	31	14	29	...	12	3	12

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·592 in.
Mean temperature	38·3°
Highest point of thermometer	44·7°
Lowest point of thermometer	30·3°
Mean dew-point temperature	35·1°
General direction of wind	E., E.S.E., & E.N.E.
Whole amount of rain in the week	0·07 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Jan. 13, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Jan. 13.	Deaths Registered during the week ending Jan. 13.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2808	1567	20·7	44·7	30·3	38·3	3·50	0·07	0·18
Brighton	111262	68	30	14·1	46·2	29·6	39·4	4·11	0·16	0·41
Portsmouth ...	131478	92	37	14·7	...	...	...	...	...	...
Norwich	89612	67	32	18·6	...	...	...	...	...	...
Plymouth	74977	64	40	27·8	53·4	33·3	43·3	6·28	0·39	0·99
Bristol	212779	156	63	15·4	45·0	29·9	38·2	3·44	0·17	0·43
Wolverhampton	77557	64	34	22·9	43·6	26·7	35·1	1·73	0·48	1·22
Birmingham ...	414946	307	175	22·0	...	...	...	...	...	...
Leicester	129483	93	46	18·5	43·2	30·8	37·5	3·06	0·15	0·38
Nottingham ...	199349	177	76	19·9	43·2	30·5	36·9	2·72	0·07	0·18
Derby	85574	63	15	9·1	...	...	...	...	...	...
Birkenhead ...	88700	34	45	26·5	...	...	...	...	...	...
Liverpool	566753	460	366	33·7	42·8	29·9	37·3	2·95	0·26	0·66
Bolton	107862	72	50	24·2	41·3	26·5	34·9	1·61	0·47	1·19
Manchester ...	339252	247	188	28·9	...	...	...	...	...	...
Salford	190465	144	97	26·6	...	...	...	...	...	...
Oldham	119071	78	56	24·5	...	...	...	...	...	...
Blackburn	108460	96	53	25·5	...	...	...	...	...	...
Preston	98564	73	58	30·7	...	...	...	...	...	...
Huddersfield ...	84701	49	30	18·5	...	...	...	...	...	...
Halifax	75591	48	35	24·2	...	...	...	...	...	...
Bradford	204807	129	87	22·2	42·4	29·0	36·5	2·50	0·94	2·39
Leeds	321611	222	160	26·0	47·0	29·0	37·7	3·17	0·43	1·09
Sheffield	295497	198	131	23·1	41·0	30·5	36·7	2·61	0·70	1·78
Hull	176296	128	63	18·6	42·0	31·0	37·3	2·95	0·19	0·48
Sunderland ...	121117	109	65	28·0	...	...	...	...	...	...
Newcastle	149464	119	70	24·4	...	...	...	...	...	...
Cardiff	90033	71	39	22·6	...	...	...	...	...	...
For 28 towns ...	5620975	6236	3708	22·4	53·4	26·5	37·6	3·12	0·34	0·86
Edinburgh	235946	146	81	17·9	44·9	28·4	37·7	3·17	0·02	0·05
Glasgow	515589	390	302	30·6	45·0	23·0	38·9	3·83	0·00	0·00
Dublin	349885	197	197	29·4	48·9	24·7	40·7	4·83	0·55	1·40

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·59 in. The highest reading was 30·30 in. on Sunday morning, and the lowest 29·13 in. on Saturday morning.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

W. Grove.—The climate at Richmond differs, probably, according to the position of your residence—whether at the river level or on the top of the hill. You had better consult a medical man.

L.R.C.P. Lond.—The history of the valuable mace of the Royal College of Surgeons is a rather curious one. It is well known that the late Sir Everard Home, twice President of the College and Serjeant-Surgeon to George IV., was a great favourite with His Majesty. One day, when the King was in a particularly good humour, Home ventured to ask the King (as president of a Royal college) if he would grant him a mace. "Certainly; by all means!"—little dreaming the result. Whereupon Sir Everard lost no time in driving off to Rundle and Bridge, goldsmiths to the Royal family, and ordering the mace now always placed in front of the President at all meetings of the College. Some two years after the "little bill" was sent in, when His Gracious Majesty's attention was drawn to it, and, meeting Home, he demanded an explanation of this £200. He was reminded of his gracious permission, but immediately said he did not expect to pay for the thing. However, it is believed the cost of the mace was put down among the other bad debts, and ultimately paid for by the nation.

Mr. Williams.—The lectures of the Professors of Comparative Anatomy and Physiology, and also the Hunterian Oration, will be delivered in the next and ensuing month.

"First Aid" to the Injured.—A "first aid" box, containing a stretcher, bandages, and other appliances, was some time ago stationed in the General Post Office yard for use in case of need. The medical officer, Dr. Steet, has reported to the Committee of the St. John Ambulance Association that lately the stretcher was found most useful in transporting to St. Bartholomew's Hospital a workman who sustained severe injuries (subsequently fatal) by a fall from a scaffolding at the work at the Post Office. Three constables, who had attended the Association classes, acted as bearers, and the hospital authorities speak in high terms of the manner in which the patient was conveyed on the stretcher, and the measures taken to alleviate his sufferings as far as possible.

E. T.—The views of the celebrated Dr. Caspar on longevity are not only interesting, but, if correct, may lead to important conclusions. He states that "marriage is decidedly favourable to longevity," and adds that the medium duration of life is as follows:—In Russia about 21 years, in Prussia 29, in Switzerland 34, in France 35, in Belgium 36, and in England 38 years. The so-called climacteric periods of life do not seem to have any influence on the longevity of either sex.

Mr. Long.—It is a Hebrew proverb, "When the sun rises the disease will abate." It originated from a tradition that Abraham wore a precious stone round his neck, which preserved him from disease, and which cured sickness when looked upon. When Abraham died, God placed this stone in the sun.

Precautions against Accidents to Working Men: Germany.—In the Imperial Parliament a motion has been carried in reference to taking speedy steps in accordance with a law of 1878, to secure certain classes of working-men against peril to life and health. In 1881, of 2,000,000 labourers, 1986 had been killed by preventable causes, while 1780 had been rendered permanently, and 85,056 temporarily, unable to work. Against this formidable list of casualties, the chief precautions demanded were the adequate lighting of factories and the proper construction of staircases, the closing-in of engines and flywheels, the security of wire ropes, etc., and the restriction of juvenile labour.

A Vaccination Inquiry.—Dr. Barry, the Local Government Board inspector, has reported on a case of death from vaccination at Darley. He intimated that there was little doubt the infection was inoculated by some dirty application used by the vaccination officer. As a result the Board of Guardians has required this officer to resign.

De Candolle.—Mr. Archibald Menzies, F.L.S., the celebrated botanist, died so long ago as February 18, 1842. He was then the last survivor of Vancouver's voyage. Mr. Robert McCormick, F.R.C.S., surgeon and naturalist to all of Parry and Ross's antarctic expeditions, and who commanded an open-boat expedition up Wellington Channel in search of his old friend Franklin, is still alive, and apparently quite well. He resides at Wimbledon, where we had the pleasure of seeing him very lately. As he was admitted a member of the College of Surgeons in 1822, he must now be in his eighty-third year.

Artisan Factory Inspectors.—As to the desirability of appointing representative members of the artisan class as inspectors of factories, the appointment of Mr. J. D. Prior, now stationed as a factory inspector in Birmingham, followed upon the action of the Trade Union Congress in pressing the question upon the attention of the Government. It is now stated that the Home Secretary has also nominated Mr. J. W. Davis, Secretary of the National Brass Founders' Association, as an inspector of factories.

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How to Promote Temperance.—The Sheffield Board of Guardians have decided that in future no allowance be made in cases where officials do not take beer. The master of the workhouse tendered his resignation, which was accepted.

Bad Plumbing.—An action was brought by a plumber in the Croydon County Court against a civil engineer for upwards of £30, for the erection of a lavatory. The defendant made a counter-claim of £120 on the ground that, the work being improperly done, sewer-air escaped into the house and caused the illness of six members of his household and the death of his son. He therefore claimed the doctor's bill and other expenses. The judge disallowed the plaintiff's claim and gave judgment for the defendant.

The Bow Cemetery.—With regard to the grievances in connexion with this cemetery, to which we lately alluded, Dr. Hoffman, Medical Inspector, Burials Acts Office, Home Office, has held an inquiry into the alleged irregularities which were admitted by the Cemetery Company. The sanitary officer, Dr. Corner, stated that no case of injury to health from the grievances complained of had come before him. After hearing various witnesses, Dr. Hoffman said he should propose an Order in Council, to which the cemetery authorities would have to adhere under a penalty of £10 for each offence against it.

Anglicanus.—The total cost of the rebuilding of the National Hospital for the Paralysed and Epileptic, in Queen-square, Bloomsbury, will be £40,000. Half of this amount has been raised. The balance of £20,000 is still required to complete the work, without involving the Board in debt. There will be provided 150 beds, and also a special ward for children.

Need of Hospital Accommodation.—At the meeting of the Runcorn Board of Commissioners, last week, the chairman, Dr. Steele, remarked, in reference to a poor man who was injured in the town, and who was conveyed to the Liverpool Royal Infirmary, where he died, that it was not very creditable that a town of 15,000 inhabitants should have no hospital. He believed that one could be easily maintained if the clergy and ministers in the town would organise a "Hospital Sunday," and he had issued invitations to the clergy and tradespeople of the neighbourhood to discuss the question.

A Penalty for Playing at Football.—It is stated that an employer of young men in Manchester has decided that he would not allow salaries to any of his clerks who were injured in football matches, "as the game was too dangerous to be played with safety, and he did not feel it right that he should pay for absences caused in this manner."

Curious Disclosures.—An inquest has been held at Macclesfield touching the death of an old woman who died from "natural causes." The inquiry was considered necessary from the fact that the woman died a few moments after taking a dose of medicine which had been "dispensed" by the housekeeper of a surgeon who was the doctor to a sick club of which the deceased was a member. This evidence drew from the coroner an expression of surprise, whereupon the housekeeper rejoined, "There's a whole row of bottles out of which I can get medicine!" Moreover, the club doctor had given a certificate of death, notwithstanding, as alleged by the deceased's relatives, he had not seen her during her illness. The verdict of the jury censured the doctor, and the coroner intimated that it would be forwarded to the "proper quarter."

Cemeteries in the Hands of Private Companies.—In reporting upon the state of the private cemeteries in Edinburgh, Dr. Littlejohn urges on the Town Council that the interment of the dead should no longer be left to private companies, but should be under the control of the authorities, who should provide, by forming a public cemetery, means of interment for the poorest of the inhabitants at the lowest possible rates.

"Sisters" and Lay-Nurses, France.—The municipal authorities of Auxerre about two years ago dismissed the sisters who officiated as nurses in the town hospital, and filled their places by lay-nurses. These women at once became the objects of unkind gossip. Several newspapers were fined for stating that two of the nurses had led an immoral life, and that one had been in prison. Lately typhoid fever prevailed at Auxerre, and one or two of the same papers announced that the hospital authorities had been obliged, by the desertion of the lay-nurses, to recall the sisters. This was devoid of truth. The statement appeared as a telegram in the *Figaro*, and was reprinted in the *Pays*. On the menace of a prosecution, the paragraph was contradicted, but the nurses brought a joint action against the offending journals. In consideration of the withdrawal of the libel, only small fines were inflicted, with 50 fr. as damages to each of the plaintiffs.

Mortality: Edinburgh.—The average death-rate of the city for 1882 was 19·54 per thousand of the population, as compared with 20·10, the average for the five previous years.

Longevity of Baronets.—The venerable Sir Moses Montefiore will, on October 25 next, enter upon his hundredth year. According to "Webster's Red Book" there are at least twenty baronets living who were born before the commencement of the present century.

Onslaught upon Commons.—During the ensuing parliamentary session no less than thirty-seven Bills will be considered, by which powers are sought to enable various promoters of schemes to acquire four hundred the yet remaining open commons.

Denbigh.—At the recent monthly meeting of the Town Council it was reported that the town was remarkably healthy. The nine deaths during the past month including two people over ninety, one eighty-four, and others over seventy years old.

Grateful for Medical Services!—"How is your wife this morning?" inquired a doctor of one of his patients. "She is dead, I thank you," was the widower's answer.

A Lady's Opinion of Grocers' Liquor Licences.—Mrs. Margaret B. Lucas, sister of Mr. John Bright, M.P., speaking at a temperance meeting at St. Pancras Vestry Hall, said that every day evidence came to light to show that grocers' licences were doing an immense amount of mischief, and if Mr. Gladstone lived until the age of one hundred years he could never undo the evil that had been done by this measure.

Medical Men on Food and Cookery.—Several interesting addresses on food and cookery were delivered by medical men at the recent Cookery Exhibition, held under the auspices of the Abstainers' Union, in the Crown Halls, Sauchiehall-street, Glasgow.

Anti-Vaccination Items.—At the meeting convened by the St. Pancras Anti-Compulsory Vaccination Society, presided over by Mr. Daniel Grant, M.P., resolutions were adopted in favour of the repeal of the Compulsory Vaccination Laws, and of disbelief in its efficacy.——During the past year upwards of 500 persons in Leicester have been fined 10s. each for non-compliance with the Vaccination Act. Others have refused to pay when fined, and distraints have been levied upon their goods, which have been sold by public auction. At the last meeting of the Board of Guardians it was stated that seventeen others had refused to pay the fine, and on the Board being asked for instructions as to distress warrants in these cases, it was decided, by a majority of seven, not to take out the warrants, and a notice of motion was given that the vaccination inspector be instructed not to apply for any more summonses against persons who refused to have their children vaccinated.

COMMUNICATIONS have been received from—

The President of the Harveian Society, London; Mr. Frank Hare, Liverpool; The Sanitary Commissioner for the Punjaub, Lahore; The Registrar-General for Scotland, Edinburgh; Dr. Edward Penny, Greenwich; Dr. Alexander Henry, London; Mr. Edward East, London; Dr. W. J. Morton, New York; Mr. J. Chatto, London; Sykes, Doncaster; Dr. W. H. Barlow, Manchester; Mr. Clement Lucas, The Honorary Secretary of the Medical Society of London; Dr. London; Mr. H. T. Wood, London; Mr. J. E. Ingpen, London; Dr. Broadbent, London; Mr. J. C. Hurley, London; Dr. Cockle, London; Mr. Blackett, London; Dr. Sidney Coupland, London; Mr. W. Grove, Richmond, Surrey; The Secretary of the Royal Institution, London; The Secretary of the London Society for the Abolition of Compulsory Vaccination; The Honorary Secretary of the Clinical Society of London; The Secretary of the London Sanitary Protection Association, London; Dr. Whitson, Glasgow.

BOOKS, ETC., RECEIVED—

Ueber die Gartner'schen Gänge beim Weibe, von Dr. J. Kocks—On Diseases of the Bladder and Prostate, etc., by David Jones, M.D.—Atlas der Gelenkkrankheiten, von Dr. August Schreiber—Report on the Health, etc, of Kensington from December 3 to 30, 1882—Anatomy, Descriptive and Surgical, by Henry Gray, F.R.S.—A Manual of Nursing, by Charles J. Cullingworth, M.D.—General Pathological Anatomy, by Ernest Ziegler—Waterworks as Constructed in the United States, by W. J. McAlpine, M.Inst.C.E.—The Causation of Sleep, by James Cappie, M.D.—British Homœopathic Pharmacopœia—The Alexandra Palace and What to Do with it, by R. Oakley—On Representative Government in the British Medical Association, by Sampson Gamgee, F.R.S.E.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Deutsche Medicinal-Zeitung—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Brain—Students' Journal and Hospital Gazette—Revue des Sciences Médicales—Journal de Médecine—Australian Medical Gazette—Medical News—Denver Medical Times—Nordiskt Medicinskt Arkiv—Journal of the Vigilance Association—Journal of the British Dental Association—Boston Journal of Chemistry—Maryland Medical Journal—Journal of Psychological Medicine.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

St. Albans Union.—Dr. R. H. Prior, Medical Officer for the Second District, is deceased: area 12,090; population 6148; salary £24 per annum.

Thingoe Union.—Mr. K. J. Dougall has resigned the Fourth and Fifth Districts. Fourth District: area 8080; population 1552; salary £50 per annum. Fifth District: area 6660; population 1697; salary £42 6s. per annum.

Tynemouth Union.—The Cramlington District is vacant: area 7680; population 11,676; salary £50 per annum.

APPOINTMENTS.

Castle Ward Union.—Robert S. Sibbit, M.B., C.M. Edin., to the Stamfordham District.

Cheadle Union.—Edward J. Leapingwell, B.M. and M.C. Edin., to the Ipstones District.

Henstead Union.—George Lowe, L.F.P.&S. Glasg., L.R.C.P. Edin., M.C. and B.M. St. And., to the Third District.

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ORIGINAL LECTURES.

THE LETTSOMIAN LECTURES
ON THE
TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

By A. ERNEST SANSOM, M.D. Lond., F.R.C.P.,
Physician to the London Hospital; Senior Physician to the North-Eastern Hospital for Children, etc.

LECTURE II.—MITRAL REGURGITATION.—JAN. 15.

MORBID ANATOMY—MITRAL REGURGITATION IN ANÆMIA, IN NEUROSES OF THE SYMPATHETIC, IN ACUTE FEVERS, IN RHEUMATISM, AND IN CONDITIONS OF HIGH ARTERIAL TENSION—TREATMENT TO RESTORE COMPENSATION—DIGITALIS—BELLADONNA—CASCA—CAFFEINE—CONVALLARIA MAJALIS—MORPHIA—ALKALIES, IODIDES, ETC.

I HAVE to ask your attention this evening to the subject of the treatment of various conditions of disease associated with a certain imperfection in the mechanism of the heart—an imperfection of closure of the left auriculo-ventricular orifice at the time of systole, occasioning the reflux of a portion of the contents of the left ventricle into the left auricle, the mitral valve being inadequate to close the orifice.

Pathological anatomy teaches that such result may be brought about by several varieties of morbid change:—

1. By dilatation of the left ventricle without structural disease of the valve. So the free borders of the curtains are drawn upon by their circumferential attachments, and prevented from a perfect apposition in systole.

2. By the changes in the valve-curtains, the tendinous cords and fleshy columns induced by endocarditis, and the changes consecutive thereto. Vegetations about the orifice may prevent its perfect closure. Or the valve being thickened, its segments may be imperfectly coäpted. Or curtains, cords, and columns, any or all, may become shrunken, thickened, fibrous, or cartilaginous from sclerous change. Or from deposit of earthy salts, the valve and orifice may be hard and calcareous.

3. The valve-curtains, cords, or columns may become ruptured, and therefore incompetent. It has been supposed that this may occur from sudden strain in a healthy heart; but Drs. Wilks and Moxon have given strong reasons for the conclusion that there must have been some dilatation, at least, of the left ventricle previously. They consider that this precedent is not of infrequent occurrence, and say—"The snapping of an overstrained mitral tendon in a dilated heart we believe to be a relatively very common cause of severe heart-disease, converting the very bearable trouble of a moderate dilatation into a hopeless disablement."(a)

4. Patches of atheromatous disease may be observed upon the valve, with consecutive degenerative change, rendering it inadequate.

5. Portions of the valve and the surrounding structures may be destroyed by ulceration.

Such are, in brief, the changes which are observed on post-mortem examination to render perfect closure of the left auriculo-ventricular aperture impossible.

Mitral regurgitation is, however, not to be wholly interpreted by pathological anatomy. It is to clinical investigation that we must chiefly look for guidance. We ask ourselves, first, from what sign observed in the living body do we infer that the mitral orifice is incompletely closed in systole? The answer is, that there is a *consensus* amongst observers that a murmur heard with the first sound at the apex of the heart, localised at this point, conducted externally towards the left axilla, or to the back in the neighbourhood of the angle of the left scapula, indicates that there is in existence a condition permitting regurgitation into the left auricle. The sign is almost, though not quite, pathognomonic. The only condition with which it is likely to be confounded is, in my opinion, pericardial roughening at or about the apex. I have never known a difficulty about the differential diagnosis in the case of adults, but I have observed such difficulty several times in children. In cases of children I have repeatedly said that the quality, character, and situation of a systolic apical murmur will not declare with precision whether there is exocardial or endocardial disease. My House-Physicians at the North-Eastern Hospital for Children have observed this with me. A murmur which has been ascribed to mitral regurgitation by competent observers has been proved on post-mortem examination to be due to roughening of or fibrinous exudation on the pericardium in the neighbourhood of the heart's apex.

The difficulty of diagnosis is, however, an infrequent one, and we may conclude that in a vast majority of cases the existence of a murmur having the characters which I have mentioned, indicates a condition of mitral regurgitation.

Combined clinical and necroscopic observation, however, soon convinces us that in certain cases, wherein we have determined from such physical sign that mitral regurgitation existed during life, no lesion whatever indicating inadequacy of the mitral valve to close its orifice has been discovered after death. Moreover, in some cases where we have not only observed the sign mentioned, but where the whole category of signs, symptoms, and consecutive changes which experience has taught us to associate with mitral inadequacy has been present, the autopsy has demonstrated no determinate lesion at the orifice.

It will best serve a practical purpose, I think, if we divide the cases in which the signs indicating mitral regurgitation are evident, into clinical groups, discussing the bearing of the collateral phenomena upon treatment in each group. We shall thus consider the cases just as we meet with them in practice.

I. A case presents itself, manifesting signs indicating mitral regurgitation in the subject of marked *Anæmia*. We have to inquire whether or no there has been antecedent disease leading up to organic change at the mitral orifice. Supposing such signs are not in evidence, have we a right to assume that actual mitral regurgitation can be induced by the condition of anæmia without concurring causes? The answer is, in my opinion, undoubtedly in the affirmative. In cases of anæmia and chlorosis a murmur is sometimes heard exactly in the site of that indicating mitral regurgitation. I have observed not only this sign, but all the concurring signs of cardiac failure, in a woman who suffered from excessive periodic hæmorrhages per vaginam, associated with uterine fibroids. I was called to such a case (Mrs. H., aged thirty-nine), manifesting severe dyspnœa such as one meets with in cardiac disease, extensive œdema, and a loud systolic murmur heard at the apex of the heart. The patient was very anæmic from copious hæmorrhage, the cause of such hæmorrhage having been diagnosed by Mr. Spencer Wells to be uterine fibrosis. With care, rest, and suitable treatment, she recovered from all the symptoms denoting cardiac disease, and the murmur wholly disappeared. This I consider to have been an instance of what Professor Balfour has termed "curable mitral regurgitation."

In the disease known as *progressive pernicious anæmia* it is common to find an apex-systolic murmur. Such was noticed in four of eight cases recorded by Dr. Byrom Bramwell. In one an observer had diagnosed the case as cardiac dropsy from mitral insufficiency.(b) In three cases recorded by my colleague, Dr. Stephen Mackenzie, an apex-systolic murmur was noted. Though in many of such cases the murmurs are heard at the base of the heart and over the site of the pulmonary artery, they are, as Dr. Stephen Mackenzie has said, "sometimes loudest at the apex of the heart, conducted into the axilla and heard at the angle of the left scapula. It is remarkable how loud and harsh these bruits sometimes are."(c)

A series of phenomena strictly analogous to those just mentioned as occurring in the human subject can be induced in animals by copious bleedings. Dr. Donald MacAlister says: "When an animal is bled till it is feeble, a murmur indicating regurgitation from the ventricle is heard with the heart-sounds. You may inject a proper saline solution to make up the normal quantity of circulating fluid, but still the regurgitation occurs. As the animal makes blood again,

(a) *Cf.* "Pathological Anatomy," by Drs. Wilks and Moxon. Second edition. London: John Churchill and Sons. 1875.

(b) *Edinburgh Medical Journal*, November, 1877.

(c) "Clinical Lecture on Idiopathic, Essential, or Pernicious Anæmia," *Lancet*, 1879.

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so that its muscles are again properly nourished, the murmur disappears."(d)

And now, assuming that in these cases there is a veritable regurgitation, how is such brought about? The explanation is, I think, given by the careful experiments conducted by Ludwig and Hesse at Leipzig, which have been admirably summarised by Dr. Donald MacAlister.(e) The mechanism for the closure of the left auriculo-ventricular orifice does not reside in the valve alone; the surrounding muscles of the ventricle have an active share not merely in floating up the valve-curtains, but in reducing the size of the aperture which these valve-curtains have to close. In Dr. MacAlister's words: "As systole begins, the muscles surrounding the ostia contract; and presently, instead of the round gaping orifices of diastole, the valves have to close oval and compressed ones. . . . . The base muscles do their share of the work of closure, the valves promptly complete it." When the muscles of the base are enfeebled, as in the cases which we have been considering, the valve-curtains are insufficient to close the orifice because such orifice is wider than usual. It is not that the aperture is dilated, but that it is insufficiently contracted, the aid of the muscles which normally produce such contraction being lost.

Regurgitation may result, therefore, from feebleness of muscle, and restoration to the normal may occur with improved nutrition; but it must be recollected that persistent anæmia or repeated blood-lettings (as shown by experiments on animals) will induce a fatty degeneration of the heart-muscle, a morbid condition which may be irrecoverable.

I think it will be agreed that both for prognosis and treatment it is important that we should be able to make the differential diagnosis between a regurgitation due to feebleness of muscle, the result of anæmia, and organic disease at the mitral orifice. I will suppose that in a case of Anæmia presenting a systolic murmur at the apex there is no evidence to lead us to suspect previous valvular disease, and no history of Rheumatism. It may be, however, that the regurgitation is not from adynamia of the ventricle, but from an endocarditis of insidious origin, such as I have previously described. Can we rely for guidance on the physical signs? I will mention an illustrative case. I was called a short time ago to a patient at the London Hospital, who was supposed, after the preliminary examination, to be suffering from mitral disease. There was a loud apex-systolic murmur, typical of mitral regurgitation. On delineating the outline of the heart by percussion, however, I noted that there was no notable dilatation such as one would expect to find in organic heart-disease when failure was imminent; for the patient was extremely ill. Noticing the very marked pallor, I suspected that this might be a case of Idiopathic Pernicious Anæmia, and in confirmation of this view I found the fundus oculi studded with abundant hæmorrhages. I have no doubt, both from these reasons and from the clinical history, that this was a case of mitral regurgitation in association with pernicious anæmia. Unfortunately, the patient being a Hebrew, an autopsy was not performed. I would insist, therefore, on the value of *determining the outline of the heart by percussion* as a means of differential diagnosis in these cases. In anæmia, as I have observed, the heart is not notably dilated.

In the case I have mentioned as occurring in conjunction with hæmorrhage, I found the *determination of the tension in the arterial pulse* to be a very important means of differential diagnosis. In advanced organic mitral disease—when, for example, as in the case cited, dropsy and extreme cardiac dyspnœa have supervened—the arterial tension is usually low. In the case mentioned I found the opposite indication—the tension, as shown by the sphygmographic tracing, was rather high. It is an unexpected thing, as Dr. Broadbent has pointed out, that "in a disease such as chlorosis, characterised by debility, there should be high arterial tension: but such is the fact."(f) My experience is in this particular entirely in accord with Dr. Broadbent's.(g)

These two signs, therefore—an area of cardiac dulness not perceptibly greater than the normal, and a heightened tension in the systemic arteries,—I consider to be of the greatest importance in differentiating in a very anæmic patient between organic disease at the mitral orifice and incomplete closure from adynamia.

As regards treatment, such differentiation is important, for I have never known, in the class of cases we are now considering, any marked improvement follow the administration of the usual cardiac tonics, such as digitalis and iron. In the cases attended with hæmorrhage, it is, of course, of the first importance to arrest this at its source. Rest, and the administration of assimilable food, are no less important indications. In this connexion I may call attention to the great value I have observed to attach to *supplementary alimentation by the rectum* in such cases. I have long tried the plan of using defibrinated ox-blood for a nutrient enema, as advocated by my friend, Dr. A. H. Smith, of New York. In comparing results, however, with those in which artificially digested food has been employed, I consider that the balance of evidence is in favour of the latter plan. I have had prepared mixed peptone enemata—beef, milk, and farinaceous food—which have been proved to preserve in perfectly good condition for long periods. These have the advantage of being available at a moment's notice, it being only needful to render them diffluent with warm water. From two to four ounces are injected slowly into the rectum, and repeated every three or four hours. In many cases I have caused to be added the dried ox-blood (*sanguis bovinus exsiccatus*), in the proportion of a drachm to the ounce. I have lately, however, adopted a simpler plan with good results—using, instead of peptoned food, equal parts of warm milk and cod-liver oil as a nutritive enema.

In the treatment of cases of idiopathic anæmia, I have found no drug-treatment so efficient as the administration of arsenic (Fowler's solution in small doses, gradually increased). I have observed, as has been recorded by others, complete recovery with the disappearance of the cardiac murmur under such treatment, combined with rest and careful nutrition.

It has been supposed by Naunyn, Balfour, and others that actual regurgitation through the mitral orifice is in existence in cases where a systolic murmur is observed in the second left interspace near the border of the sternum. I am far from convinced that such view is correct, and prefer to adhere to the opinion that such murmurs are generated usually in the pulmonary artery. A consideration of this debateable question is unnecessary here, as I am dealing with those conditions in which observers would generally agree that mitral regurgitation was undoubtedly indicated.

II. We will now assume that a systolic apex-murmur is present in a patient showing signs of *a neurosis of the cervical sympathetic*. It has been frequently noted that a murmur at the apex has existed in the subjects of Exophthalmic Goître (Graves' or Basedow's Disease); yet, on post-mortem examination, no disease at the mitral orifice has been discovered. In these cases anæmia may be present, but not of necessity. It is not causally related with the phenomena. Organic heart-disease may co-exist, but such coincidence is rare. It is important to recognise—especially with regard to treatment—that in the subjects of Graves' disease mitral regurgitation occurs without valvular lesion. I now wish to draw attention to a point with reference to this curious affection, viz., that, as I have myself observed, the triad of symptoms—the protrusion of eyeballs; the thyroid enlargement; the paroxysmally disturbed, rapid, palpitating heart—can be disunited: and we may observe in a given case a union of two of the groups, or even one group alone. For example: I lately brought before the Ophthalmological Society a patient manifesting pronounced Exophthalmos without thyroid or cardiac symptoms. I have lately seen in consultation a case manifesting only the cardiac phenomena, the heart's action being very rapid and the paroxysms of palpitation extreme. Again, I have lately observed the case of a lady in whom there is a combination of the cardiac and thyroid symptoms without exophthalmos. In each of these cases there was a history of shock, mental anxiety, or nervous exhaustion as a proximate cause. In the last case the cardiac trouble was severe; besides distressing paroxysms of palpitation a loud murmur was manifest at the apex, and extensive œdema supervened. In fact, the case closely resembled one of organic mitral

(d) *British Medical Journal*, October 28, 1882, page 825.
(e) "Remarks on the Form and Mechanism of the Heart," *loc. cit.*
(f) *British Medical Journal*, August 26, 1882, page 355.
(g) Dr. Allbutt has found that in progressive pernicious anæmia the heart is not dilated, but simply atrophic. Dr. Theodore Williams has observed that some cardiac hypertrophy often follows anæmia, but dilatation is not evidenced. (*Cf.* discussion on Professor Balfour's paper, "Arguments in Favour of Dilatation of the Heart as the Cause of Cardiac Hæmic Murmurs, etc," *British Medical Journal*, August 26, 1882, page 354.)

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disease. There can be but little doubt, I think, that in these cases there is disorder, if not disease, of certain ganglia of the cervical sympathetic. The record of fatal cases in which such disease has been actually demonstrated is now tolerably extensive. Trousseau, Cruise and McDonald, Reith and Shingleton Smith, have recorded cases in which some of the ganglia (usually the inferior cervical) have been enlarged, atrophied, or degenerated. Such observations have a distinct bearing on treatment. In the cases which I have seen, ordinary tonics and digitalis have been of very little benefit, but great improvement has followed galvanisation of the Cervical Sympathetic. I have employed the continuous current, from twenty to forty elements (Léclanché). One pole may be placed behind the lower jaw in front of the sterno-mastoid, and the other either at a corresponding point of the opposite side, or at the nape of the neck right or left of the vertebra prominens, or above the sternum at the inner edge of the insertion of the sterno-mastoid.(h)

III. I now turn to a third group of cases, and assume that the indications of mitral regurgitation are manifest *during the evolution of certain fevers*. In the course of typhoid fever, for example, a systolic murmur may be discovered at the apex. There is no history of its existence before the attack, but it has arisen during the course of the disease. M. Hayem has especially studied these phenomena. He says, "In the course, or at the end, of the second week there arises, in a certain number of patients, a bellows murmur with the systole. At the time of its first appearance this murmur may be soft and of little intensity. Its maximum is at the apex in the neighbourhood of the nipple, but it is prolonged towards the base, becoming feebler there. Often this bruit has an intensity and roughness equal to organic mumurs; or at first of only slight intensity, it may soon become louder, and make one believe in the existence of endocarditis. Moreover, it may vary in intensity from day to day, or may become modified by a change of position of the patient, as one may observe when auscultating in the lying and sitting positions alternately."(i) In typhoid fever, therefore, it may be an important question as to the nature of such a murmur, and its bearing on treatment. The clinical evidence shows that in the course of the fever the murmur changes its site and fades away, and that it may be accompanied by reduplication of heart-sounds and disturbances of cardiac rhythm. Thus, in the case of a young lady aged nineteen, observed by myself, there appeared, on the eleventh day of typhoid fever, a soft systolic murmur, left of the sternum, at the third costal cartilage; on the thirteenth day the bruit extended nearly as far as the apex; on the fifteenth it reached the apex; on the seventeenth it was right of the apex, and there was reduplication both of the first and second sounds; on the nineteenth, twentieth, and twenty-first days reduplication of the first sound only was heard, the murmur having disappeared.

The murmur, therefore, is an evanescent one. To what is it due? The changes are, according to M. Hayem's observations, not in the endocardium nor pericardium, but in the muscle of the heart. In fatal cases the muscular fibres present a granular and fatty degeneration, or a special form of *vitreous* degeneration; the areas of morbid change are disseminated in an irregular manner here and there throughout the cardiac muscle. There are, besides, a multiplication of the muscular nuclei and aggregation of cellular elements. In fact, the disease is a form of myocarditis.

It is, I think, sufficiently proven that the murmur occasionally heard at the apex in cases of typhoid fever is due to regurgitation on account of imperfect apposition of the valves of the left or right sides from enfeeblement, by disease, of the muscular fibres in certain areas of the heart-wall. It does not appear that the occurrence of such murmur renders the prognosis more grave; but sudden death, in all probability from myocarditis, may occur in typhoid without any special evidence of direct cardiac impairment previously. Its occurrence, however, should make us watchful, and cases presenting any of the phenomena indicating myocarditis in typhoid should be observed, and treated with a view of preventing subsequent dilatation.

Analogous myocarditis has been described in variola (by MM. Desnos and Huchurd),(k) and in severe forms of intermittent fever as observed in Africa by M. Vallin.(l)

It is obvious that a recognition of the nature of the alteration which produces a mitral regurgitant murmur in the cases we have been considering must have an important bearing on treatment. We need not fear that endocarditis has arisen as a complication, nor have we to debate as to an anti-rheumatic plan of treatment. The indication is to keep the disturbed muscle of the heart as tranquil as possible, and of course to promote as good a nutrition as the circumstances will permit.

(*To be continued.*)

(h) Such treatment has been recorded as successful by von Dusch, Chvostek, Moritz Meyer, Eulenburg, Guttmann, Remak, Ancona, and others. *Cf.* Althaus, "Medical Electricity," third edition, pages 165 *et seq.*, 335, 621; Hayden, "Diseases of Heart and Aorta," pages 1050 *et seq.*; Ancona, *Giornale Veneto delle Scienze Mediche* (*British Medical Journal*, June 1, 1878, page 790).

(i) *Cf.* "Des Manifestations Cardiaques de la Fièvre Typhoide," par M. G. Hayem: *Le Progrès Médical*, 17 Juillet, 1875, page 401 *et seq.*

(k) "Des Complications Cardiaques dans la Variole, et notamment de la Myocardite Varioleuse," *Union Médicale*, 1870-71.

(l) *Union Médicale*, 1874, pages 293 and 316.

ORIGINAL COMMUNICATIONS.

TWO CASES OF HEPATOTOMY FOR HYDATIDS.

By J. KNOWSLEY THORNTON, M.B., C.M.,
Surgeon to the Samaritan Free Hospital.

The following cases present in strong contrast the results of two different methods of treatment; they also present other features of interest, upon which I shall make some remarks at the end of this communication.

Case 1.—M. G., aged twenty-two, married twelve months, never pregnant, was placed under my care at the Samaritan Hospital by my friend Mr. Corner, of Poplar, in December, 1880. When admitted she was much emaciated and very anæmic. There was a marked cystic enlargement of the liver, most prominent in the centre of the abdomen, and extending down half-way from the umbilicus to the pubes; there was also a considerable quantity of free fluid in the peritoneum. There were the marks of five separate punctures over different parts of the hepatic tumour.

History.—"There had been a lump in her stomach ever since she could remember," about the size of a hen's egg; painless, and situated to the right of the navel; it could not be moved about at any time. Soon after menstruation appeared at fifteen, it began slowly to enlarge, but did not trouble her. When eighteen she had some recurrent attacks of pain in it or in connexion with it, extending over three months; but she remained stout and well. Six months after marriage the attacks of pain came again, and the swelling enlarged more rapidly. She was admitted into the London Hospital under the care of Dr. Warner, and was in for two months. The swelling was aspirated five times. On the first occasion about two quarts of darkish fluid were drawn off. After the fourth tapping she was feverish and felt very ill, and after the fifth was still worse; and had been getting rapidly worse up to the time of admission. Dr. Warner was kind enough to furnish me with information which confirmed my diagnosis of hydatids of liver, and the general condition of the patient left no doubt in my mind that putrid suppuration had taken place in the cysts as the result of the tappings.

On December 20, assisted by Messrs. Meredith and Doran, and in the presence of Dr. Warner and others, I made a five-inch incision over the tumour, above and to the left of the umbilicus. It was exposed, covered with adherent omentum, and surrounded by coils of matted intestines. There was much free fluid removed from the peritoneum, and the tumour was then packed round with carbolised sponges and opened. Horribly fœtid pus and broken-down hydatids escaped; and another cyst higher up was cleared through the first of similar contents. The sacs were well cleaned out with iodine, the edges of the opening stitched to the opening in peritoneum and parietes, and two large drainage-tubes introduced. There were twenty-five pints and a half of mixed ascitic fluid, pus, and hydatids. The discharge from the tubes was very free, and apparently aseptic, but coffee-ground vomiting came on, with rapidly ascending pulse (highest temperature 101·6° Fahr.), and

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patient died of septicæmia in thirty-one hours from the operation. I should have mentioned in the history that she had passed tapeworms when a child.

Case 2.—H. H., aged forty-one, single, was admitted under my care in the Samaritan Hospital on December 19, 1881 (just one day short of the year from the operation on the previous case). She was a cook, and, though looking much older than the age stated, was fairly healthy. I found the abdomen much distended with a cystic tumour, which was continuous with the liver above, and reached down almost to the pubes; all the right side of abdomen was dull, and a narrow margin of clear percussion extended from the spleen all round the left side, and below the tumour to the right iliac crest. I could detect nothing wrong in the pelvis by vaginal examination, which was difficult from the presence of a rigid ring hymen. Menstruation regular. The appetite was good; tongue clean and moist; much trouble from flatulence, and bowels usually loose.

History—Could remember a tumour of the size of a hen's egg high up in the abdomen twenty years ago, and thought it had been there since her girlhood. It had slowly increased up to six months before admission, but had not caused her much inconvenience. At that time it suddenly began to enlarge more rapidly, and during the last month the increase had been so great as to interfere with the performance of her duties as cook. She stated that the tumour was always bigger just before the period, and more or less painful.

The diagnosis lay between hydatid or other hepatic cyst, and an ovarian cyst which had become adherent in this situation. I rather inclined to the latter view from what she said about the increase of size before the period; the possibility of its being a fibro-cyst of uterus also presented itself. An exploratory operation was decided upon, and, assisted by Messrs. Meredith and Doran, and in the presence of her own medical attendant, Mr. Odell, and others, I made a five-inch incision in the median line, and exposed a red-looking tumour, which we all thought must be uterine. I passed my hand into the pelvis, and found a small uterus, closely connected by its fundus with lower part of the cyst. Further exploration revealed what I believed to be the right ovary embedded in the right lower segment of the tumour. Passing my hand into the upper part of the abdomen, I separated some vascular parietal adhesions, and could find no line of demarcation between the cyst and the liver. I tapped the cyst, and clear watery fluid escaped, mixed with flakes of white lymph-like material. I enlarged the opening, and, passing my hand into the cyst, found it packed with layers of this white material. The notion that it was hydatid was gaining ground, but from what organ it really grew was still a puzzle. As it emptied and contracted, the body which I had found by touch deep in the right iliac fossa, and believed to be the ovary, came into view, and I saw that it was the gall-bladder. Other small portions of liver-tissue were then found, apparently entirely isolated, in the cyst-wall. I thoroughly cleared out the cyst-cavity, sponging the walls well all over. In parts they were calcareous. No fluid had escaped into the general peritoneal cavity, and as the cyst was very adherent to uterus, intestines, etc., I decided not to attempt any general sponging, for fear of causing hæmorrhage. I sewed the whole opening in the cyst into the abdominal incision, and having taken care to thoroughly dry the sac, closed it up entirely without introducing a drain of any kind. This was an experiment, but it seemed to me that, when once thoroughly cleared of hydatids, the sac would not be a secreting one, as it had not suppurated, and if a little serum was effused into the cavity, it would gradually re-absorb as the sac contracted. There were nearly three pounds of hydatids and seven pints of fluids. The hydatids varied in size from a very small pea to a fair-sized orange. The patient was very weak for the first three days, and I could not help thinking that some hæmorrhage must be going on into the sac from some of the suture punctures. On the second evening the temperature touched 102·4°, but as the skin was acting well I did not think it necessary to adopt any cooling treatment; simply gave some digitalis to steady the pulse. Later in the evening it rose to 102·6°, and I then had the ice-water cap put on. From this time she improved: temperature and pulse steadily fell; bowels acted naturally on fifth day; and I noted, "Has decidedly put on flesh since the operation." I did not disturb the dressings till the eleventh day, and then found the wound well healed. She did not convalesce so quickly as a patient does after ovariotomy, and was troubled with flatulent distension very much. At the end of three weeks, however, she was up, and six days later went to the convalescent home at St. Leonards. After the bowels began to act regularly, and the flatulence dispersed, I could not detect any sign of refilling of the cyst. And in August, the lady in whose service she was before the operation, and to whom she returned, wrote—"She is very well in every way, and able to do her work well."

In comparing the two cases, the first thing that strikes one is the fact that in both patients the disease appeared when they were quite young, progressed slowly, and was long before it seriously inconvenienced them or affected their general health. From this point all similarity ceases. In Case 1 several cysts much of a size formed, and some of them appear to have remained quiescent or been cured by the aspiration; but the too common result of putrefaction and suppuration resulted after the fourth and fifth tappings, and when the patient came under my care she was already dying of blood-poisoning, and the operation was a last desperate effort to save her life. I hoped that, with the precautions taken to avoid escape of the putrid material into the peritoneum, the thorough cleansing with such a powerful destroyer of putridity as iodine, and free drainage, her life might be saved, but she never rallied at all, and the symptoms of septicæmia only became more marked with the fresh absorption resulting from the operation.

In the second case the cyst was single, and seemed so thoroughly to have destroyed the liver, that one wondered how the patient had lived; and yet her general health was fairly good, and it was only when the size of the cyst began to interfere with her work that she sought relief. She came to me without previous treatment, and I was able to perform an aseptic operation, and to demonstrate what I hardly hoped—that a large cavity of this kind, if not in a state of suppuration, will entirely contract and disappear, without any drainage, if it is thoroughly cleared out and left to nature without any irritant to cause secretion. It was simply necessary to remove thoroughly the hydatids, and to do this in such a manner as to avoid the admission of any of the causes of putrefaction; and in a few weeks the whole thing had disappeared, without its contraction interfering with the normal action of the liver-tissue which had been so long stretched out over its walls. It seems quite likely that the blood which was effused into the cavity during the first hours after the operation, clotted, and aided in the consolidation of the cavity. What would have been the course of events had the causes of putrefaction been allowed to mingle with this blood and serum, shut up inside a sac of this kind, and exposed for some days to a fever temperature, in a patient weak from loss of blood and a severe operation? Can anyone who knows anything of surgery doubt that suppuration and discharge, or blood-poisoning from want of discharge, would have made the two cases alike in their termination, as in their early history? Listerism, *without the trouble and risk of drainage*, saved a useful life, and gave us a beautiful demonstration of what nature can do when simply protected from outside interference.

PREGNANCY WITH OCCLUDED VAGINA.—Dr. Hyernaux, Surgeon of the Brussels Maternity, communicated to the Belgian Royal Academy of Medicine (*Presse Médicale Belge*, 1882, No. 45), a remarkable case of a woman aged twenty, who was brought to the Maternity with what seemed commencing pains of labour. On examination an imperforate hymen was found to exist, through which no aperture could for a long time be detected, until at last the rounded extremity of a very fine probe passed into an extremely minute one. The hymen was incised, and was found to be five millimetres in thickness. The finger was then introduced into the vagina, which was quite free, and the presentation of the fœtal head with a thin os uteri detected. Labour did not come on until a week later, when it terminated naturally in a few hours with the birth of a girl weighing 2800 grammes. It seems that the young woman had, when she was seventeen years of ago, undergone a puncture of the hymen for the discharge of menstrual fluid, and since that time she had, until the period of conception, a slight monthly discharge.

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CASE OF

RADICAL CURE OF INGUINAL HERNIA:

APPROXIMATION OF THE PILLARS OF THE RING BY MEANS OF CHROMICISED CATGUT—RECOVERY.(a)

By JAMES WHITSON, M.D., F.F.P. & S. Glasgow,
Surgeon to the Dispensary of Anderson's College; late Extra Dispensary Surgeon, Glasgow Royal Infirmary.

JOHN McB., aged fifty-six, labourer, was admitted on October 18, 1882, to Ward XXIX. of the Royal Infirmary, suffering from what was supposed to be a strangulated inguinal hernia, which, however, Mr. Greenhill, House-Surgeon, succeeded in reducing, without difficulty, the ring being a wide one, and the distance, in consequence, between its pillars being very considerable. The patient having afterwards expressed a desire to be relieved of his infirmity, which was a constant source of annoyance as well as danger to him, I resolved to perform an operation for the radical cure of hernia; but, before doing so, I thought it expedient to give him a few days' rest in bed, so that his bowels might be carefully regulated, and any shock which he had suffered from on admission might have had time to pass off.

On October 27 the patient was put under chloroform, the pubes carefully shaved, and, with the kind assistance of my friend, Mr. Clark, I proceeded to operate by first of all transfixing a fold of skin over the inguinal ring, and cutting outwards. The various structures between the skin and the mouth of the canal were successively divided on a director until the sac was reached, when it was opened into, and a large portion of it removed. Wood's needle, threaded with the strongest chromicised catgut, was then passed through the upper and outer side of the ring, carried over towards the inner pillar, and when brought into contact with the skin on that side, the latter was pulled away in the direction of the mesian line, so as to permit of the exit of the point of the needle at the opening already made. Three separate sutures of catgut were introduced in this way; and the cut edges of the sac were stitched together with moderately sized gut. The pillars of the ring were then firmly approximated by tightening the sutures, and securing them with reef-knots. A decalcified drainage-tube, threaded with horse-hair, was inserted into the wound, the margins of which were brought together with two button sutures, and accurately apposed by means of several stitches of fine gut. Protective plaster and gauze were next applied in the usual way, and an elastic bandage assisted in keeping the whole in excellent position. The dressings were changed on the second day, when the hair was withdrawn from the drainage-tube, and union by first intention had taken place along the whole line of incision, with the exception of the lowest point, where a necessary aperture for the exit of the discharge remained. It is needless to give further particulars of the progress of the case, as the wound followed a truly aseptic course, and the patient made an excellent recovery. He was dismissed, cured, on December 2, 1882.

Up to the present time surgeons have generally been in the habit of using silver wire, in order to obtain a permanent approximation of the pillars of the ring; and Mitchell Banks, of Liverpool, in a recent article(b) on the subject, speaks of this material burying itself harmlessly in the tissues; but it would seem to me evident that a ring of thick wire can hardly be present in the body without causing inconvenience in its own immediate neighbourhood, or, what is equally objectionable, eating its way gradually from within outwards. The same writer, as well as Mr. John Wood, of London, both say that they distrust catgut, as it yields too soon; and, beyond a doubt, the great bulk of the so-called "chromicised catgut" of the shops will soften and become absorbed in the course of two or three days. Owing to this, disappointment in the results of many operations has followed as a natural consequence, not from any inherent defect in the material, but from its being insufficiently hardened, either by a too brief immersion in the chromic acid solution, or by its being steeped in a mixture improperly composed, and therefore not adapted for imparting the requisite degree of durability. If prepared, however, by the process recommended by Macewen,(c) and kept in solution for a week, it will be found thoroughly reliable, and capable of resisting the action of the tissues for a fortnight. Catgut, in this capacity, has many advantages over wire. It possesses greater pliancy, and adapts itself much more readily to the position of the parts with which it comes in contact. A firmer and better knot can be tied with it than by means of a metallic suture, and one which takes a closer and more equable grasp of the structures which it surrounds; and on account of its bland and innocuous qualities it never causes irritation, while at the same time, from its ultimate absorption, it cannot possibly produce after-discomfort.

(a) Read before the Medico-Chirurgical and other Societies, Glasgow.

(b) "Radical Cure of Hernia by Removal of the Sac and Stitching together the Pillars of the Ring" (*British Medical Journal*, November 18, 1882), by W. Mitchell Banks, F.R.C.S.

(c) Macewen's method of preparing chromicised catgut is as follows:—One part of chromic acid is first added to five of water. One part of the solution thus made is then mixed with five of glycerine, and if the gut is steeped in this for a week, it will be found capable of resisting the action of the tissues for a fortnight.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GREAT NORTHERN HOSPITAL.

FRACTURE OF CERVICAL SPINE, WITH DISLOCATION.—DISPLACEMENT OF THE LEFT KIDNEY.

(Under the care of Mr. W. ADAMS.)

THOMAS E., aged forty-three, was admitted into the Great Northern Hospital, May 6, 1882, at 3 p.m., with the following history:—Two hours previous to admission, whilst unloading timber from a cart, he had fallen from the top of one of the wheels to the ground. His feet had struck the ground first, and he had fallen backwards, his head coming into violent contact with the trunk of a tree. From the moment of the accident he had been unable to move his legs, his arms, or his hands. Previous to the accident he had been in perfect health.

He was brought at once to the hospital, and his condition on admission was as follows:—He was perfectly sensible, and able to answer any questions. He complained of pain at the back of his neck, shooting down his arms and legs. A small bruise was found at the back of the head, but no wound. His arms and legs were completely paralysed, falling helpless when raised from the bed. The muscles of the affected limbs were perfectly flaccid. The intercostal muscles were motionless, the respiration being wholly diaphragmatic. Sensation was lost in the legs, arms, and lower part of the trunk; in front of the chest some sensation was retained. Priapism was constant. The patient could move his head from side to side, but if he attempted to raise it he at once felt great pain in the neck. For the first six hours after admission the only change observable was a slight increase in the number of respirations, and occasional intermittence of the pulse. There was no rise of temperature. The urine was retained, and when drawn off by catheter was found normal. The gradual collection of mucus in the respiratory passages resulted in death seventeen hours after admission, sensibility being retained to the end.

The post-mortem examination (by Dr. Clifford Beale) was made thirty hours after death. The weather was warm and moist, and decomposition had begun. The body was that of a large and heavy man, particularly thick about the neck and chest. A slight bruising of the scalp at the vertex and towards the back of the neck were the only external evidences of injury. The tissues were much congested. In the neck the fifth cervical vertebra was found to have been fractured transversely through the body, and at the same time to have become detached from the vertebra below it by dislocation, without fracture of their articular processes. Thus complete separation had taken place. The lower fragment of the body of the fifth vertebra remained attached to the intervertebral substance in relation with it. The spinal cord was found intact, no injury to the membranes could be discovered, nor was there evidence of more than slight bruising in the cord itself. The lungs were found engorged and

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œdematous, the tubes blocked with mucus. The left kidney could not be found in its normal position, but was discovered lying on the left common iliac artery, and closely attached to the brim of the pelvis. The ureter was only five inches long, and opened out of a funnel-shaped pelvis on the anterior surface of the kidney. The renal artery opened out of the aorta just at its bifurcation. The right kidney and both supra-renal capsules were in their normal position. Dr. Beale remarks that this displacement of the kidney is not very uncommon: several instances are recorded in periodical literature. In a paper in the *Pathological Society's Transactions* for 1875-76, Dr. Wickham Legg pointed out the greater frequency of displacement of the left kidney than of the right, and also the still more constant occurrence of the pelvis on the anterior surface, and of the origin of the renal artery at some point below that of the inferior mesenteric. The case is interesting, apart from this anatomical point, from the occurrence of so little injury to the spinal cord in the presence of so severe an injury to the spinal column. Owing to the immense thickness of the muscular and other tissues of the neck, no certain diagnosis of the injury could be arrived at, and the symptoms all pointed to a complete suspension of the functions of the cord at the seat of fracture. Hence no attempts at reduction were made.

ROYAL FREE HOSPITAL.

CASE OF TYPHOID FEVER WITH ULCERATION OF SMALL AND LARGE INTESTINES.

(Under the care of Dr. COCKLE.)

[Notes by Mr. F. H. Norvill, M.B., House-Physician.]

Louisa J., aged forty-two, married, was admitted into the hospital, December 2, 1882.

Previous History.—The patient was said to have been ill in bed for one week, suffering from diarrhœa. There had been a troublesome cough, and at night the patient had been delirious.

Condition on Admission.—Patient was very emaciated and looked very ill. She was in such a state of mental stupor that she could not understand anything that was said to her. Percussion over thorax revealed some dulness at the right apex. Loud rhonchi were heard over both lungs. There was slight persistent cough. Sputum very slight, and did not contain blood. Heart-sounds very feeble; no murmur. Abdomen not tense. Some gurgling in right iliac fossa. The tongue was dry, marked by transverse depressions on the dorsum. Marked deafness. Urine contained a trace of albumen. In the evening the patient was in a state of muttering delirium. During the progress of the case, diarrhœa was very frequent. On an average there were ten stools per diem, not reckoning several passed unconsciously. The heart's action became feebler, the cough persisted, and the profound affection of the nervous system varied but slightly. The temperature, from the time of admission till 6 a.m. on December 8, with one exception, ranged between 102° and 106° Fahr. Death, from exhaustion, occurred at 1 a.m. on December 9.

Autopsy, fifty-six hours after Death.—No signs of peritonitis and no ascitic fluid. Intestines, small and large, distended with air. Examined after removal from the body, the intestine showed no perforation. Several of the Peyer's patches were extensively ulcerated. Their appearance was typical of typhoid. There was commencing ulceration of many solitary glands in the ascending, transverse, and descending colon. A similar appearance was presented by some solitary glands in the small intestine. The mesentery, for a distance of one inch and a half from the intestine, was transparent. Liver was distinctly fatty; weight fifty-two ounces. Spleen was enlarged, and weighed ten ounces. The kidneys were congested, otherwise normal. Heart small, six ounces. Occupying the right ventricle was a firm decolourised clot extending into the pulmonary artery, and presenting there the same condition. Valves healthy. Lungs congested, especially at the bases. Pneumonic consolidation of right upper lobe.

During the last few months, three fatal cases of typhoid fever have occurred in Dr. Cockle's wards, in all of which extensive ulceration of ileum and colon co-existed. In one case perforation occurred in the rectum; in another, double perforation occurred in the colon; in the last case detailed, had the patient survived longer, perforation would probably have taken place, in both large and small intestines.

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The Medical Times and Gazette *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, JANUARY 27, 1883.

THE HOUNSLOW TRAGEDY.

It must have been a relief to everyone, except perhaps a few morbid and insatiable lovers of sensation at any cost, when the weary and painful investigation, in the coroner's court, into the circumstances of Dr. Edwardes's death was brought to a close on Thursday, the 18th inst., and the jury delivered their verdict. The formal verdict was that Dr. Edwardes had died from the effects of prussic acid administered by his own hand during temporary insanity; but to this the jury added a very strong expression of their opinion that he had been driven to this act "by the pressure brought to bear by his partner, Dr. Whitmarsh, using the false charge of Mrs. Bignell as a means to drive him to a dishonourable dissolution of partnership." It will be remembered that Mrs. Bignell, one of Dr. Edwardes's patients, had brought against him a charge of indecent assault; that the charge had been formally withdrawn; but that, nevertheless, Mrs. Bignell did almost immediately afterwards institute a prosecution against Dr. Edwardes for the same offence; that this had become known to Dr. Edwardes shortly before he poisoned himself; and that he left behind him a letter, affirming in the most solemn terms his entire innocence of the crime imputed to him, and accusing his partner, Dr. Whitmarsh, of having threatened to appear as a witness against him unless he assented to dissolve the partnership on ruinous terms and to leave the neighbourhood. It was also beyond doubt that on the evening of the night when the deceased took poison he had had a long interview with Dr. Whitmarsh, and had provisionally accepted a proposition to the effect that their partnership should be dissolved on condition of Dr. Whitmarsh's paying Dr. Edwardes the sum of £500; and that at the conclusion of this interview Dr. Edwardes returned home "utterly crushed," and soon afterwards

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The author remarked on the danger and difficulty of transfusion, which he thought too grave to be undertaken by a practitioner alone, at a moment's notice. Defibrination of the blood rendered its nutritive value very small. But the value of transfusion depended primarily, not on its nutritive, but on its *dynamic* effect. This latter could be procured with greater certainty by the intravenous injection of a large quantity of saline fluid. He had invented, and elsewhere described, a syphon for such injections. This instrument he had now modified, so that blood transfusion might be combined with the saline injection. The flow of saline fluid into the recipient's vein having been established with the syphon, the blood-donor's vein was opened with a trocar and canula specially devised for the purpose, and the blood, by a tube, conducted into one limb of a Y-shaped glass tube, through the other limb of which the saline solution flowed, and by this the blood was carried on into the recipient's vein. Coagulation was prevented by the addition of a few drops of liquor ammoniæ to the saline solution. Should the blood-donor become faint, by turning a stopcock the current could be reversed, and the saline solution made to flow into the donor's vein.

Dr. AVELING thought the interest of the paper was in the proposal to substitute saline fluid for blood. He thought the apparatus a bad one; there was no certainty that blood would flow through it, no way of telling whether it was flowing, or of measuring its quantity. The reversal of the current he thought dangerous, tending to carry clots into the donor's circulation. Life might sometimes be saved by autotransfusion, raising the patient's feet high above her head.

Dr. ROUTH said that Mr. Jennings's solution contained potash salts. It had been found by experiment that the injection of potash salts was poisonous. The valves in the donor's veins would prevent the proposed reversal of the current.

Dr. GRAILY HEWITT thought that the chief point in the paper was the attention directed to the dynamic effect of transfusion. This, he thought, was probably very important. There was great difficulty in deciding when the operation was necessary. Patients after post-partum hæmorrhage might rally, and yet perish some hours later without further loss of blood.

Mr. FENTON-JONES thought Mr. Jennings's syphon was an admirable instrument. The solution had been used with success, and therefore was not poisonous. He thought the current of saline fluid would act as a *vis a fronte*, and carry on the blood.

Dr. FANCOURT BARNES said that he had found it difficult to get the blood to flow from the donor's arm, even with Roussel's instrument.

The PRESIDENT regarded transfusion as little more than a hopeful proceeding, demanding encouragement and study. Patients who survived it were often spoken of as having been saved by it—a manifest mistake. In many cases it had caused death. Sets of cases of transfusion, occurring in single practices, within a limited time, were often published. He could not admit that extreme danger occurred so often. Injections of plain water had been used in cholera with splendid but temporary benefit. He would like to see it have a fair trial in cases of hæmorrhage. The attempt to use blood introduced most of the difficulties and dangers of the operation, and these were increased by complicated apparatus. He would use any good clean syringe, preferably a glass one.

Mr. JENNINGS only advocated blood transfusion for the minority; he thought it dangerous. He had found by experiment that a few drops of liquor ammoniæ would prevent coagulation. He thought that the collateral circulation through venous anastomoses would allow the saline fluid, when the current was reversed, to enter the donor's vascular system. The amount of blood taken should depend upon the effect of its loss on the giver, not on measurement by ounces.

Dr. HERMAN said that saline intravenous injection had been used at the London Hospital in four cases of puerperal hæmorrhage, of which two had recovered and two died; water once, and the patient recovered.

Dr. MANSON, Banff, has been entertained at a banquet by the Corporation authorities, and at the same time presented with 500 guineas and a handsome silver tea-tray.

OBITUARY.

SIR JOHN FORSYTH, K.C.S.I., C.B., HONORARY PHYSICIAN TO THE QUEEN.

THIS distinguished medical officer, as we briefly noticed last week, died in his eighty-fourth year, at the house of his son, General A. G. Forsyth, West Brighton, on the 14th inst. The following is a brief abstract of his services.

He was appointed to the Bengal Medical Department in October, 1819. Up to 1838 he held several important military and civil charges; then his appointment as Senior Surgeon to the Force, 9000 strong, serving under His Majesty Shah 'Soojah-ool-Moolk opened his administrative career. He was present at the first capture of Ghuzni. In 1840, Shah Soojah conferred upon him the Third Class of the Order of the Doorránee Empire. He served with the force sent, late in 1841, under General Sale, to clear the Passes through the Ghiljee country to Jellalabad, and was present at all the actions fought in the course of that march. In the memorable siege of Jellalabad he was Principal Medical Officer to the heroic defenders, and he was present at the action of April 7, when Ukbar Khan was defeated, the siege was raised, and the whole valley cleared. Joining General Pollock's army, he was in all the actions—Mamoo-Khail, Jugdulluk, and Tezeen—fought by it between Jellalabad and Cabul. He received three medals for his services in Afghanistan—Ghuzni, Jellalabad, and Cabul. He was also entitled to the Mutiny medal. Sir John was appointed, in 1843, to officiate as Secretary to the Medical Board. Being confirmed in that important post, he held it until September, 1852. He was then a member of the Bengal Council of Education, and Government Examiner of Candidates for Diplomas at the Calcutta Medical College. In 1852 the Governor-General, the Marquis of Dalhousie, wrote to him as follows:—"My dear Forsyth,—There is no officer in the Service who, on the joint considerations of personal ability, public service, and valuable aid professionally rendered to the Government, has better claims to the vacant office of Apothecary-General than yourself." He occupied the post, obtained under such distinguished auspices, until towards the end of 1853, when he was made Superintending Surgeon, being posted to the Pegu Circle. In April, 1857, he was appointed to the Meerut Circle of Superintendence, joining only three days before the Mutiny broke out. Here he had to provide for the medical equipment of the force that marched to besiege Delhi under the command of Brigadier Archdale Wilson. Shortly after the storming of Delhi he assumed charge of the hospitals there. In November he received a letter (he never knew by what route, as the communication with the Lower Provinces was not fairly re-established) from Government, appointing him Director-General of the Bengal Medical Department. Consequently, he proceeded towards Calcutta with the convoy led by Colonel (afterwards Sir Thomas) Seaton, and was present at the actions fought by that officer at Googaira and Putteallee. Arriving in Calcutta, he conducted, with the fullest approval of the Governor-General in Council and of the Commander-in-Chief, the arduous duties of the Medical Department up to the quelling of the Mutiny. In 1861 he was appointed Honorary Physician to the Queen, being the first who received that designation in India. After forty-one years and eleven months' continuous labour in India, during which he never took leave to England, he retired from the Service. In his general order, on this occasion, the Governor-General notified, with other expressions of high approval, that "Dr. Forsyth's career has been one of continued usefulness and honour." He was created a Companion of the Bath in August, 1862; and the dignity of Knight Commander of the Star of India was conferred upon him in 1881.

The remarks of old officers who had served with him, who stood around his grave last Thursday, strongly indicated the character of this wise and just leader: "Honest John!" "The best Head our Department has ever had!" "He did not fear man or devil!" He was a man of noble aspect and great physical power; a steady reader of the best books up to within a few hours of his death; accomplished in his profession, and perfectly acquainted with all matters of official administration. His manner, at first sight, was not attractive: he was reserved and reticent; but there could scarcely

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have been an officer in the Service who did not learn to esteem and love him for his strong sense of justice and genuine kind-heartedness. In India the character of every old officer is known to everyone; and there, and at the Oriental Club, where many of his latter years were passed, he was regarded with affectionate esteem by all.

An officer who was his secretary during the Mutiny writes:—"I would sit with the form of a letter of recommendation before me, and inquire—'Whom do you nominate?' He would fix his eyes upon me, his naturally rather pale face flushed and swollen with pent-up anxiety. Then his eyes would drop, and he would remain for some minutes in what appeared to be an agony of mental conflict, as he weighed the claims of all. At length he would give a name which, in my belief, nearly ninety-nine out of every hundred of our officers would have approved of as the fittest. He had an instinctive insight into character, and of all characters a boastful one was peculiarly odious to him. He was the most wise, just, and noble-minded man I have ever known in sixty-five years. When I reached middle age, I believed that I had a fair understanding of the difference between right and wrong; but, after my official association with him, I felt that I had learnt a code of honour purer and more lofty than I had ever imagined. Great leader, of inflexible integrity in word and deed, steadily generous to his own detriment, warm friend, faithful servant of his Maker, absolutely free from all taint of official favouritism and jobbery, the memory of John Forsyth will remain dear to his Service until the last of his fellow-workers joins the majority."

Diphtheroidic Vulvitis in Children.—Dr. Sarjus, in a recent *thèse*, observes that the mucous membrane of the genital organs of little girls is often the seat of a special inflammation, which is contagious and inoculable, and is characterised by the eruption of small whitish vesicles, which are soon succeeded by rounded cupuliform ulceration of an invading character, and covered with a greyish pulpous layer. It is of a similar nature to noma and hospital gangrene, and, while not being truly diphtheritic, is of a diphtheroid character. It is quite local, and not dangerous, and depends upon microscopical organisms not as yet well defined. Iodoform, topically applied, is wonderfully successful in treating it, and as yet has never been mischievous. The surfaces may be dusted with very finely powdered iodoform; and over this is applied lint or wadding; or the powder may be kept *in situ* with a solution of gum-arabic or collodion.—*Jour. de Thérap.*, December 10.

Hyoscin as a Mydriatic.—In a paper on Myopia (*Phil. Med. Times*, October 21), Dr. Mittendorf observes:—"I should like to say a word of recommendation for this new mydriatic hyoscin, which is made from hyoscyamin. One five-hundredth part of a grain will dilate the pupil and paralyse the accommodation in seven minutes. Its effects disappear in two or three days. For children a one-thousandth part should be used, as in larger doses it is apt to produce alarming constitutional symptoms. In fact, I prefer that young persons should use homatropine, which, although not quite so powerful, is much safer. I have used hyoscin very extensively for more than a year, and find that it has the advantage over atropine, that it acts more promptly, and that its effect is not so lasting."

Temperatures of Different Parts of the Body.—Dr. Henry L. Taylor, of the Roosevelt Hospital, in an article in the *New York Med. Record* (November 18), furnishes the results of observation of temperatures simultaneously on different parts of the body in half a dozen cases of typhoid fever, and concludes as follows:—"It is hardly justifiable to draw conclusions from such a limited number of observations, but I may, perhaps, be allowed to sum up provisionally the results. 1. The difference between axillary and rectal temperature is not constant, but averages about 1° Fahr. in favour of the rectum and vagina. 2. In certain exceptional cases the temperature may be considerably higher in the axilla. 3. The difference does not seem to vary directly with the height of the temperature. 4. The difference in favour of the mouth, in buccal and axillary temperatures, averages about one-half that in favour of the rectum and vagina, when axillary temperatures are compared with the latter.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 17th inst., and when eligible will be admitted to the pass examination, viz.:—

Archer, T. Launcelot, student of St. Bartholomew's Hospital.
Boger, W. Henry, of Guy's Hospital.
Bremner, W. Ernest, of King's College Hospital.
Brooks, S. John, of King's College Hospital.
Fegen, C. Milton, of St. George's Hospital.
Haynes, Charles, of the Charing-cross Hospital.
Kingsford, E. Claude, of Guy's Hospital.
Lauria, W. Benjamin, of St. Bartholomew's Hospital.
Magge, W. Adolphus, of the Middlesex Hospital.
Phillips, G. G. Owen, of Guy's Hospital.
Pott, F. Henry, of St. George's Hospital.
Richmond, W. Stephenson, of St. Bartholomew's Hospital.
Rubie, P. H. Elton, of St. Mary's Hospital.
Schofield, Gerald, of Guy's Hospital.
Selway, Leonard, of Guy's Hospital.
Shackleton, T. Francis, of King's College Hospital.
Swinburne, J. D. Marsh, of St. George's Hospital.
Warren, D. Ernest, of St. George's Hospital.
White, F. Faulder, of St. Mary's Hospital.

Five candidates were referred for three months. The following gentlemen passed on the 18th inst., viz.:—

Bateman, M. George Young, student of Guy's Hospital.
Burrows, W. Horncastle, of the Charing-cross Hospital.
Cooper, J. Wilford, of the Charing-cross Hospital.
Cordova, Rudolph de, of University College Hospital.
Daruvala, H. Sorabji, of the Bombay School of Medicine.
Duke, A. Forrester, of St. George's Hospital.
Edye, J. Simpson, of St. Thomas's Hospital.
Ensor, F. D. Livingstone, of King's College Hospital.
Essery, W. Joseph, of King's College Hospital.
Hall-Hains, W. R., of the Westminster Hospital.
Hodges, C. Robert, of King's College Hospital.
Jones, T. Slater, of Guy's Hospital.
Mossop, A. George, of Guy's Hospital.
Mugford, S. Arthur, of Guy's Hospital.
Nicholls, William, of St. Bartholomew's Hospital.
Piggott, F. C. Holman, of the Cambridge School of Medicine.
Shaw, Arthur, of University College Hospital.
Tuke, T. Seymour, of St. George's Hospital.

Three candidates were referred for three months, and two for six months, making a total of sixty-one out of the 190 examined.

The following gentlemen, having undergone the necessary examinations, were admitted Members of the College at a meeting of the Court of Examiners on the 22nd inst., viz.:—

Armstrong, A. J. Mackenzie, L.R.C.P. Edin., Chippenham-road, W., student of St. Mary's Hospital.
Atkinson, William, M.D. Queen's Univ. Ire., Camden Town, of the Galway School of Medicine.
Black, W. Jones, L.S.A., Manchester, of the Manchester School.
Burman, F. James, Wath, Rotherham, of the Leeds School.
Chadwick, John, L.S.A., Rochdale, of the Manchester School.
Davies, J. Thomas, L.R.C.P. Edin., Rhyl, North Wales, of the Glasgow School.
Fink, G. Herbert, L.S.A., Regent's-park, of University College Hospital.
Fletcher, John, L.S.A., Manchester, of the Manchester School.
Howse, P. W. McDowall, L.S.A., Barking-road, of the London Hospital.
Hudson, O. Henderson, Sheffield, of the Sheffield School of Medicine.
Jackson, J. William, L.R.C.P. Edin., York, of St. Mary's Hospital.
Jones, Arthur, Ormskirk, of University College Hospital.
Kuss, Arthur, L.R.C.S. Edin., Woburn-place, of the Toronto School of Medicine.
Liptrot, A. Bailey, Wigan, of the Manchester School.
Logan, Robt., M.D. McGill, Michigan, of the Toronto School of Medicine.
Mead, Rivis, M.B. Edin., Whitby, of the Toronto School of Medicine.
Owen, J. F. Holland, Liverpool, of the Liverpool School of Medicine.
Rowell, R. Henry, L.S.A., Houghton-le-Spring, of the Newcastle School of
Young, J. More, M.B. Glasg., Rothwell, Kettering, of the Glasgow School.

One gentleman was approved in Surgery, and when qualified in Medicine will be admitted a Member of the College. Three candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred for three months, four for six months, and two for nine months. The following gentlemen passed on the 23rd inst., viz.:—

Arthy, G. Sleaman, Manchester, student of the Leeds School of Medicine.
Buck, J. Archer, Newman's-row, W.C., of King's College Hospital.
Gresswell, Albert, Louth, of St. Bartholomew's Hospital.
Holt, H. Lyttleton, L.R.C.P. Edin., Devonshire-terrace, W., of University College Hospital.
Holton, Richard, L.S.A., Lincoln, of the Manchester School.
Lane, Benjamin H., L.R.C.P. Edin., Victoria-street, S.W., of Guy's Hospital.
Marsden, J. Aspinall, Camberwell, of Guy's Hospital.
Randa, St. J. Outland, Northampton, of Guy's Hospital.
Salter, S. Thomas, B.A. Cantab., Woburn-place, of St. George's Hospital.
Unitt, J. Arthur, L.R.C.P. Edin., Walsall, of the Birmingham School.
Ward, A. Arthur, Walpole-street, S.W., of the Leeds School of Medicine.
Williamson, H. Holdrich, Mildmay-park, of University College Hospital.
Wilson, Alexander, Manchester, of the Manchester School.

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committed suicide. All this was clearly shown in outline, though not in detail, on the first day of the inquest. Since then this outline has been filled in, and, though an immense amount of more or less irrelevant evidence was also taken, the main facts are as follows:—Dr. Edwardes visited his patient, Mrs. Bignell, on December 22; on the evening of the next day he received from her a letter, charging him with indecently assaulting her on the previous day, and requesting him to cease from visiting her. This letter he took on the 24th to his partner, Dr. Whitmarsh; and he seems to have been at once completely upset by the accusation; he spoke of being ruined, and asked whether "he should bolt." It does not appear from the evidence that his partner gave him much encouragement or support; but, after some conversation, Dr. Whitmarsh agreed to go and see Mrs. Bignell on the matter. She repeated the charge, but said that if Dr. Edwardes would apologise, the matter should be dropped. Dr. Edwardes was then fetched, and, after some discussion, Mrs. Bignell and her husband signed a paper withdrawing the charge, and expressing sorrow for having made it, and Dr. Whitmarsh witnessed their signatures. This withdrawal was made though Dr. Edwardes had positively refused to make any apology. The letter to Dr. Edwardes making the charge was then torn up by Mrs. Bignell, but the pieces were not destroyed, and they were afterwards obtained from Mrs. Bignell by Dr. Whitmarsh. Mrs. Bignell, it must be said, insisted that the charge she had made was true, though she retracted it. On the 25th, Dr. Edwardes called on Mrs. Bignell, when she again insisted that the charge was a true one; and Dr. Edwardes appears to have said that if anyone repeated the accusation he would bring an action for libel. Next day he told Dr. Whitmarsh that he had decided to prosecute Mrs. Bignell for libel, and the two partners called on Mr. Barber, a solicitor, and instructed him to institute the action, Dr. Whitmarsh furnishing him with a copy of the original letter written by Mrs. Bignell. Dr. Whitmarsh then appears, from his own evidence, to have called on Mrs. Bignell and told her what Dr. Edwardes was doing, and he gave as his reason for this proceeding that he thought he had not acted fairly by her in giving a copy of her letter to Dr. Edwardes's solicitor. Mrs. Bignell, when she was examined before the coroner, swore that Dr. Whitmarsh said he did not wish to see her "rounded on"; that he "egged her on," and recommended her to be "first in the field"; and, consequently, she and her husband instructed Mr. Lay, a solicitor, to take out immediately a summons against Dr. Edwardes. The same evening Mr. Lay called on Dr. Whitmarsh to explain what he was doing. Dr. Edwardes was invited to meet Mr. Lay at Dr. Whitmarsh's house, and, after a long conference, agreed to entertain the proposal for a dissolution of partnership. Dr. Edwardes was to withdraw the prosecution of Mrs. Bignell; and Mr. Lay promised to use his influence with Mrs. Bignell to drop her summons against Dr. Edwardes for an assault. Dr. Edwardes then went home, and the rest need not be repeated.

The whole story is a terribly sad one. Dr. Edwardes was a man of unstained and very high character; but he appears to have been extremely sensitive, and to have lost, from the very beginning of the case against him, all power of cool judgment. He needed, in an unusual degree, support and encouragement from his partner; and, so far as we can see, Dr. Whitmarsh entirely failed to give him this. The charge made was one to which medical men are at all times liable, and in this instance was an unusually weak one. It was shown that Mrs. Bignell is an hysterical woman; and it is only too well known that women of that temperament are very prone to imagine assaults of the kind with which she charged Dr. Edwardes. It was shown also, on her own evidence, that her conduct previously had not been free from reproach. Her first child was born a day or two after her marriage; and she had made once before, against another man, a charge similar to that which she brought against Dr. Edwardes, and had dropped it on an apology being made. She adhered to the charge in this instance even before the coroner and the jury, but the jury did not believe her; and it seems utterly impossible to believe that a man of Dr. Edwardes's character, or, indeed, any medical man in his senses, could have acted as she alleged Dr. Edwardes did in the circumstances; for it is to be remembered that Dr. Edwardes had shown special caution in his visits to Mrs. Bignell. A next-door neighbour, Mrs. Wheeler, or some female friend was always present; and Mrs. Wheeler was expected every moment during this last visit. Friends of the woman were within hearing of a cry or a knock, and Mrs. Wheeler admitted in her evidence that the slightest scream or other sound could have been heard in the adjoining cottages; and Dr. Edwardes's groom was in his trap in front of the door. It is remarkable that public feeling in Hounslow was, from the first, entirely in favour of Dr. Edwardes, and as strongly against Dr. Whitmarsh, though the latter had practised in the place for many years, and the former for, comparatively, only a very short time. The violent and lawless ways in which the feeling against Dr. Whitmarsh was expressed in the town were very deplorable, and the virtually unchecked displays of opinion that occurred over and over again in court were disgraceful to all parties; and Dr. Whitmarsh deserves some credit for the quiet way in which, on his second appearance before the jury, he endeavoured to lead the coroner to keep order in the court. But it is very difficult to understand Dr. Whitmarsh's conduct in all other respects. Medical men, happily, do almost invariably stand by each other in such cases, till guilt is unquestionably proved; but Dr. Whitmarsh does not, in his own showing, seem to have given his partner in any positive degree the support the latter had a right to expect. It is difficult to suppose that he was not aware of the antecedents of Mrs. Bignell,—she had been a patient of his,—and yet there is no evidence that he had ever given Dr. Edwardes any hint of her character. And, let alone the negative and very luke-warm support he gave, and all the rest of his behaviour, it is most incomprehensible how, after going with Dr. Edwardes to institute a prosecution against Mrs. Bignell, he could have thought it right, in any sense, to go immediately afterwards to Mrs. Bignell to inform her of what was being done, and, according to her statement, to prompt, if not to positively encourage, her to take out a summons against his partner. Dr. Whitmarsh has already suffered very severe punishment, while Dr. Edwardes's character remains without stain, but who, considering the evidence placed before the jury, can be surprised at their verdict? Whether Dr. Whitmarsh can and will take any steps to clear his character remains to be seen but if he can succeed in lessening the obloquy that now rests on it, we shall, for the sake of the profession, be glad.

BILLROTH ON EMPYEMA.

In a recent number of the *Wiener Med. Woch.*, Professor Billroth is reported to have said that it was his impression that, notwithstanding the alleged more favourable course of cases of empyema treated antiseptically, yet the occurrence of complications in the form of infective pericarditis and peritonitis was not prevented, and further, that the final results of operation for empyema were really not more favourable than before the introduction of Listerism. The

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final issue of empyemas submitted to surgical treatment is dependent much more on etiological and other considerations than on the operation and subsequent treatment. Billroth was also of opinion that the notion that a discharging empyema is very likely to set up tuberculosis is quite wrong; the patients are much more prone to die from other accidents, or from the development of lardaceous disease. Further, caries of the ribs is not a regular consequence of empyema, and is not to be regarded as a necessarily grave complication. When the rib is primarily the seat of tubercular disease, the resulting circumscribed empyema can only be considered, from a prognostic standpoint, as a cold strumous abscess. The partial destruction of the periosteum of a rib by a genuine primary empyema does not render the forecast much worse.

Whilst thus clearly stating his impressions, Professor Billroth, with his usual candour and broadness of mind, inculcated the principle that sound knowledge can only be established on a lasting basis by a careful record of cases and by accurate statistics. Putting this principle into practice, Dr. Fraenkel has brought together a series of fifteen cases treated by free opening and various forms of antiseptic dressings in Billroth's clinic since the year 1876. The first three cases were empyemas associated with tubercular disease, two of which died, and the third was lost sight of. The next ten cases were the result of simple pleurisy: three of these died,—one indeed did well for a time, but died within a year of operation; four were practically well for some months, but later information was not forthcoming; in the remaining three, though there were temporary improvements, the latest reports showed that the cases were not yet brought to a favourable termination, *i.e.*, the fistulæ still remained open and discharging two years after operation. The last two cases were of traumatic origin: one recovered apparently completely in nine months; the other underwent a rapid and striking amelioration, but the wound, nevertheless, was not healed eighteen months after operation. Empyemas of tubercular origin are universally looked upon as of grave prognosis. It is taught in many places that empyemas originating in ordinary pleurisy are of very different terminations, according as they occur in the adult or in the child; and we should be inclined, from a fairly large experience, to support that notion. But, out of the ten cases the result of simple pleurisy, Fraenkel had three which occurred in children. In all three instances the final issue was anything but favourable. These, and others gathered from the practice of Weinlechner, make Fraenkel doubt whether the usual notion mentioned in the previous sentence is correct. Of the seven adult cases the outcome of ordinary pleurisy, one died after irrigation with a two per cent. solution of carbolic acid, one succumbed to peritonitis, and not one of the other five recovered.

In a total of fifteen cases of empyema operated on by Weinlechner and Billroth, the result of genuine pleurisy, six died from the operation or from the consequences of the empyema; of ten patients the ultimate outcome is unknown, and in some, at all events, the fistula had not healed after some years. In only two of the patients was a definite and permanent cure recorded. (We cannot account for the apparent discrepancy in the numbers here quoted.) As Fraenkel remarks, these results are highly unsatisfactory. Of course it is a pity that cases cannot be followed to their legitimate conclusion.

It has been repeatedly said that operative interference should take place early. Against this notion it has been urged (1) that spontaneous recovery by absorption does occur; (2) that recovery after repeated aspiration occurs, especially in children; (3) that the course is more favourable if the empyema has been left to burst spontaneously. Fraenkel gave some numbers from which the time that elapsed before bursting (we do not gather whether outwardly or through the bronchi) was seen to vary from one month to one year. He asserts that it is not right to say that an empyema points and bursts more readily in the child than in the adult. For ourselves, we are inclined to think that one of the most remarkable things about empyemas is the variety of their behaviour. The course of an empyema is materially influenced by the possession of a more or less rigid wall. If the collection of pus be small and near the surface of the thorax, the bony wall is of much less importance than when the whole pleura is affected. But it would carry us far beyond the limits of a leading article to enter into even one department of detail. The expression that every case requires individual treatment is nowhere of truer application than in the present instance. We are quite of opinion that the position of the whole subject might with advantage be re-opened, but we are also aware that physicians of no small experience believe that the lines for the treatment of empyema, especially in children are already laid down with the best possible arrangement, from which any new departure would be regarded, to say the least, as wrong in a high degree. The statement of opinion by Billroth, that antiseptic treatment of the discharging empyema is without influence in the prevention of septic serous inflammations, is worthy of all attention, as proceeding from him; but we have seen isolated cases of enormous empyema in children, even when offensive to the nostril, do remarkably well with proper antiseptic dressings. We are glad that Dr. Fraenkel has put this series of cases on record, and we hope that his excellent example will be followed both at home and abroad. More information and statistics on the results of cases treated with Listerism are greatly to be desired.

"NE SUTOR ULTRA CREPIDAM."

It is a trite experience that continuous success, high honours, and popularity are heavy burdens to bear well; and there seems to be some danger of Lord Wolseley's affording a fresh illustration of this. He appears to have a high estimate of the extent of his own knowledge, and is ready to deliver a lecture or express a comprehensive judgment on any subject or question that is submitted to him. Quite recently he expressed his firm conviction that had he been born a tinker he would have been king of his craft; and now, with great confidence, he lays down the law regarding the physiological uses of alcohol. Replying to a deputation of the Blackburn Gospel Temperance Mission that waited on him at the residence of Major-General Fielden on the 18th inst., he said that he had always employed the opportunities afforded him to impress the necessity of temperance on those under his command. In the Red River Expedition, against the advice even of the medical men who accompanied the troops, he decided that no spirituous liquors should be taken with the force; and yet no men ever did harder work or behaved better than those on that expedition. In South Africa his personal body-guard consisted almost exclusively of temperance men; and there too the doctors, who had predicted all manner of ills from the absence of grog, had absolutely nothing to do. In Egypt, again, the doctors told him that it was very necessary the men should have grog, and he was obliged, owing to the great pressure put upon him, to allow it occasionally; but it was given in very small quantities and rarely, and yet the troops in Egypt were admirable in their behaviour. He had long held that drink was the great source of crime, disobedience, and other evils. As regards this latter conclusion, so authoritatively set fort

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Lord Wolseley can scarcely have conceded to him the merit of an original discoverer, as the disastrous consequences of drinking habits, whether amongst soldiers or civilians, have certainly been mentioned once or twice before he opened his lips at Blackburn. But because excessive drinking is destructive of health and morality, it does not necessarily follow that a moderate ration of alcohol must be injurious to men accustomed to the moderate use of alcohol, and called on for special exertion under special climatic influences, perhaps also short of food, and under severe mental tension or depression. This, however, is what Lord Wolseley would have us believe. Unless he has been incorrectly reported it would appear that upon three occasions he has, by his own unaided judgment and foresight, saved British armies from pernicious and enfeebling influences which the doctors were bent on inflicting on them, and has thus maintained them at the highest point of fighting and marching power. It has been his mission to push aside medical ignorance and prepossession, and to pursue a policy of his own, which has been justified by events. But it must occur to many who read these statements by the hero of Tel-el-Kebir, that they are strangely at variance with some other utterances of his on a recent occasion, for surely if the army doctors have been so imprudent as to persist in forcing upon him recommendations which he knew to be injudicious, and which he felt bound as much as possible to disregard, they must be unworthy of the encomiums which he bestowed on them in the letter which was read by Sir William Jenner at the banquet given to the Egyptian medical officers in Willis's Rooms in November last. If they know so little of their work as to be unable to express a trustworthy opinion as to when alcohol is and is not needful or desirable, and if their professional prescriptions in this respect require to be reviewed and corrected by the general in command, then they are deserving not of praise, but of blame and disregard. For our part, however, we prefer to believe that Lord Wolseley has erred just a little in his statement, and has rashly jumped to his conclusion, with that risk of a fall which precipitancy always involves. He may be right in declaring that the doctors recommended a certain amount of grog, and that he disregarded their recommendation; but he is not entitled to aver that the results of the course of action which he pursued were perfectly satisfactory. No doubt our soldiers in Egypt marched and fought well on the next-to-no-grog regimen, but might they not have marched and fought even better than they did had they had that quantity of grog which the doctors deemed it advisable for them to have? May it not be suggested that the somewhat excessive proportion of sickness amongst the troops in Egypt, and the worn and shattered aspect of those who have returned home, are to be in some measure attributed to the disregard of the medical recommendation? Is it not open to doubt whether the Army Medical Department has not, in the odium thrown upon it in connexion with the Egyptian campaign, been suffering vicariously for the sins of a very exalted personage? We do not pretend to answer these questions,—in order to do so we should have before us a mass of statistical information that is not yet available,—but this we may assert, that Lord Wolseley is not in a position to answer them in his own favour. If, as he would have us believe, he went directly counter to the advice of the army doctors who were with him to guide and assist him, he incurred a very grave responsibility; and until the most convincing justification of the step which he took is adduced, we shall continue to think that he erred, believing that scientific and experienced medical men, who have studied under Parkes and Aitken and De Chaumont, and have practised in all quarters of the globe, are more competent than he can possibly be to decide as to the propriety of giving or withholding alcohol as an element of diet. Lord Wolseley has not yet given evidence of any special acquaintance with the properties and actions of alcohol, nor has he, as far as we are aware, instituted any statistical inquiries into the effects of its use and disuse on troops operating under different circumstances. Until he does so his opinions respecting it are just general impressions, and, except for the known intellectual capacity of the speaker, worth no more than thousands of other general impressions on medical and scientific questions which are propounded by self-sufficient persons daily, and of which a vast majority are totally fallacious. Laymen, when dealing with medical problems, are too apt to make themselves the measure of the universe, and, reversing the pharisaical dictum, to pronounce that other men are exactly as they are. What agrees with them must suit everybody. What is detrimental to them must be universally bad. "There shall be no cakes and ale, because they are virtuous." Perhaps Lord Wolseley thrives best on cold tea; and perhaps, regarding himself as the typical Tommy Atkins, he legislates for the British soldier generally out of his own inner consciousness. If we could only accept Lord Wolseley's propositions with the unquestioning faith with which his troops receive his commands, we might hope that bright days were in store for our army, for he lays down the principle that abstinence during campaigning not only promotes the objects of the campaign, but sets up a permanent habit of temperance. The soldiers, he declares, whom he had kept short of grog in the Egyptian desert remained harmless as doves after they got into Egyptian towns. In Cairo, where there are grog-shops in every street—some streets being indeed entirely composed of them,—the men were exposed to constant and considerable temptation, and yet none of them gave way, and Lord Wolseley never saw a drunken soldier in Egypt! If his experience might be received as conclusive, and if a brief sojourn in the Egyptian desert, with severe exercise, and grog administered in small quantities and at rare intervals, were potent to eradicate the drink-appetite and to insure permanent sobriety, we might speedily reform the army, and convert those who are the pests of its ranks into steady men. Nay, might we not induce Mr. Cook to undertake the cure of dipsomania, and to conduct personally some large parties of habitual drunkards through the Egyptian desert, landing them at Cairo reformed characters?

We venture to think that Lord Wolseley will himself somewhat regret his Blackburn speech when he again peruses it calmly, with no gospel teetotalers or "hydropots" (to adopt the most novel and approved term) before him to stir him into fervour and move him to strong statements. By the persons and the associations to whom the speech was, directly or indirectly, addressed it will certainly be understood as being generally to the effect that army doctors are, if not the champions of intemperance, at least sometimes the advocates of alcoholic indulgence, and that it has been Lord Wolseley's constant duty to oppose their wishes and doctrines. It need scarcely be said that any such representation as this is grievously incorrect. We venture to assert that there is no class of officers that has done more for the cause of temperance in the army than that class which is charged with the care of the soldiers' health. By their example, by their exhortations, by their teaching, army doctors have unceasingly inculcated the lessons of sobriety. They have measured and exhibited in strong colours the ruin and devastation that are wrought by strong drink amongst our forces at home and abroad, and they have never lost an opportunity of promoting every reform of discipline, diet, and surroundings that seemed to them likely to conduce to pure and sober living.

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THE WEEK.

TOPICS OF THE DAY.

On the evening of the 17th inst., Mr. W. K. Burton, the chief inspecting engineer to the London Sanitary Protection Association, read at the Society of Arts the paper which had been some time previously announced, on the sanitary inspection of houses. It was illustrated by drawings, which enabled the audience to contrast a well-drained house with one the arrangements of which were defective. In the outset Mr. Burton explained that his principal object was to give an idea of what was the condition, as regards efficiency or the reverse, of the drainage arrangements at present existing in the average London house. The objects to be aimed at in house-drainage he summarised as follows:—First, all matter placed in any of the sanitary appliances in the house must be carried with the greatest possible expedition clear of the premises, leaving behind it as little deposit as possible. Secondly, all sewer-air must be prevented from entering the houses by the channels which serve to carry away the sewage. Third, since it is impossible to have house-drains absolutely clean, that is, devoid of all decomposing matter, all air from house-drains, and even from bath, sink, and other waste-pipes, must be kept out of the dwelling-rooms. To these might be added a fourth desideratum, that a constant current of fresh air must be established along every pipe in which it is possible that any decomposing matter may remain, so that such matter may be rapidly oxidised or rendered innocuous. The London Sanitary Protection Association, which was formed in 1881, had inspected 523 houses, and in very few (notably those in which recent sanitary arrangements had been carried out) were these conditions found to be satisfactorily existent. The class of houses inspected was the very best in London, and the lecturer proceeded to mention some of the leading defects found to exist in them. In the discussion which followed the reading of the paper it seemed to be agreed that drain-pipes under houses should be of cast-iron with lead joints. The necessity for inspection was admitted, and it was urged that it ought to be made compulsory, and that local authorities should be compelled to give certificates showing and describing what had been done, the cost of which, if it insured the best drainage, would be recouped by the increased letting value of the house.

The Thames Valley Drainage question has at last turned up again, after a prolonged slumber. Mr. J. T. Harrison, C.E., one of the inspectors of the Local Government Board, has just concluded an inquiry at Kingston-on-Thames in reference to an application made by the Joint Sewerage Board for permission to extend the time which had been allotted to it for carrying out the purposes for which it had been formed, and also to extend the period during which no proceedings should be taken to enforce the payment of penalties for discharging sewage into the Thames. The time applied for was three years, but to this the inspector, as well as Mr. Elmslie on behalf of the Thames Conservancy Board, demurred, on the ground that an immense deal of time had been already wasted, and that the Board was just as far as ever from a solution of the question. The Inspector stated that the Local Government Board would probably be induced to grant a further short extension of time, but that the Board would have to take some definite action within that time, so as to show some benefit for the constituent Authorities. All the schemes to carry out irrigation having failed, the Joint Board is now turning its attention to chemical filtration. The second proposal made to the Board by the West Kent Board for taking the Upper Thames Valley sewage has also fallen through from the exorbitant nature of the terms demanded, though some of the members of the Thames Valley Board are still inclined to treat with the West Kent on the original terms, which were not nearly so high. In the meantime, so much dissatisfaction is felt throughout the whole neighbourhood at the waste of time and money, that disintegration of the united districts is likely to ensue. The Heston and Isleworth Local Board are taking steps to promote separate actions, with the view of dealing with their own sewage in an independent form, and it is not improbable that Richmond may pursue the same course.

At the Liverpool City Police-court, last week, Thomas McDermott, who keeps a lodging-house, was summoned for knowingly letting for hire a part of a building in which a person had been suffering from typhus fever, without having such place disinfected. It appeared that on the 12th inst. Inspector McWilliam, noticing that the fever-van from the Workhouse Hospital stood at the defendant's door, made inquiries, and found they were removing a woman who was suffering from typhus fever of a malignant type. He spoke to the lodging-house people, and told them that they must be particular to see that the room was not occupied. He paid another visit to the house the following morning, and found the very bed occupied by a couple of tramps—a man and his wife,—who, as it was remarked in court, may have gone on to Warrington or Manchester, spreading fever in either direction. The magistrate fined the defendant £5; but for such an offence the law should inflict something more severe than a money penalty. Those who frame the statutes do not always sufficiently gauge the extent of the wrong-doing; the efforts of any number of sanitary authorities and medical officers of health may at any time be paralysed by the behaviour of landlords such as this one.

At a recent meeting held at the Kensington Town Hall, under the presidency of Mr. A. S. Ayrton, the opponents of the Contagious Diseases Acts somewhat shifted their ground. The object of the meeting was to emphasise the opposition of the "Ladies' National Association" for the abolition of the Acts, and in a speech of an hour's length the chairman went through all the usual arguments, of which it is only necessary to quote one to convey an impression of the whole: "As to the opinions of the eminent medical men who supported the Acts, he contended that they were no better judges on the question of the continuance of the Acts than anyone in that room." But the Rev. C. B. Symes, in moving that the meeting should express opposition to the Acts, and demand their abolition, acknowledged that there was another side to the question. He also admitted that there was on the part of those who supported the Acts a large amount of Christian feeling and moral earnestness, and the desire to benefit all classes of people. He, however, objected to the abstract injustice of the Acts in dealing only with one sex, and he further declared that the operation of the Acts was unconstitutional, although he acknowledged that they were worked under jealous scrutiny, and without wrong. Another speaker (Dr. Heywood Smith) admitted that the Acts had done good with regard to the health of the population, but he protested against their inequality, as in the case of the divorce laws, which did not give women equal rights with men. We believe that this is the first occasion upon which it has been publicly admitted by the opponents to the Acts that they were of any use at all; and evidently the speakers we have quoted are rather in favour of an extension of their operation, instead of their total suppression, since they are of opinion that it is not only women who should be subject to their operation.

Dr. Bernays, of St. Thomas's Hospital, in his quarterly report as analyst to the parish of Camberwell, lays special

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stress on the adulteration of milk. He says: "When we compare the good milks with the adulterated, we are able to form a fair judgment of their quality. In the months of October, November, and December, instead of 9 per cent. of solids not fat, which is the amount of solids taken as the basis of our calculation, we have an average of 9½ per cent. If this were remembered when a judgment is given upon a milk adulterated with 10 per cent. of water, there would be no room for the exhibition of such leniency as is shown in so many cases. I suppose 10 per cent. on our standard means the payment by the public of London of the sum of £400,000 as an additional water-rate, so that even when the water is pure the tax is a heavy one. How unfair to the honest tradesmen is such leniency on the part of some, must be obvious to all." We commend Dr. Bernays' report to those amongst our metropolitan magistrates who, by their decisions, would appear to dissent from some of the clauses of the Adulteration of Food Act.

A novel dress has recently been exhibited at the rooms of the National Health Society, Berners-street, intended for the protection of sanitary visitors, nurses, and others who have to enter the apartments of persons suffering from infectious diseases. The garment is of mackintosh, glazed inside and out, and made completely to envelope the wearer, with a hood to cover the head. Only the hands and face remain exposed—a matter considered of little importance, as these can be easily washed with disinfectants. A not less important object proposed to be effected by the use of this dress is that by its removal when the wearer leaves the sick-room the clothes which have been protected need not be changed, and the danger of the disease being carried from house to house or communicated to susceptible people in public vehicles is obviated. A tight case for the fever-dress to be enclosed in is part of the invention. At the end of the day, or as often as may be convenient, the dress can be cleansed with disinfectants. Further protection is given by a simple form of respirator, which is made of two folds of thin washing-net, between which is placed a layer of medicated cotton-wool, through which the wearer can breathe, though no germs can pass. After use, the wool is burnt and the net washed.

The Army Medical and Transport Inquiry Committee have held further meetings since we last reported. At one, Surgeon-General Sir J. Hanbury, K.C.B., who was the Principal Medical Officer of the British Force in Egypt, was examined. It is stated that the Committee are considering the reports of former campaigns in order that they may the better arrive at a conclusion as to what changes are necessary in the medical and transport branches of the Service.

The Committee of the German Hospital at Dalston have secured the spacious premises known as Graham House, in Dalston-rise, directly opposite the Hospital, to be used as a home for the convalescent. This step, which was suggested at the last annual dinner of the institution, held at Willis's Rooms, will relieve the present premises, and enable the Hospital authorities materially to extend the usefulness of the charity.

WASTING AFTER DIPHTHERIA.

In the *Berlin. Klin. Woch.*, No. 1, Dr. Kahn, assistant in Kussmaul's clinic, reports a case of "a peculiar form of general atrophy after diphtheria, probably of a *trophoneurotic* nature." The occurrence of palsy after diphtheria is now widely known, but this paralysis need not be attended with atrophy, either of the muscles or of any other structure. The want of muscular atrophy, and the absence, so far as we know, of an alteration in the reaction of the affected muscles to the faradic current, are factors of much importance in the question of the nature of diphtheritic paralysis. General and rapid loss of flesh is a marked feature of brain disease, especially in the growing child. With cases of emaciation associated with, and probably dependent on, gross changes in the organs of the thorax and abdomen, we have at present nothing to do; these are not so mysterious. Profound wasting may be seen as a rare event in chorea, and then the faradic reaction is not appreciably changed from the normal. The following is an outline of the case recorded from Kussmaul's hospital. A boy, aged fourteen years, had a mild attack of pharyngeal diphtheria, which lasted for two weeks, in January, 1882. About eight days after recovery a difficulty in swallowing gradually declared itself, the voice assumed a nasal quality, and the food regurgitated through the nose. An interruption to the passage of food down the gullet was first observed about two weeks later; this was accompanied with a feeling of pressure about the lower end of the sternum, and was followed in from two to four minutes by a return of the food, which, although mixed with mucus, had not been in the stomach, as it was not of acid reaction. It was concluded that paralysis of the lower part of the œsophagus was the explanation of these symptoms. If this be so, Kahn argues that we may have a palsy of the involuntary muscle, as well as of the voluntary apparatus of deglutition, in cases of post-diphtheritic paralysis. And there is no reason why such should not occur. Paralysis of the ciliary muscle, for instance, is, we believe, very common after diphtheria. The other interesting feature of the report consisted in the enormous emaciation. The boy only weighed fifty pounds in June, 1882, notwithstanding good nourishment, which was introduced into the stomach by means of a tube so long as the dysphagia lasted. The temperature of the body remained normal; the excreta were *quite natural* (elaborate investigations of the amount of urea, chlorine, and phosphoric acid were instituted). It seemed that only the process of assimilation was at fault. The boy finally improved in all respects, and in October weighed about seventy-five pounds.

SICKNESS AND MORTALITY RETURNS OF FRIENDLY SOCIETIES.

In his report for the year 1880, the Chief Registrar of Friendly Societies stated that should the sickness and mortality returns for the quinquennium ending December 31, 1880, supply adequate data as to the duration of sickness, for which purpose a form had been specially devised, he was advised by the Actuary to the Central Office that the purpose for which these quinquennial returns were devised—viz., the collection of statistics on which to base tables for the use of friendly societies—would, in his judgment, have been fulfilled. The result of a preliminary examination of the new returns was, that on May 22 last the Actuary reported to the Chief Registrar that the data already in possession of the office were adequate for the purposes of the Act; and on August 10 last a short Act was passed, which relieved all friendly societies from the labour of rendering the quinquennial returns of sickness and mortality in the future. Moreover, the consent of the Treasury has been given in principle to the preparation of tables of sickness and mortality, and of contributions and benefits, to be founded on the data in the hands of the Central Office, supplied by these quinquennial returns of sickness and mortality, during the twenty years 1860-80; and it will now only be for Parliament to provide the requisite funds to carry out this undertaking. The available materials are stated to be enormous, largely exceeding, in years of observed life, those of the Institute of Actuaries' Collection of Life Office Experience; the Manchester Unity of Odd Fellows' Sickness and Mortality

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Experience, 1870; the Ancient Order of Foresters' Sickness and Mortality Experience, 1875; and Mr. Finlaison's Friendly Societies' Experience, 1850—put together. Results of the highest accuracy and importance—some perhaps at present unforeseen, the Chief Registrar thinks—may be expected from the scientific treatment of so vast a body of data, the equivalent to which may very probably never be again collected; but the extent of the results, he points out, must be determined by the liberality of the sum provided by Parliament.

ARTIFICIAL NEPHRITIS.

Dr. Aufrecht, of Magdeburg, who is already known from his researches on the effects of ligaturing the ureter, has recently published an account of further experimental work in the pathology of the kidney (*Centralblatt f. die med. Wiss.*, November 25, 1882). The ingenious plan was adopted of administering cantharides subcutaneously to animals, and examining the kidneys at intervals after various numbers of injections in different cases. The stages of nephritis could thus be ascertained with great ease, and the process followed from one set of renal elements to the others. The general result at first sight appears remarkable. It was found that simple tubular catarrh, tubulo-interstitial inflammation, and ultimately granular disease, were set up by the single irritant cantharides. Dr. Aufrecht is careful to say that it must not be rashly concluded from these observations that Bright's disease is but one and the same process, whatever "form" it takes. The conditions in chronic renal disease in man are obviously totally different from the conditions just referred to. It is, however, an important fact that the tubular disease always precedes the interstitial; and that the latter appears to originate in the connective tissue nuclei, not in the vessels by way of exudation of leucocytes. Acute nephritis induced by cantharides is not indeed attended by any exudation of white corpuscles. It seems obvious that artificial nephritis promises to furnish pathologists with a field for contention almost as large as was furnished by the cornea some eight or ten years ago, Cohnheim's views of the nature of inflammation being still actively combated by other morbid anatomists. In this connexion, as well as from its bearing both on the nature of Bright's disease and the possible danger of repeated blistering, we are likely to hear more about artificial nephritis from cantharides. In the same connexion, it may be noted that Litten (*Charité-Annalen*, VII., page 187, 1882) has observed a case in which inunction with a preparation of balsam of Peru (for scabies) induced acute desquamative nephritis and dropsy on three different occasions.

SAUSAGE-MAKING IN DUBLIN.

Recent revelations before the Public Health Committee of the Corporation of Dublin go to show that the manufacture of sausages is in that city often carried on under anything but hygienic circumstances. At the last meeting of the Committee, Dr. Cameron, the Medical Officer of Health, reported the existence of a sausage manufactory in a cellar in Moore-street, which, from its situation and surroundings, was altogether unsuited for the purpose. The Committee directed that proceedings be instituted against the manufacturer. It was decided to summon a special meeting of the Committee for the purpose of considering (1) the existing arrangements for the execution of sanitary duties; (2) the incidence of repayment of the loans borrowed for paving works; and (3) in reference to the closing of private slaughter-houses. The returns of duties performed by the sanitary staff showed that during the preceding week nineteen dwellings were disinfected. The disinfecting chamber was used by nineteen persons, 128 articles were disinfected in the hot-air chamber, sixteen certificates were granted for the gratuitous burial of destitutes, eighteen samples of food were collected for analysis. In sixty-four cases where sanitary notices were disregarded the Committee authorised the issue of summonses.

COLLEGIATE LECTURES.

Professor Parker, F.R.S., will commence his annual course of lectures in the Theatre of the Royal College of Surgeons on Friday, the 2nd prox., and will deliver nine lectures on the "Metamorphosis of Suctorial Fishes and Batrachia." The following is a syllabus of his lectures:—Lecture I. (February 2).—Introductory. On low types of Animals approximating to the Vertebrata, and on the Embryology of those forms and of the Vertebrata, proper. Lecture II. (February 5).—On the Structure of the Myxinoid Fishes (*Myxine* and *Bdellostoma*). Lecture III. (February 7).—On the Early Development of the Lamprey. Lecture IV. (February 9).—On the Metamorphosis of the Lamprey. Lecture V. (February 12).—A comparison of the Lamprey with the Myxinoids. Lecture VI. (February 16).—On the Embryology of the Batrachia. Lecture VII. (February 19).—On the Metamorphosis of the Tadpole into the permanent form. Lecture VIII. (February 21).—The three types—Myxinoids, Petromyzoids, and Batrachia—compared together. Lecture IX. (February 23).—The light shed by these low types upon the highest—viz., the Mammalia. Concluding remarks. Instead of the lecture on Wednesday, the 14th prox., the President of the College (Mr. Spencer Wells) will deliver the biennial Hunterian Oration.

THE PERITONEAL UTERINE SUTURE IN CÆSARIAN SECTION.

One of the main causes of the mortality after Cæsarian section, and one which makes success almost a matter of luck, if we may use the word, rather than of surgical skill, is the gaping of the uterine wound, and consequent escape of uterine secretions into the peritoneal cavity. In some cases the uterus contracts well, and remains contracted; consequently the edges of the uterine wound remain in apposition, and unite, with or without sutures, and these patients usually do well. In others, uterine contraction is not permanent, but intermittent; and in the relaxation of the uterus the sutures are often torn out, and the wound gapes, lochia escape into the peritoneum, and septicæmia and peritonitis is the result. Consequently, obstetricians have long felt that the primary step needed to make Cæsarian section not more dangerous than other abdominal operations of equal magnitude, is the discovery of a method of suture which can be relied on to keep the edges of the uterine wound together. In a recent number of the *Archiv für Gynäkologie*, Dr. Leopold, of Leipzig, describes a successful case of Cæsarian section in which he adopted a new method of suture. This method was, in principle, suggested to him by Sänger—a paper by whom, "in defence of the classical Cæsarian section," appears in the same number. Sänger's paper is largely devoted to criticising the suggestions of Kehrer, which we noticed in our number of October 14, 1882. The method of suture adopted by Leopold is based on the principle upon which ovariotomists act, and at which Mr. Spencer Wells arrived by those few experiments upon animals for which he has been so much abused in anti-vivisection pamphlets, and has so needlessly defended himself. That principle is the bringing together, in closing abdominal wounds, surfaces of peritoneum. To do this in closing the uterine wound, Dr. Leopold dissected up the peritoneum bounding the wound from the muscular tissue

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underneath to the extent of about one-fifth of an inch at the upper and lower angles, and rather more than one-third of an inch along the sides. Then he cut away the whole thickness of muscular tissue from which the peritoneum had been thus stripped. The freed peritoneum was then turned inwards so that it covered the edges of the wound, and was united with carbolised silk sutures, so that the surfaces of introverted peritoneum were brought into contact. The patient, as we have said, did well. One successful case of course proves little; but, as an attempt to solve a difficult problem, this seems to us worth notice.

THE CASE OF GAMBETTA.

THE *Gazette Hebdomadaire* of the 19th inst. publishes a minute account of the case of Gambetta, the clinical portion having been drawn up by Dr. Lannelongue, and the description of the autopsy by Prof. Cornil. Professors Charcot, Verneuil, Trélat, and Brouardel, and Dr. Siredey, certify to the exactitude of the statements made; and the document fills twenty-seven columns of the journal, illustrated by a lithograph of the morbid condition of the cæcum. Appended is a short paper by Dr. De Wecker, giving an account of his acquaintance with Gambetta, consequent on his having extirpated, in 1867, his right eye on account of its staphylomatous condition, due to a traumatic cataract which had been produced when he was a boy, and gradually gave rise to the inflammatory distension which necessitated the operation.

THE METROPOLITAN ASYLUMS BOARD MEETING.

AT the recent meeting of the Metropolitan Asylums Board Managers, a letter was read from Mr. Gladstone, declining to receive a deputation on the subject of the difficulties with which the Managers have to contend in carrying on their duties. This matter, the Premier explained, was beyond the province of his own department, but he had no doubt that the Local Government Board would do everything in their power to assist the Managers. The letter was ordered to be referred to the General Purposes Committee, who should have power to seek an interview with the new President of the Local Government Board. An important question of hospital management was also considered: it was formerly the custom of the Board to appoint superintending medical officers to all the asylums, and it having been found costly to appoint, in the height of an epidemic, a superintending medical officer, who might, in the course of six or eight months, have no patients, the Board made a new departure during the height of the late fever epidemic, and appointed a resident medical officer only, and made Dr. Collie, who has had great experience as the Superintendent of Homerton Fever Asylum, to act as visiting physician to one of the asylums which it was found necessary hastily to fit up. Colonel Haygarth moved a resolution to the effect that it is not desirable that the medical superintendent of any hospital under the Board should have the supervision of any other hospital at the same time. Sir E. H. Currie, on the other hand, pointed out that the committees of both asylums referred to were perfectly well satisfied with the new arrangement, which, while it was wisely economical for the ratepayers, gave the patients the benefit of the wide experience of Dr. Collie, whose reputation as an authority on fever was, like that of Dr. McKellar, known throughout Europe. In the division which followed the discussion on this subject only six voted for Colonel Haygarth's motion. The asylum returns showed that during the preceding fortnight in the South-West Hospital 23 fever patients had been admitted, 2 had died, and 34 had been discharged, leaving 61 under treatment, 44 of whom were scarlet fever patients, 1 typhus, and 16 enteric fever. In the North-East Hospital 33 had been admitted, 2 had died, and 44 had been discharged, leaving 151 under treatment, of whom 8 were typhus fever patients, and 39 enteric fever patients, and in this hospital, in the small-pox wing, there were 56 more scarlet fever cases. In the Western Asylum 9 patients had been received and 15 discharged, leaving 97, of whom 68 were scarlet fever cases, and 14 enteric fever cases, while 15 were suffering from other febrile symptoms. At the South-Eastern Asylum 22 cases had been received, 1 had died, and 15 had been discharged, leaving 98 under treatment, of whom 59 were scarlet fever, and 39 enteric fever cases. In the North-West Hospital 11 had been received, 1 had died, and 22 had been discharged, leaving only 22 under treatment (15 scarlet fever and 7 enteric fever cases). In all, 102 cases had been received in the fortnight, 8 had died, and 144 had been discharged, leaving 485 under treatment, a decrease of 44 on the number remaining a fortnight ago. The small-pox returns showed 94 patients remaining under treatment, as against 79 a fortnight since.

DEATH OF PROFESSOR F. W. BENEKE.

THE University of Marburg has sustained a severe loss by the death of this eminent and philosophical physician, who died on December 16 in consequence of the strangulation of a large portion of the small intestine in an aperture of the great omentum, the size of a shilling. He was born at Celle, in Hanover, in 1824, and passed two years and a half of his professional career at the German Hospital of London. In 1867 he was appointed Professor of Pathological Anatomy and General Pathology at Marburg, which post he retained until his death, at a time when, to all appearances, he seemed likely to continue his always active career for many years. He has contributed several valuable essays on theoretical and philosophic medicine. His active participation in various philanthropic undertakings will be much missed, the last of which—the establishment of a sanatorium for the scrofulous and consumptive at Norderney, on the coast of the North Sea—occupied much of his attention.

TUBERCLE BACILLI IN SPUTA.

WE learn from the *Berliner Klin. Woch.*, No. 3, of fresh investigations on the occurrence of bacilli in the expectoration of patients suffering from consumption. Dr. Pfeiffer, of Wiesbaden, has endeavoured to determine whether the presence of the bacterium in the sputa is of such regularity as to be of value in everyday practice. He has made observations daily over a period of twenty-five days (last October), the amount of sputa employed being limited to about 300 grains, and four preparations being made of this every day. To facilitate measures, the plan recommended by Dr. Long, of Breslau, has been employed. This consists in rendering the sputa more fluid by means of a weak solution of caustic potash, whereby some grey-green compact streaks may be set free, which have been found to be the favourite seat of the bacteria. Further, Pfeiffer has detected by this method some conspicuous white specks which are easy to distinguish against a dark background. These are apparently whole colonies of bacilli. The results of these investigations are in complete accordance with those previously arrived at by Balmer and Fraentzel (for an account of which our readers may refer to our second volume for 1882, page 608). Pfeiffer believes he has proved that the examination of small quantities is sufficient to confirm or disprove the existence of the micro-organism, but the examination must be spread over more than three days before a negative answer is given. Unless the observations extend over this period, the bacilli

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might very well be present and yet not be discovered. The bacilli were found to be present more regularly, and to be larger and more numerous, when the disease was more severe. The method adopted was that of Ehrlich, but the albumen on the cover-slips was coagulated by heating in an oven kept at a temperature of 100° C., in place of passing the glasses through the gas-flame, which is apt to char the nitrogenous material. Gentian violet was the dye used, and in this the cover-slips remained twenty-four hours. The background was of Bismarck brown: the specimens were immersed in this for a half to one minute.

VITAL STATISTICS OF SCOTLAND FOR THE SEPTEMBER QUARTER OF 1882.

In completion of our notices of the vital statistics of the United Kingdom for the third quarter of the past year, we now proceed to summarise the report of the Registrar-General for Scotland for the period ending September 30, 1882. The births registered during the quarter under review were 30,718; they were consequently at the rate of 325 to every 10,000 of the estimated population of Scotland, and represented an annual birth-rate of 3·25 per cent. Of the eight principal towns, Greenock had the highest, and Edinburgh the lowest, birth-rate. For every 10,000 of estimated population, the registered births of the quarter were at the annual rates of—in Greenock, 386; in Leith, 373; in Glasgow, 371; in Dundee, 327; in Perth, 315; in Aberdeen, 311; in Paisley, 306; and in Edinburgh, 289. The usual comparative statement is given regarding the frequency of illegitimate births. In seven of the thirty-three counties these constituted more than 12 per cent. of the whole number, while in two counties the illegitimate did not amount to 5 per cent. of all births that occurred. In Elgin and Wigtonshires the rate exceeded 17 per cent.; in Sutherlandshire it was only 3·9 per cent. The number of male births was 15,644, that of female births 15,074; for every 100 girls there were accordingly 103·4 boys born. During the whole quarter there were registered on an average 333·9 births every day. The number of deaths registered in Scotland during this September quarter was 16,886, being in the proportion of 178 deaths to every 10,000 of estimated population. The average death-rate of the corresponding quarter of the ten preceding years having been 189 per 10,000 of population, the death-rate of the quarter now under review has, during 1882, been very favourable. From the quarterly return from England, it appears that the estimated population of that division of the United Kingdom was, at the middle of 1882, 26,406,820; that the number of deaths registered during the quarter was 118,114; and that the annual death-rate during the three months ending with September did not exceed 17·7 per 1000 of the estimated population. The rates for England and Scotland, therefore, for the last September quarter were nearly identical. Of the principal towns, Paisley had the highest, and Aberdeen the lowest, death-rate. For every 10,000 of estimated population the registered deaths were at the annual rate of 262 in Paisley, 225 in Glasgow, 212 in Perth, 206 in Dundee and Greenock, 187 in Leith, 178 in Edinburgh, and 175 in Aberdeen. Throughout the whole quarter the deaths averaged 183·5 per diem. The natural increase of the population during the quarter—that is to say, the difference between the number of births and deaths registered—was 13,832, which is, of course, without reference to emigration or immigration. Zymotic diseases caused 1440 deaths during the quarter, constituting 22·7 per cent. of all deaths registered, and referred to specified causes. One death from small-pox occurred during July, in the person of a fisherman at Aberdeen on board a French lugger. Diseases of the respiratory organs were responsible for 955 deaths, constituting about 15 per cent. of the total mortality from specified causes, and that exclusive of deaths from consumption, diphtheria, croup, etc. During this period old age proved fatal to no less than 215 persons. The weather of the quarter may be briefly summarised as follows:—July was chiefly characterised by its very heavy rainfall, exceeded only by those of 1867 and 1858; August was, on the whole, favourable, with a moderate rainfall, a mean temperature rather higher than the average, and a dryness of the air much beyond what is usual; during September the barometer was at its ordinary mean height, but much disturbed,—*i.e.*, varied much in range,—yet the wind was of less than its usual strength, and the rain less both in depth and days of falling, though great barometric range usually increases both.

RARE SEQUELÆ OF ENTERIC FEVER.

In our issue for January 6 we briefly summarised a paper on a rare pathological event, viz., abscesses of the liver in association with enteric fever. In the *Wiener Med. Woch.*, No. 50, Max Weiss has put on record a case of abscess of the brain occurring in connexion with typhoid fever; and further, since gross lesions of the cerebrum in this disease are very infrequent, Max Weiss has prefaced the description of his case with notes of the literature of the subject. Griesinger, out of 118 cases of enteric fever, met with four instances of effusion of blood between the arachnoid and dura mater (there was no pachymeningitis, which is one of the most frequent causes of hæmorrhage in this site); in two this happened in the third week of illness, in two in the marasmus after the disease had ceased. Buhl, out of 300 cases, met with two of softening with capillary hæmorrhage in the substance of the brain. Tommaso Galli has communicated an instance of aphasia occurring in the course of convalescence. Berger has recorded a case of left hemiplegia, which set in suddenly, with only transient disturbance of consciousness in the course of the disease. Duchek has contributed three examples which were observed in an epidemic characterised by little diarrhœa and abundant rash. In these individuals the symptoms were those of irritation and paralysis combined. Thus, spasm of the face, with lockjaw and stiffness of neck, back, and extremities, were mingled with ptosis, dilatation of pupil, and convergent squint (the third and sixth cranial nerves being paralysed); one case showed cutaneous hyperæsthesia, and another aphasia. The above reports are interesting, but, in the matter of diagnosis of gross cerebral lesion, evidence other than that obtained at the post-mortem table is apt to be misleading, and cannot be trusted—*e.g.*, the symptoms of cerebral tumour are often observed in cases of renal disease. The case recorded by Max Weiss was that of a single woman, aged twenty-one years, who, six days before death, was suddenly seized with vertigo, after which the left side was found to be paralysed. In the progress of the illness the left limbs were also the seat of clonic and tonic spasm. At the post-mortem examination there was discovered an abscess in the "motor" region of the right cerebral hemisphere; in the ileum, signs of a past enteric fever in the form of small, flat, shallow scars; and perimetritis, with catarrh of the uterus and Fallopian tubes.

AN ASEPTIC CHAMBER.

The impossibility of excluding dust and germs from the air of the laboratory, and the extreme difficulty of insuring their absence even from smaller chambers or bell glasses, has always thrown a doubt on the results of researches into the life-history of bacteria and other micro-organisms. After three years' patient labour, Dr. Adrian Schücking, of Pyrmont, has succeeded in constructing a chamber which

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shall not only be absolutely dust and germ free, but which permits of ingress and egress without contamination from the outer air. There are many other investigations in which it may be employed, but it will be indeed an indispensable adjunct to the physiological laboratory. It consists of two chambers, the walls, floors, and roofs of which are covered with well-soldered zinc-plates or sheets of glass. The door of the antechamber and that between it and the inner chamber are made air-tight with india-rubber, and both compartments are lighted by glass windows closely sealed. The distinguishing feature of Dr. Schücking's chamber is the ventilation. The air is drawn out by an exhauster (Scheer and Petzold's) worked by an engine of half a horse-power. This is connected by tubes with the outer chamber, and, performing 2500 revolutions per minute, extracts thirty cubic metres or the entire contents of the antechamber in that time. The inlets are ten in all—three in the inner room, four in the outer, and three in the wall which parts them. They are forty centimetres square, and formed of clean compressed cotton-wool, about ten centimetres thick, securely fastened into a leaden frame, and covered by a thin sheet of felt. Before any observations are commenced, the walls are washed down with a 5 per cent. solution of carbolic acid, and the whole chamber disinfected by bromine vapour. The air is then exhausted. Between the opening of the outer and inner doors a full minute must be allowed for the renewal of the air, and the removal of any germs that may have been admitted from without. The outer chamber serves also, in prolonged experiments, for the reception of food or excreta, and is also furnished with a bath. The experimenter, or patient to be experimented on, should be clad in linen, with an outer garment of india-rubber, both previously disinfected. If desired, the walls of the antechamber might be further purified by a spray apparatus each time the door is opened.

THE ESTIMATION OF UREA IN THE BLOOD.

After detailing the objections to the processes already in use, devised by Christison, Joseph Picard, Gscheidlen, and Gamgee, Professor Haycraft (*Journal of Anatomy and Physiology*, January, 1883) proceeded to describe his own process, which is based on dialysis. Briefly, his *modus operandi* is as follows:—A certain quantity of defibrinated blood is placed on a dialyser, so as not to form a layer more than three millimetres deep on the parchment paper. An equal quantity of alcohol is then poured into the outer vessel, and the whole covered over for a few hours. The fluid parts of the blood will pass through into the alcohol during this time, leaving some dried blood adhering to the parchment. This should be mixed with water and bruised in a mortar, and then again placed to the dialyser. This process may be repeated. The portions of alcohol should then be evaporated, and the residue extracted again with alcohol, the residue of which will contain little else than urea. This residue is then washed with petroleum naphtha, which extracts fats and colouring matter, extracted with ether; and the urea may then be estimated by any of the well-known methods (preferably by Hüfner's), because there is less liability to estimate the substances with the urea by this process, and because it is accurate and easy of application. As regards the accuracy of the method, he says that slight evaporations were unavoidable, and that the oxalate had to be dealt with, which is a tolerably stable compound. The main advantages were, that the urea was obtained in a state of comparative purity, and that no metallic salt was introduced. Owing to his inability to obtain a licence, his experiments are but few in number. He sums up the result of his investigations in the following propositions:—"1. A large quantity of urea is found in the blood of an animal during and shortly after digestion; far less if it be in a starving condition. 2. The injection of a solution of peptone also produces an increase in the amount of urea, although this point requires further investigation. 3. Urea is not increased in blood during and after muscular exercise to any appreciable extent. 4. The amount may vary greatly in various conditions of the healthy state; in my own cases this may be from 0·095 to 0·01 per cent. It is impossible to give an average unless the time after food be taken into consideration. 5. Urea exists in muscle in small amount (about 0·01 per cent.). 6. There is no increase perceptible as the result of muscular activity. Probably the quantity existing in muscle varies with, and depends upon, that in the blood, a small and varying quantity naturally diffusing into it."

THE PARIS WEEKLY RETURN.

The number of deaths for the second week of 1883, terminating January 11, was 1122 (610 males and 512 females), and among these there were from typhoid fever 69, smallpox 6, measles 28, scarlatina none, pertussis 2, diphtheria and croup 42, dysentery 2, erysipelas 11, and puerperal infections 3. There were also 61 deaths from acute and tubercular meningitis, 208 from phthisis, 42 from acute bronchitis, 69 from pneumonia, 64 from infantile athrepsia (23 of the infants having been wholly or partially suckled), and 47 violent deaths (35 males and 12 females). The number of deaths registered is slightly inferior to the mean of the last four weeks. Of the epidemic diseases, the only one which shows any increase is measles, the deaths from which increased from 9 to 23. The numbers of deaths from typhoid fever and diphtheria continue nearly stationary, but the admissions for typhoid fever have diminished from 155 to 83. This is the first week for five months during which the admissions for typhoid fever have been less than 100, and 88 admissions are not above the mean of non-epidemic periods. So high a mortality as 28 from measles has not been reached since July, 1882, when the disease prevailed epidemically in Paris. The births for the week amounted to 1365, viz., 667 males (461 legitimate and 206 illegitimate) and 698 females (506 legitimate and 192 illegitimate): 113 infants were born dead or died within twenty-four hours, viz., 58 males (38 legitimate and 20 illegitimate) and 60 females (38 legitimate and 22 illegitimate).

DROPPING OF FLUID FROM THE NOSTRIL ASSOCIATED WITH OPTIC NEURITIS.

Although in the case of dropping of fluid from the nostril recorded by Sir James Paget, in the *Clinical Society's Transactions*, this symptom was proved to depend solely upon polypoid growths in the antrum, yet the cases recorded by Mr. Priestley Smith and Mr. Nettleship in the January number of the *Ophthalmic Review* would seem to show that something still remains to be made out in regard to the pathology of this affection. In the first case the dropping commenced after well-marked cerebral symptoms had existed for four years, these symptoms being headache, vomiting, and amaurosis. For four months from its commencement the discharge of fluid continued regularly; but after this there were occasional periods of cessation, during which drowsiness, pain in the head, or some other cerebral symptom was observed. The patient died about fifteen months after the dropping was first noticed, being comatose for a week before his death; during this time no dropping from the nose occurred, and the patient was frequently convulsed. In this case no nasal polypus could be seen during life, and an autopsy was not permitted. Mr. Priestley

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Smith's second case is very similar: the patient's illness had commenced with convulsions, headache, and vomiting, and blindness had gradually supervened; two years and a half from the onset of this illness the dropping from the nostril commenced—at first from one nostril, subsequently from the other. When he came under observation it was found that he had one nostril occluded by a polypus. This patient also found that if the dropping stopped he suffered from pain in the forehead and temples. In both these patients, then, there was a history of grave cerebral symptoms at the commencement of the illness, followed by optic atrophy some years before the onset of the dropping of fluid from the nose. Mr. Nettleship's case only differs from the others in that the patient was a woman; that the cerebral symptoms during the primary illness were not so well marked, and were attributed, in part, at any rate, to hysteria; and that the onset of the dropping of fluid from the nose took place earlier than in the other cases. She had well-marked optic atrophy, and the mucous membrane of the left nostril (from which alone the dropping took place) was found to be swollen and ulcerated. In all these cases the fluid was examined, and found to contain albumen and mucin, but no sugar—which is practically conclusive that the fluid was not cerebro-spinal, even had other circumstances rendered it probable that such was the case; the only point in support of such a theory being the aggravation of the cerebral symptoms when the flow was temporarily suppressed. Mr. Nettleship adopts the view that the fluid came from the nasal cavities, and does not attempt any explanation of the connexion (if any) with the cerebral symptoms. Mr. Priestley Smith, however, writes: "In both of my cases, severe brain symptoms, with eventual atrophy of the optic nerves, *preceded* the onset of the dropping. May not these have been set up by encroachment of a morbid growth upon the upper wall of its containing cavity, *e.g.*, the sphenoid or ethmoid cells, destruction of the bone, and inflammation of the meninges? It is not necessary to assume that the growth pressed upon or in any way affected the optic nerves directly, for in one case certainly, and most probably in the other also, the atrophy of the nerves was consecutive to neuritis, and neuritis demands no special locality for the primary lesion. If the bony septum between the nasal cavities and the brain was actually damaged in the way suggested, it is easy to conceive how a stoppage of the downward flow of the fluid through the nostril might lead to pressure on the brain." We cannot say that we see any good grounds for accepting the hypothesis. Dr. Baxter's case, to which reference is made, appears to be of a similar nature; and yet we read that at the post-mortem examination the interior of the skull, the brain and its membranes, and the cavities of the ethmoid and sphenoid bones, showed no disease. In this case, therefore, the pressure of a morbid growth had no share in the production of the cerebral symptoms, and it seems to us that the partial recovery that all these patients made is quite inconsistent with the continued presence of the growth which originally gave rise to such symptoms. Be that as it may, however, the cases are of considerable interest, and we hope that, now that attention has once more been called to this disease, some fresh observations may be forthcoming.

At the meeting of the Medical Society of London, to be held on Monday evening next, Dr. Whipham, Physician to St. George's Hospital, will open a discussion on the important question of the association existing between Bacilli and Tuberculosis. It is expected that many practitioners other than those who are Fellows of the Society will enter into the debate.

In a communication, dated 18th inst., to Dr. Norman Kerr, the Hon. Sec. of the Dalrymple Home for the Treatment of Inebriates, the Archbishop (designate) of Canterbury accepts the Vice-Presidency of the Home, and expresses his "sympathy and earnest goodwill in the anxious and needful work" which the institution represents.

We are glad to learn that the London Sanitary Protection Association enters the new year in a prosperous condition. At the end of 1882 the members numbered 540, and the total income for the year was £1164. The Association begins the new year with a clear balance at their bankers, and an increased staff of competent young engineers engaged at adequate salaries.

It is stated that a Bill for the amendment of the Medical Acts is being prepared on the lines of the recommendations of the Royal Commission on the Acts; and that it will be introduced in the House of Lords.

FROM ABROAD.

Dr. Satterthwaite on Tuberculosis.

Dr. Satterthwaite, Pathologist to the St. Luke's and Presbyterian Hospital, New York, terminates an elaborate paper on "The Origin and Natural History of Tuberculosis" (*New York Medical Record*, October 28), with the following conclusions:—

"1. Tuberculosis is a disease that deserves the name hereditary, for it attaches itself to certain families throughout many successive generations; and it is most apt to attack those members that are deficient in physical vigour, from whatever cause. Proper precautions often enable those that are thus liable to escape it, or withstand it successfully. 2. The most distinguishing characteristic of tuberculosis is the occurrence in the tissues of minute, bright, glistening, translucent particles that have been called miliary tubercles, granula, granulations, etc. 3. They are the result of an inflammatory process, because they can be produced by the introduction of mechanical irritants into the system. 4. When these minute bodies coalesce to form larger bodies, and undergo a change of colour, they are known as crude or yellow tubercles. 5. Some of them contain the reticulated tissue that has been called adenoid because it resembles the retiform tissue of lymphatic glands. As the miliary tubercle advances in age, one or more large multi-nuclear foci may be found, either at the centre or periphery of the nodule. Sometimes Schneppel's epithelioid corpuscles are found, sometimes lymphoid elements, and sometimes fibrous tissue; but no one of these tissue-elements, which all belong to the connective tissue series, is pathognomonic of tubercle. 6. The lungs and serous membranes are most frequently attacked, and it is here that the natural history of tubercle is studied to the best advantage. In other regions there may be modifications of the tubercle, so that its distinctive character is difficult to demonstrate. 7. In the gradual development of these bodies they undergo caseous change at the centre, which phenomenon is another marked feature of tubercle. Still, in some instances, we have reason to suppose that the miliary tubercle may become organised, and thus a cure result. 8. Tubercles are rarely found without more or less contiguous inflammation that may be classed as a pneumonia or bronchitis. The latter is the *infiltrated tubercle* of Laennec, the *catarrhal pneumonia* of Niemeyer, or the *desquamative pneumonia* of Buhl. The pneumonia may be, perhaps, protective in some instances, serving to wall up a caseous process, thus preventing it from becoming disseminated; or it may eventually itself participate in the same process, and lead the way to necrosis of the lung and the production of cavities. 9. Tubercles may be confined to a limited area and a single lobe of the lung, in a single lung, or they may be diffused pretty equally in different organs. Generalised, disseminated, or secondary tuberculosis is the most dangerous and malignant, and is probably due to

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transmission of the disease by the lymphatics or bloodvessels —usually the latter. In this secondary form the first manifestations are the grey granulations, as they are also in the primary form. 10. Tuberculosis is inoculable, producing its kind if it produces anything; but other substances will also, in a certain number of cases, produce the same apparent lesions—in fact, not only any organic substance that is capable of physical deterioration, but also a variety of non-organic substances. 11. There is some good evidence favouring the theory that consumption is contagious, *i.e.*, that it is capable of propagation by *cohabitation*, or, in other words, close association with persons that have the disease. The number of well-authenticated instances in the human being where the origin of the disease can be explained in this way is sufficient to give considerable strength to the theory. The best evidence on this point is obtained from a study of phthisis in the domestic animals, especially in horned cattle. 12. And yet the morphological differences between this form of phthisis and those of the human being are such as to put us on our guard against forming hasty conclusions from a comparison between them. 13. Nor does it appear that we have good grounds for believing that the meat or milk of phthisical cattle, when taken as food, have ever produced a single instance of tuberculosis in the human being. 14. But we should, none the less, discontinue the sale of such meat or milk, since, even if they are not infectious, they are deficient in proper nutritive elements, and for this reason alone should be debarred from sale. 15. And so in the case of bovine virus, though it does not appear that any person has been rendered tuberculous, yet no vaccine virus should be held to be suitable for vaccination purposes unless proper assurances have been given that the animals yielding the vaccine were in every respect free from tubercle, as determined by inspection after slaughtering. 16. Pulmonary tuberculosis and pulmonary phthisis are, in the majority of cases, interchangeable terms. 17. As a natural deduction from the above views, attention should be chiefly directed, in prophylaxis and treatment, to the vicious constitution which is conceded to be an essential prerequisite of the disease, rather than to a contagium that at the best plays only a comparatively infrequent and subordinate *rôle*."

Internal Œsophagotomy.

Dr. Roe, in the numbers of the *New York Medical Record* for November 11 and 18, publishes a paper, which he read at the Medical Society, with the object of showing the superiority of internal œsophagotomy performed for the division of membranous or cicatricial constrictions or obstructions. He contributes two examples of its performance in his own practice, and furnishes an analysis of the thirteen other cases which have been recorded. From a review of the whole fifteen cases he arrives at the following conclusions:—

"1. That the operation of internal œsophagotomy for the division and removal of membranous constrictions or obstructions in the œsophagus is established beyond question as justifiable operation; and in all cases where it is clearly indicated it is the only warrantable operation for relief against impending starvation. 2. That it is a safer operation in its immediate results, and is attended by fewer complications, than external œsophagotomy or gastrotomy. 3. Notwithstanding that it is a safer operation than external œsophagotomy or gastrotomy, when done with equal care and skill, it is one requiring great care, and oftentimes the utmost surgical and manipulative dexterity; for the careless and reckless performance of it, even in the most favourable cases, would at once lead to the most serious consequences. 4. That it is an operation applicable to strictures in every region of the œsophagus, whereas external œsophagotomy is only applicable to those located in the region above the sternum. 5. That, as in external œsophagotomy and gastrotomy, it is an operation only to be undertaken when dilatation of the stricture has failed. 6. That success in this operation means a permanent relief to the patient, and cure of the stricture; the restoration of the œsophagus to a normal condition rendering alimentation normal, and leading at once to comfort and freedom from annoyance: whereas success in external œsophagotomy and gastrotomy necessarily means a life of continued torment, the patient being in constant danger of the most serious complications and unfavourable termination. 7. That the operation does not dispense with the use of the sound, but renders its use rapidly effective. 8. That it is inadmissible in strictures through which an opening cannot be found. 9. That it is contraindicated in every instance in which the obstruction is cancerous or of a malignant nature, or caused by conditions external to the lumen of the œsophagus; where the walls are greatly atrophied, thinned, or indurated; and whenever internal urethrotomy would be inapplicable under like conditions of the urethra."

GENERAL CORRESPONDENCE.

"Therapeutical Remembrancer," etc.

Letter from Dr. J. Mayne.

[To the Editor of the Medical Times and Gazette.]

Sir,—Owing to the circumstance of my having recently been the (no doubt) honoured recipient of more than one anonymous letter containing *quasi-critical* references to the above-named miniature publication, may I hope that you will kindly permit the following brief remarks to appear in a corner of your admired journal as immediately as may be convenient.

These probably worthy, though nameless and rather hazy amateur monitors, seem bent on imputing to me negligence, and other *heinous shortcomings, ex facto*, or rather *ex concesso*. In other words, it is plain that they, and any who may be holding the same opinions, have expected the "Remembrancer" to represent what it never was purposed to effect—the task, to wit, of a fresh attempt at approximately defining the features and phases of human ailments in general; and, perhaps, as to "*disease-germs*" in particular!

It may be a little interesting for parties alluded to, to know that the first edition of the "Remembrancer" appeared (in London), bearing its present imprint, thirty years ago, and enjoyed acceptance at home and abroad. Its latest reproduction is greatly condensed, and constructed with elastic binding to maintain its pocket-book form.

In conclusion, and in support of the sole intention of these remarks, it here will not be deemed improper to add, that, should a third edition be wanted, it will be forthcoming, and without containing any allusion to individual diseases. The latter arrangement would have characterised the *second* edition but for a mistake on the part of a deputed party.

I am, &c.,

January 17. J. Mayne, M.D., L.R.C.S.E.

The Results of Excision of the Pylorus.—Dr. Rydygier, in a recent number of *Volkmann's Sammlung*, thus sums up the results of the operations hitherto performed. Sixteen surgeons have operated upon twenty-three cases, all but two of which have been examples of cancer. Of these last two operations one was performed by Rydygier in a case of stenosis caused by round ulcer, which terminated successfully; and the other by Lauenstein in a case of supposed cancerous tumour, which at the autopsy proved to be one of gangrene of the transverse colon. Of the twenty-three cases, nineteen proved fatal, viz., fifteen some hours after the operations, three on the seventh or eighth day, and one (Billroth's) four months after from relapse. Of the four recoveries, one belongs to Billroth (no relapse having occurred in six months), one to Wölfler (the patient seeming well at the end of a year), one to Czerny (seven months without a relapse), and one to Rydygier.—*Allg. Wien. Med. Zeit.*, November 28.

Bromide of Potassium in Chordee.—Dr. Cambillard states in a recent *thèse* that he has seen this painful affection successfully treated at the Midi by means of injections of bromide of potassium, and supplies the following formula:—Water 150 parts by weight, glycerine 10, bromide of potassium 6, and Rousseau's laudanum 2 parts. Four of these injections should be employed in the twenty-four hours, the last just before bed-time. Each injection should be retained one or two minutes. The erections are usually speedily calmed, and sometimes completely suppressed. They are nowise painful, causing only in some persons a slight burning sensation. They act by anæsthetising the urethral mucous membrane.—*Bull. de Thérap.*, December 30.

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FOREIGN CORRESPONDENCE.

CUSTOS! QUID DE NOCTE?

[To the Editor of the Medical Times and Gazette.]

SIR,—There is in Rio de Janeiro a biological laboratory annexed to the Ministry of Agriculture, presided over by a French *savant*, Dr. Luis Couty. Two assistant professors (Brazilians)—Doctors Ribeiro Guimaraes and Raposo—have just concluded a series of experiments which prove, contrary to long-fixed belief, that coffee is an agent of waste or consumption, and not a moderator of organic assimilation and separation. They show that under the use of coffee a much greater supply of albuminous food is necessary. I understand that a detailed account of these experiments has been sent to Paris. Fortunately, the pursuit of biological science, if prohibited by puritans in England, has found a peaceful sanctuary in Brazil, and flourishes under the fostering personal care of another Peter the Great.

I should like to see an authorised opinion as to the question, Is the lymph taken from a perfect vesicle on the arm of a revaccinated person equally efficacious as that taken from one now for the first time vaccinated? My own opinion is that the potency is equal, as the perfection of the vesicle in the revaccinated is a proof that in the organism there remained no trace of the first vaccination. I saw lately a fact as to vaccine, which I think worth relating. A child was vaccinated, with a perfect result, and, scratching itself, first on the region occupied by the vesicles, and then touching with the same fingers two abrasions of the cutis on its face, there were produced two perfect vaccine vesicles. The only plausible explanation is that the first vaccination had not saturated the organism; and the fact may be paralleled to that which I have seen, of a second attack of small-pox supervening after an interval of two weeks from a first. The individual succumbed to the second attack. I was much interested by the reading of Sir Joseph Fayrer's lectures on Indian Fevers. It seemed as if I were reading a monograph on our Brazilian fevers. This mixed or hybrid fever—malarial typhoid—has for some time been recognised in Brazil, and my own experience has convinced me that typhoid, or at least a fever undistinguishable from true *Dothinenterite*, may be evolved in the human organism in the presence of an absolute impossibility of transmission from a previously infected person. Typhoid is here undoubtedly but slightly contagious, as, fortunately, scarlatina has proved itself to be in St. Paul; for an epidemic on a small scale which appeared in the province last year soon died out, after making, perhaps, from thirty to forty victims as the whole sum of its fury in the four districts attacked. Unfortunately, one of these was my promising eldest grandson, who bore the old family baptismal name of Achilles. It was the first time that scarlatina had been recognised in the interior of this province, and its inactivity in propagation was noticed as a curious and inexplicable fact by several physicians. *Nihil novum sub sole!* The use of ox's blood fresh drawn in phthisis and lung weakness, which I remember to have seen preconised in medical journals as a novelty, is an old popular remedy in this country; and those who can overcome the natural repugnance to the drink speak with enthusiasm of the good resulting therefrom. It is taken in the quantity of a cupful, sweetened with sugar and well agitated with a spoon. In the commencement of this month Dr. Candidus Barata Ribeiro, one of the physicians of the great Hospital of Peter II. for the Insane in Rio de Janeiro, performed the ligature of the vertebral artery as a *tentamen* for the cure of epilepsy. I do not know the result. Unfortunately, a few days afterwards this same physician, entering his house, stumbled over a dog in the corridor, and broke his arm in two places. Have Dr. Austin Flint's views as to the pathology of pneumonia been well received in England? I and other physicians here have long considered pneumonia to be essentially a septic fever with local manifestation.

I am, &c.,

RICHARD GUMBLETON DAUNT, M.D. Edin.

Campinas, San Paulo, Brazil, October 24, 1882.

WARREN DIAMOND, M.R.C.P., M.R.C.S., Senior Honorary Medical Officer of the Brixton, Streatham, and Herne Hill Dispensary, has resigned his appointment. He has given his services to the charity for twenty-five years.

REPORTS OF SOCIETIES.

THE CLINICAL SOCIETY OF LONDON.

ANNUAL MEETING—FRIDAY, JANUARY 12, 1883.

JOSEPH LISTER, F.R.S., President, in the Chair.

A CASE WITH SYMPTOMS RESEMBLING MYXŒDEMA.

DR. COXWELL read notes of a case which he exhibited at the last meeting. It was that of a child aged thirteen, with symptoms resembling those of myxœdema. Until eight years of age she differed in no way from other children, and could read a chapter out of the Bible or a story as well as her mother, could write, and learnt arithmetic. A great change then came over her: she would often fall asleep, even when eating her meals; her memory became defective, and if sent to do anything she would wander about in an aimless fashion. Later, her speech became thick and indistinct; she suffered from headache; her head drooped forward on to her chest; her hands and feet became very cold; her legs became weak and her gait unsteady. She was lately a patient in the National Hospital for the Paralysed and Epileptic under the care of Dr. Hughlings-Jackson. The appearance of her face is very suggestive of myxœdema, her skin being translucent, with a circumscribed patch of redness in the centre of the cheeks; the lower eyelids swollen; the nose broad; the eyes prominent and well formed. The thyroid gland seems diminished, and there are no abnormal fatty tumours in the region of the neck or elsewhere. While under observation her temperature was frequently as low as 95·6°. She was often extremely restless at night, and had frequent attacks of screaming. Her power of speech became worse, till at last she could hardly utter a single sound, the lips being seen to move ineffectually while she attempted to do so. She could not kiss her mother or puff out her cheeks, and her food would often remain seven or eight minutes between her teeth and lips. There was a general overclouding of the intellect. Dr. Coxwell drew attention to the fact that very pronounced mental disease has been reported in myxœdema, and that Dr. Ord had a patient suffering from that disease with marked affection of the bulb, a point of similarity with the present case of some importance. If the case was one of myxœdema, it was of interest as being the first recorded in a child; if it was one of simple imbecility, it was remarkable on account of the bulbar symptoms and the likeness it bore to myxœdema. The arguments in favour of sporadic cretinism were few, and outbalanced by the absence of most of the characteristics of that disease.

CASE OF ENORMOUS ENLARGEMENT OF THE LOWER LIP CURED BY OPERATION.

These notes were read by Mr. DAVIES-COLLEY. Richard 3. D., a clerk, aged thirty-six, was admitted into Guy's Hospital in August, 1881, with a remarkable swelling of the lower lip. Fourteen years before he had a chancre on the penis, followed by soreness of the tongue and swelling of both lips, especially the lower. There was never any rash on the skin. He was a very great smoker. The lower lip was of enormous size, everted, and pendent, so that its border was on a level with the tip of the chin, while the lower teeth were in front completely exposed to view. The mucous membrane was fissured in parts, but otherwise natural. The tissues were a little firmer than usual, but not at all indurated. There was a little tenderness on pressure. From side to side it measured three inches, from above downwards one inch and a quarter, and in thickness seven-eighths of an inch. The upper lip and tongue showed signs of chronic inflammation. There was no enlargement of the adjacent glands. He left off smoking, and was at first treated with anti-syphilitic remedies. The mucous membrane became more healthy, but the lip remained the same size. Some reduction was then effected by pressure between thin slips of wood. The lip became smaller and flaccid, but was still coated and pendent. On November 8 a V-shaped piece was removed from the centre of the swollen lip, and a rapid recovery ensued. When last seen, he had no longer any eversion of the lip, which had assumed a perfectly healthy and normal aspect. Mr. Davies-Colley brought the case forward as a striking example of the enlargement of the lip which occasionally results from chronic inflammation. There was

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nothing in the patient's family history to indicate a scrofulous tendency. The evidence of secondary syphilis was doubtful, and there was no record of mercurial salivation. On the whole, Mr. Davies-Colley was disposed to attribute the disease primarily to syphilis, and secondarily to the constant irritation of the inflamed surface by excessive smoking. The case was also interesting on account of the success which followed excision of part of the lip after the more or less complete failure of other remedial measures.

Mr. CLEMENT LUCAS said he had seen the case, and congratulated the operator on the success of his treatment. With regard to the cause of the enormous enlargement of the lip, he believed that any chronic ulceration might lead to chronic œdema, whether the ulceration were the result of constitutional affections, such as syphilis or struma, or of local causes or acquired syphilis. In his experience, the strumous lip of children, where the hypertrophy was associated with ulceration, was frequently due to an hereditary syphilitic taint. Besides the combined effect of smoking and syphilis to which the author attributed the labial disease, the use of mercury may be an additional cause in some cases. In the secondary stage of syphilis, patients ought to give up the unfortunate habit of smoking, because the ulceration of the lip and tongue is principally kept up by extraneous irritation, and there was a liability for the inflammatory condition to become converted into an epitheliomatous growth. Another efficient explanation of great overgrowth of the labial tissues may be found in the prolonged presence of carious teeth. A remarkable case of this kind happened six years ago in the person of a a young lady in whom the upper lip had become enormously enlarged, and so remained for twelve months. The lip also showed an eruption on the cutaneous aspect, which was at different times diagnosed as eczema, herpes, lupus. The two lateral incisors were decayed and stopped, and a small sinus was present at the base of one of them. The dentist considered the dental state quite enough to cause the labial hypertrophy. The teeth were removed after consultation with Sir William Gull and Dr. Fagge. The hypertrophy of the lip had subsided completely one month after extraction of the diseased teeth.

Dr. HADDEN thought the labial enlargement might be due to lymphatic obstruction, such as had been described by German authors in the tongue. The microscopical examination was not opposed to such a view. There was no reason to suspect syphilis.

The PRESIDENT regarded the case as of interest, not only from the rarity of such an extreme degree of inflammatory hypertrophy, but also from the result of the treatment used. As far as he understood the case, it appeared that the removal of a V-shaped portion of the lip not only reduced the size by its direct effect, but that which remained returned to its normal dimensions by virtue of the excision. We had analogous examples in the case of the removal of enlarged tonsils. It would seem that the effect of extirpation of a part of such structures is to bring about a sympathetic atrophy of the remainder. Of this experience the case of a young gentleman, aged fifteen, was mentioned, in whom long-lasting deafness entirely disappeared in two weeks from the excision of the tonsils; in this case the sympathetic chronic inflammatory thickening of the Eustachian tube was reduced by the indirect effect of the operation. Another kind of case was also illustrative of the same principle in the lipomata of the nose—so-called "grog-blossom"—the large unsightly mass may be reduced to the normal dimensions by removal of a part with the knife, the vicinity, although not cut or meddled with by the surgeon, undergoing reduction.

Dr. MEADOWS narrated the case of a lady with enormous inflammatory hypertrophy of the mons veneris and labia, which he freely cut away two years ago. Within six months of the operation, the patient, although only thirty-three years of age, ceased to menstruate. Probably this effect was the result of atrophy of the ovaries.

Mr. DAVIES-COLLEY considered that the good result obtained in his case was due in part to removal of tension, and in part to the change in the position of the lip, for the operation allowed the lip to get rid of its pendent condition. There was no evidence of lymphatic obstruction or of enlargement of the glands. The teeth exposed to view were bare at the neck and coated with tartar, but were otherwise good. The condition of the rest of the teeth was not mentioned in the report; but Mr. Davies-Colley excluded the teeth as a cause, because the lip had been bad for fourteen years, and the teeth did not come in contact with the disease. The early ulceration of secondary syphilis and the excessive smoking were quite sufficient to explain the condition.

CASE OF TRANSPATELLAR EXCISION OF THE KNEE.

This was Mr. GOLDING BIRD'S case. The operation was on the person of a lad aged thirteen, fairly healthy himself, but with a family history of phthisis. There was a year's history of articular arthritis of the right knee with pulpy disease. Excision was eventually performed on May 9, 1882. It differed from an ordinary excision in that the transverse incision was made across the middle of the patella, which was then sawn in two, the two fragments, with the soft parts, being turned up and down. The excision was then completed as usual, the articular surfaces of the tibia and femur being removed. Some pulpy thickening was removed from the under side of the patella, and when the limb had been straightened two carbolised sutures were passed through its substance, and so its two fragments were united. Primary union was obtained, and nothing more was seen of the patellar sutures. Until September 12 he walked about with a stiff bandage on the knee and with crutches: after that date he was ordered to discard all support. He now has a movable patella, and half an inch shortening. He has all the advantages of retaining the patella; but, besides that, there is a gain by this method of operating, since the surgeon can freely examine and manipulate the joint, more freely indeed than where, with the idea of retaining the knee-cap, the lateral incisions are employed. Two great advantages remain to the patient by keeping the normal attachments of the patella. The quadriceps opposes the ham-strings, and so does away with the necessity of employing a stiff bandage for years, to prevent posterior displacement of the leg; and the rectus femoris, considered as arising below, has its full play upon the trunk in preserving equilibrium, whilst it also allows of the perfectly natural forward motion of the limb in walking, and this last is not the case where the ligamentum patellæ has been sacrificed.

Mr. HOWARD MARSH said that many surgeons had occasion to be dissatisfied with the usual results of excision of the knee, and on this ground he was inclined to welcome the new operation of transpatellar excision, especially because the conservation of the rectus femoris tended to preserve equilibrium, and to improve the patient's power of walking.

Mr. GANT had had a large experience in excisions of various joints, and especially in those of the knee. A series of these cases was recorded in the *Transactions of the Royal Medico-Chirurgical Society*. The number of cases in which the patella was not involved in the disease was very small, and no advantage could be obtained by leaving the patella. The value of its presence in exciting a new formation of bone was problematical, and in his experience nothing could be better than the results obtained with removal of the patella. In reply to Mr. Golding Bird, Mr. Gant said that his patients had worn a back splint and supporting apparatus for periods varying between two and six months.

Mr. CHRISTOPHER HEATH had seen the living specimen, and remarked that nothing could be prettier than the result obtained. There was a school of surgeons who were greatly in favour of early excision of diseased joints. Mr. Heath's experience of excision in young patients was by no means favourable: notwithstanding the care taken not to injure the growing part of the bone, yet, somehow, the limb operated on failed to keep pace in growth with the sound one. He was quite of Mr. Gant's opinion that a sound patella in very advanced cases was rare. Altogether he was not very hopeful of the results of early excision in children.

The PRESIDENT observed that Volkmann had advocated the transpatellar method of excision. Old-fashioned excisions, where the knee-joint was extensively damaged and sinuses had formed, did not allow of proper antiseptic treatment, and then extensive removal of the ends of the femur and tibia together with the patella was the only sound mode of procedure. On the other hand, cases of strumous disease with an unbroken skin may be treated on totally different principles; smaller portions of bones may be removed, and much broader surfaces for anchylosis thus obtained, and the patella may be left behind, the antiseptic treatment being employed. This idea, he understood, was what Mr. Golding

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Bird had in his mind, for the limb was only shortened to the degree of half an inch, showing that not much of the epiphyses could have been removed. The growth of the bones would be encouraged by the retention of the action of the quadriceps extensor. The only other point was whether the excision had been required in the present instance. He (Mr. Lister) had now treated many examples of pulpy degeneration of the synovial membrane with *free antiseptic incision*, scraping away diseased parts and gouging the bone; and by these means he was enabled to preserve the full length of the limbs, with, in many cases, movable joints. The question was whether such a procedure might not have been employed in Mr. Golding Bird's patient.

Mr. Golding Bird, in reply, fully agreed with the remarks of the President. It must be remembered that the boy had been ill for two years, had grown progressively worse under treatment, there was lateral movement in the joint with some grating, and the normal ligaments and semilunar fibro-cartilages were not recognisable. The hygienic surroundings of hospital patients were very unfavourable, and this was his reason for preferring excision. The liability to posterior displacement of the tibia was great, and so rendered the use of a stiff support necessary for a long time.

THE PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, January 16.

J. W. Hulke, F.R.S., President, in the Chair.

At the commencement of the meeting, Mr. Hulke said: Gentlemen,—On taking for the first time the presidential chair, to which your votes have lately elected me, allow me to offer you my very warm thanks, and to tell you how much I am touched by this mark of your confidence and appreciation. I feel it to be a distinction so far beyond the desert of any work I may have accomplished in connexion with our Society, that I cannot put aside the idea that I must in some measure owe it to the numerous friendships it was my happiness to make during the many years I was in office as Councillor, Secretary, and Treasurer. On the threshold of my occupancy, I must ask your indulgence for an omission. I refer to the inaugural address as given, I am informed, by my two immediate predecessors in office. It is only a very few days since I first learned of this, to me, new practice, and the interval has been too short for me to prepare anything in the guise of an address worthy of your attention. I shall, however, cherish the hope of endeavouring to atone for the present omission at the close of my tenure of office.

Report of Morbid Growths Committee on Mr. W. H. Kesteven's Specimen of Blood-Cyst of the Spinal Column.

Mr. Godlee read the above report, which was signed by Mr. Marcus Beck and himself. They found that the body of one vertebra had almost wholly disappeared. The tumour was limited by a dense fibrous capsule, which bound it down in all directions. To the naked eye it looked like an altered blood-clot, but the microscope showed that it was a mixed sarcoma, consisting of round and spindle-shaped cells with a fibrous stroma. Here and there some yellowish-brown pigment could be seen, and altered blood-clot. The blood-vessels in the immediate neighbourhood were found to contain micrococci, so that probably some of the patient's symptoms might be attributed to septicæmia. Drawings of the microscopical appearances were shown.

Bromide Rash.

Dr. Horrocks showed a girl, aged thirteen, who was an out-patient at the Hospital in Queen-square, suffering from epilepsy, due, it was believed, to fright. After taking bromide of potassium for a month, in fifteen-grain doses three times a day, a typical bromide rash appeared on the right leg.

Epithelioma of the Bladder.

Mr. W. A. Berridge showed this specimen, and gave the following account of the case:—The patient first passed blood in his urine in the summer of 1880, and at first only at night. This passed off after a time, and he remained well until the summer of the following year, when he had a relapse, and was admitted into the London Hospital for two months. He left in a better state, but the bleeding never quite ceased; he resumed his work, however, and kept at it until within a week of his death, which took place last July. At the post-mortem examination, an ulcerating surface, about two inches in diameter, was found at the base of the bladder. The prostate was natural, the right kidney pale and fatty. Mr. C. W. Mansell-Moullin had examined sections under the microscope, and found that at the edges of the ulcer there was an ingrowth of large epithelioid cells; in fact, the case must be considered to be one of villous epithelioma of the bladder.

The President remarked on the extreme difficulty of making a diagnosis in such cases, and even could a diagnosis have been arrived at, any remedial means would have been impracticable. The interest in a case of this sort was clinical rather than pathological.

Precocious Syphilitic Disease of the Arteries.

Dr. Sharkey exhibited some sections, under the microscope, of syphilitic disease of both middle cerebral arteries occurring in an early stage of syphilis. The patient, a man aged thirty-six, had come under Mr. Nettleship's care, at St. Thomas's Hospital, three months after the primary chancre, with a syphilitic eruption and commencing retinitis. Three weeks later he had some iritis. He was treated with blue pill and iodide of potassium. He soon ceased to attend, but returned in a few weeks, complaining of headache on the right side and giddiness. The eye was quite well, and the fundus presented no changes. He was transferred to the care of Dr. Payne. Shortly after this, he one day became unconscious, and had a general convulsion, and was at once admitted into the hospital. It was then stated that he had had a "fit" about five weeks previously. On admission there was marked paralysis of the right arm and left leg; there was slight right facial paralysis; the left pupil was the smaller of the two; his speech was thick; and his mental condition certainly deficient. He could not walk alone. The knee-jerk was present in excess, and the urine was albuminous. Drowsiness supervened, gradually deepening into coma, with stertorous breathing. For a week he had a succession of convulsions, and then died with a very high temperature on the eighth day after admission. At the autopsy a coppery eruption was present, which had also been seen during life. The lungs showed some collapse and a few small hæmorrhages. The kidneys were finely granular. The dura mater and pia mater were natural; the arachnoid was slightly opaque at the base. The left middle cerebral artery was nearly blocked by a hard thrombus. There was no softening of the convolutions, but the extraventricular nucleus was broken down. The right middle cerebral artery was completely occluded by a clot more recent and softer than that on the left side. The extraventricular nucleus was softened, as also were some of the convolutions. There was some effusion into the ventricles. Microscopically, two distinct changes were found in the arteries independent of each other. There was a fibroid thickening of the subendothelial layer of the intima, and the adventitia was found to be infiltrated with round cells, which were very unequally distributed, in places invading the muscular layer, and even reaching the intima. This change had evidently commenced in the adventitia. The older clot—viz., that on the left side—had evidently begun to organise, and the coats of the arteries were in a more advanced state of disease than those on the other side, and, in fact, a commencing gumma was found. There was not much evidence of disease of the vasa vasorum. The three points to which he wished to draw special attention were:—1. The date of the arterial disease in reference to the primary chancre. Usually, it was taught that syphilitic arteritis was a late phenomenon, yet here it had come on in a severe form within seven months. 2. The symmetry of the arterial disease, the tendency to symmetry in all the manifestations in secondary syphilis, was well known, and its presence in this instance was particularly interesting. 3. It was worthy of notice that the disease had its starting-point in the external coat, and not in the internal as was usually the case. It was the earliest case of fatal cerebral syphilis he knew of.

Mr. Godlee alluded to the case of a man aged sixty, who had contracted syphilis, followed by nervous symptoms in less than seven months. Whilst the secondary rash was

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upon him he became hemiplegic and aphasic, and had since been permanently imbecile, and was now in an asylum.

Mr. W. H. KESTEVEN asked if the eyes had been examined after the patient was admitted into the hospital.

Dr. ORMEROD alluded to a case he had published in *Brain* last year, in which a lesion of two kinds had been discovered in the basilar artery—first, a spindle-celled infiltration of the subendothelial layers of the intima; and next, a small round-celled infiltration in the outer coat. This did not completely encircle the artery, but only occurred here and there, causing local bulgings. There was no obvious narrowing of the lumen of the vessel, and no clotting. There was no cerebral softening. The chief feature of the case during life had been prolonged somnolence, which perhaps might be attributed to a condition of starving the brain, owing to the defective elasticity of the arteries.

The PRESIDENT did not think it was very rare for cerebral symptoms to appear within seven months of infection, and alluded to the case of a young man aged twenty-two, who suddenly became hemiplegic whilst in good health four months after contracting syphilis. He also had diplopia, became drowsy, and finally died with extensive syphilitic disease of his arteries less than eight months from the date of the primary chancre.

Dr. SHARKEY, in reply, said that the fundus was perfectly healthy up to the time of death. He had not been able to make out any connexion between the disease of the intima and that of the adventitia. The former he thought was the older. Probably it would be found that such cases were not at all rare.

SYPHILITIC DISEASE OF THE LIVER.

Dr. SHARKEY also showed sections and drawings from a case of syphilitic perihepatitis. The patient, a man aged forty-five years, was admitted into St. Thomas's Hospital under the late Dr. Murchison in 1876. For three months he had suffered from constant diarrhœa. His abdomen had been swollen for one month. His family history was good. He had been a heavy drinker in his time. He admitted to having had gonorrhœa, although he denied any syphilis. The liver was found to have a hard edge and a smooth surface, but a nodulated mass could be felt near the ensiform cartilage, hard and somewhat elastic, but not fluctuating; there was no pain; the liver reached down to the umbilicus; there was no ascites; enlargement of the spleen was doubtful; diarrhœa was present, and no albuminuria. The diagnosis was cirrhosis confined to left lobe of liver. Two years later he was readmitted much jaundiced and suffering from hæmatemesis, which had lasted for three months. The superficial veins of his trunk were then dilated, and the liver felt uneven and hard; there was some ascites and anasarca of the feet. Death took place from exhaustion owing to the hæmatemesis and melæna. At the post-mortem some atheroma of the aorta was found, and the kidneys were pale. The liver was large, weighing 6 lbs. 7 oz., coarsely nodulated, but very irregularly so. The changes in the liver were confined to the outermost parts, the central parts appearing fairly normal; for one inch from the capsule a fibrous condition was found extending inwards. Microscopical examination showed that the changes were most marked near the capsule; there was a fibro-cellular new growth spreading inwards from this, following the ramifications of Glisson's capsule. Small gummata were found here and there embedded in this altered zone, with caseating centres, the cells at their margins sending out processes to join the general fibroid network. After quoting various authorities on the subject of cirrhosis, Dr. Sharkey expressed his conviction that both the gummata and the peculiar kind of cirrhosis owned syphilis for their cause, rather than alcoholism, notwithstanding that there was a history of drink, and not of syphilis.

Dr. MAHOMED did not see anything in the drawing which suggested syphilis, and thought that the so-called gummata were perfectly consistent with alcoholic cirrhosis. He asked what other signs there were of syphilis. He had recently seen a case where the left lobe was greatly enlarged, and the right much atrophied, being almost cut in two by a fibrous band. If the left lobe had resembled the right, many people would not have hesitated to call it syphilitic. He thought that more proof should be given, in such a case as this, of syphilis. He afterwards explained that he did not deny the existence of large gummata in the liver, which were absolutely conclusive in themselves of syphilis.

Mr. BUTLIN did not think these small gummata that had been described near the surface of the liver as in any way a proof of syphilis. He thought that many forms of cell-growth might caseate in the centre. He suggested that the specimen should be referred to the Morbid Growths Committee.

Dr. GREEN said it seemed to him that the difficulties in diagnosing syphilis were being increased, and not diminished. He had always thought that the naked-eye appearances were sufficiently characteristic in themselves. He asked whether a fibroid change commencing in the capsule and extending thence had ever been met with apart from syphilis.

Dr. NORMAN MOORE thought that it would be well if the positive evidence of syphilis were stated first, when there was any to be produced. In reference to scars on the surface of the liver, he mentioned a case he had recently met with, where a scar, undoubtedly due to the pressure of stays, dipped down into the liver exactly like a scar left from a former gumma.

Mr. ROGER WILLIAMS mentioned two cases of syphilitic disease of the liver he had recently met with.

Dr. SAMUEL WEST had always believed that only two masses were ever found in the liver that became caseous in the centre, viz., tubercles and gummata; and he thought that in the present instance there could be no doubt that the masses were not tubercles. As regarded the spreading inwards of the fibrous growth from the capsule, he did not think that there was anything characteristic of syphilis in it, as he had often observed it in cases of chronic peritonitis.

Dr. GOODHART thought that the naked-eye appearances of a gumma in the liver were so characteristic as to be practically unmistakable; he considered that it was a fact that one could diagnose syphilis from the state of the liver alone.

Dr. COUPLAND quite agreed as to the very distinctive characters presented by the syphilitic liver; he had seen several cases of inflammation of the capsule, sometimes with hardly any gummata at all. He asked Dr. Sharkey if the testes had been examined in his case: very often fibroid disease might be found.

Dr. BUZZARD asked if any ophthalmoscopic examination had been made: an old choroiditis often threw much light upon a case.

Mr. THORBURN asked if the penis had been examined; some thickening always remained as the result of a chancre.

Dr. SHARKEY, in reply, said there were no lesions in any of the other viscera characteristic of syphilis. He thought that in the majority of cases of gummata in the liver there could be no doubt whatever as to their syphilitic origin. He thought that in this case the small gummata were perfectly characteristic, and quite different from anything seen in ordinary alcoholic cirrhosis. Though there was no history of syphilis, the man had had gonorrhœa, and he might have had a chancre without knowing it. The penis and testes had not been specially examined; at least, there was no note of any such examination. There had been some retinitis, but no choroiditis.

The specimen was referred to the Morbid Growths Committee.

DEVELOPMENT OF KELOID AFTER SCRAPING FOR LUPUS.

Mr. CLUTTON showed the patient who was the subject of this paper, and gave the following account of his case. The patient was a delicate lad, fifteen years of age, who had had a patch of lupus on his right cheek about seven years. In April, last year, this was scraped, with the result that by July an ordinary scar had taken the place of the lupus. Meanwhile, however, abscesses had formed below the left knee and behind the left shoulder-joint; after these had existed some time a sequestrum was removed from the head of the humerus through an incision five inches in length. Shortly after this operation the scar on the cheek began to develope the characters of a keloid, and the scar formed in the arm soon became unnaturally thick, and was eventually a true keloid. The healing of the wound in the leg where the abscess had been opened proceeded very slowly, and was not yet completed; no tendency to keloid formation had been noticed there, which suggested the question whether it was possible that suppuration in the neighbourhood prevented the formation of keloid. Had its appearance any relation to the scraping? He thought such an occurrence very rare after

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scraping. Was its occurrence due to any peculiarity in the patient? If so, patients with this susceptibility ought to become covered with keloids. Might there not be a sudden outburst of this proneness to keloid formation, the tendency to which would pass away after a time? Were there any facts to prove that this tendency might cease?

Mr. CLEMENT LUCAS had seen keloid appear after scraping for lupus; but he thought that if left alone it would disappear. He thought that Mr. Clutton's case pointed to a general constitutional condition, and asked if the boy had greatly improved in health at the time of the development of the keloids. He strongly recommended that no operation should be attempted for their removal.

Mr. BUTLIN thought that the boy was decidedly strumous, and he imagined that it was quite possible for a strumous scar to become as big as either of those in that boy.

Mr. MORRANT BAKER had once removed a lupus by freely cutting it away, which was followed by keloid; but then it was a case of lupus hypertrophicus: and he asked Mr. Clutton what form of lupus his was, as some forms might be much more liable to be followed by keloid than others.

Mr. BALMANNO SQUIRE did not think that keloid was not at all rare after scraping for lupus: the reverse had been his experience. He had never known keloid to follow linear scarification. He thought that very often, where the nose was involved, scraping produced as much disfigurement as the original disease. Keloid certainly often did disappear, and scarification assisted it. He asked whether the lupus patch was secondary to a suppurating gland or not, as was frequently the case.

Mr. SUTTON quoted the views of the late Mr. Critchett on the subject of scars as illustrated by peritomy for pannus, and asked whether these scars might simply be a prolonged first stage.

Mr. CLUTTON, in reply, said that he still believed that keloid after scraping for lupus was an uncommon occurrence. The case was one of lupus vulgaris, and it was quite superficial. He did not see any evidence whatever that it had originated in a suppurating gland.

Mr. W. A. BERRIDGE showed by card—1. Cartilaginous Aortic Valves; 2. A Foreign Body removed from the œsophagus of a child.

THE OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 10.

J. MATTHEWS DUNCAN, M.D., President, in the Chair.

SACRAL TERATOME.

DR. HEYWOOD SMITH exhibited a fœtus of about five months' intra-uterine age, having an outgrowth from the end of the coccyx, about three and a half inches long and seven inches in circumference. This consisted mainly of embryonic tissue—small round cells, with a faint fibrillar arrangement. From the coccyx were traceable four vertebræ, consisting each of a cartilaginous body with spinous processes.

PORRO'S OPERATION.

Dr. HEYWOOD SMITH exhibited a uterus removed by Porro's operation. The patient was a primipara, aged twenty, the conjugate diameter of whose pelvis was an inch and three-quarters or less. She had been in labour two days, and attempts at delivery by craniotomy and cephalotripsy had been made without success. The performance of Porro's operation occupied nearly an hour. The specimen showed clearly the rugæ on its peritoneal surface.

Dr. FANCOURT BARNES said that Müller's modification of Porro's operation was a bad one, requiring a larger incision and making the application of the ligature more difficult. Porro's original plan was better.

SUPERFŒTATION (?).

Dr. OUTHWAITE exhibited a body looking like an ovum, about a month's intra-uterine age, which had been passed within thirty-six hours after the birth of a full-time child. The specimen was referred to a committee for examination and report.

NOTES OF A SPECIMEN OF ANTEFLEXION OF THE UTERUS.

A paper by Mr. W. S. A. GRIFFITH on the above subject was read. The specimen was one in the museum of the Sussex County Hospital at Brighton. The uterus was sharply anteflexed, and was fixed, and the adjacent parts agglutinated into one mass by firm old adhesions. The uterine cavity was dilated into a sac the size of an almond, and contained the remains of a clot. The patient had died from peritonitis while menstruating. Except for a previous attack of peritonitis she had had remarkably good health. She was unmarried, and had never complained of painful menstruation until asked during her fatal illness, when she said she had pain towards the end of the periods. The bend was at the junction of the body and cervix. The cervical canal was not contracted, but rather larger than usual. There was no atrophy of the uterine wall. The author rejected obstruction as a cause of the dilatation, which he thought due to chronic congestion. He thought the specimen interesting as showing that acute flexion of the uterus might exist without interfering with the nutrition of the uterus, or with the general health.

Dr. ROUTH thought this specimen did not prove that the canal of a flexed uterus was not constricted, for the patient was menstruating, and the canal became dilated during menstruation; further, the uterine cavity was here ulcerated, and this might have enlarged the canal.

Dr. GRAILY HEWITT said that without contraction of the canal there might be virtual obstruction from the coaptation of its opposite walls, and from the swollen, congested condition of the uterine tissues resulting from the flexion. This was proved by clinical facts.

Dr. HERMAN agreed with Mr. Griffith that this case showed no evidence that the dilatation was due to obstruction. There was no angulation nor narrowing of the canal, which was bent in a curve. The uterus was fixed; and if it were admitted that here the dilatation was due to obstruction from flexion, it did not follow that the same effect would be produced in a uterus which was free to move.

Mr. GRIFFITH said that microscopic examination showed that the apparent ulceration was due to the patient having just ceased menstruating.

CASE OF EXTIRPATION OF THE UTERUS AND APPENDAGES FOR EPITHELIOMA OF THE CAVITY.

This paper, by Mr. KNOWSLEY THORNTON, was then read. The author thought that these operations being still on their trial, it was a duty to fully report every case. This duty was not enough recognised. Many cases had been reported at the time of operation, but not further. One case had been publicly referred to as successful without correction by the operator, although the patient died within a day or two of operation. Others had been reported when immediately successful, but died within a few months from recurrence, without public record of the fact. This reticence indicated that they were rarely immediately successful, and when they were, gave but a short interval without recurrence. He argued that speedy recurrence was to be expected. He had refused to operate in many cases, and thought that the only justifiable ones were those in which the disease was confined to the cavity or body of the uterus. He then gave at length the history of such a case, with details of the operation, and after-progress, to death on the fifth day. He referred to the statistics of the operation by the abdominal and vaginal methods. In any future case he would choose the vaginal method, and would avoid the use of ligatures altogether, leaving pressure forceps on for the first few days. These would serve as drains, and at the same time, by their weight, tend to draw together the wounded surfaces.

Dr. EDIS suggested that in the abdominal operation septic infection might be avoided by removing the uterus per vaginam.

Dr. AVELING said that drainage was, he believed, first advised by Purmann in 1706, and in England by Johnson in 1769.

The PRESIDENT had taken part in three of these operations, all of which proved fatal. He was struck with the greater facility of the vaginal operation.

Mr. THORNTON replied.

TRANSFUSION.

A paper on this subject by Mr. C. E. JENNINGS was read.

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Two gentlemen passed in Surgery, and when qualified in Medicine will be admitted Members of the College; and fifteen candidates were rejected, viz., six for three months and nine for six months. The following gentlemen passed on the 24th inst., viz.:—

Albert, H. Louis, Sloane-street, student of St. George's Hospital.
Brodie, C. Gordon, Isle of Wight, of the Middlesex Hospital.
Davy, T. George, B.A. Oxon., Exeter, of St. Bartholomew's Hospital.
Dowson, Walter, Upper Chadwell-street, of St. Bartholomew's Hospital.
Keatinge, H. Pottinger, Trinity-street, S.E., of Guy's Hospital.
Muirhead, M. Alexander, Jamaica, of Guy's Hospital.
Owen, Herbert, Coventry, of St. George's Hospital.
Pearse, F. Edward, Frome, of University College Hospital.
Power, C. John, B.A. Cantab., L.R.C.P. Lond., Torquay, of St. Thomas's Hospital.
Roughton, F. Wilkinson, Brook Green, of St. Bartholomew's Hospital.
Saneyoshi, Yasuzurni, Tokio, of St. Thomas's Hospital.
Targett, J. Henry, Idmistone, of Guy's Hospital.
Von Tunzelmann, E. Waldemar, Wimbledon, of University College Hospital.
Williams, A. John, Charterhouse-square, of St. Bartholomew's Hospital.

Seven candidates who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were admitted Members of the College, viz.:—

Bernays, Adolphus V., M.B. Edin., Birmingham, student of St. Thomas's Hospital.
Davidson, H. Morgan, L.R.C.P. Edin., Aldeburgh, of King's College Hospital.
Frampton, F. Thomas, L.R.C.P., Edin., Gloucester-terrace, W., of St. Mary's Hospital.
Harrison, Charles, L.S.A., Braintree, of St. Bartholomew's Hospital.
Orford, John, L.R.C.P. Lond., Ipswich, of St. Thomas's Hospital.
Payne, J. Rowland, L.R.C.P. Edin., Coleford, of St. Bartholomew's Hospital.
Sparkes, C. Stephen, L.S.A., Guildford, of King's College Hospital.

One candidate, who had previously qualified in Surgery and Medicine, having passed in Midwifery, was also admitted a Member, viz.:—

Dyer, S. Reginald, Harlesden, N.W., student of the Middlesex Hospital.

Four candidates passed the examination in Surgery, and when qualified in Medicine and Midwifery will be admitted Members of the College. Four candidates, having failed to acquit themselves to the satisfaction of the Court, were referred to their professional studies for three months, three candidates for six months, and one for nine months.

Surgical Examinations.—The first meeting of the Court of Examiners of the Royal College of Surgeons for the present session was commenced on the 19th inst., when 175 candidates presented themselves, against 123 at the corresponding period of last year. The following were the questions on Surgical Anatomy and the Principles and Practice of Surgery submitted to them on the 19th, when they were required to answer at least four (including one of the first two) of the six questions, between 1.30 and 4.30 p.m., viz.:—1. The femur being fractured in its upper third, just below the trochanter minor, enumerate all the muscles which might displace the upper fragment, grouping them according to their actions. Give their origins and insertions. 2. Mention, in the order in which they occur, beginning at the external surface, the parts divided in the operation of opening the colon in the left loin. Name the structures which serve you as guides, and those to be avoided. 3. What are the causes and signs of suppuration within the antrum? Give the appropriate treatment. 4. Give the usual symptoms of intracranial suppuration following an injury to the head. After what class of injuries are such symptoms most common? In what situations may the pus be found? What are the indications for surgical treatment? 5. Give the symptoms, course, and treatment of purulent ophthalmia of infants. 6. What untoward events might occur during the employment of the taxis? How are they to be recognised and met? The following were the questions on Midwifery and the Diseases of Women submitted to the candidates on the following day, when they were required to answer three out of the four questions between half-past twelve and two o'clock, viz.:—1. Under what conditions does rupture of the uterus take place? What symptoms and signs indicate its occurrence? 2. State the conditions under which forceps-delivery is called for. 3. You are called to a patient three weeks after delivery, who has a painful fixed swelling occupying the left iliac fossa, with febrile symptoms. What is such a case likely to be? What course is it likely to run? How would you treat it? 4. What are the causes of hæmorrhage from the unimpregnated uterus? The following were the questions on the Principles and Practice of Medicine submitted to the candidates on the same day, when they were required to answer three out of the four questions (including No. 4), from 2.30 to 4.30, viz.:—1. What are the symptoms of tubercular meningitis, the conditions under which it occurs, and the means of distinguishing it from the diseases which it most resembles? 2. Describe the symptoms, physical signs, and treatment of aneurism of the arch of the aorta. 3. What are the causes and symptoms of jaundice? 4. Enumerate the official preparations which contain mercury: give the dose of each, and briefly state their chief uses.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 18:—

Butler, Francis Henry, 25, Paddington-green, W.
Verity, Herbert William Steele, Cheltenham.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Bird, Henry, University College Hospital.
Newey, William Edward, Middlesex Hospital.

At the Preliminary Examination in Arts, held at the Hall of the Society on January 11, 12, and 13, 110 candidates presented themselves, of whom seventy-three were rejected, and the following thirty-seven passed, and received certificates of proficiency in general education, in the Second Division (in alphabetical order), viz.:—

J. Bamfylde, W. H. Barnby, G. Barton, J. A. Bairstow, F. J. Brown-Wade, S. J. Cole, T. W. Colthurst, W. C. Croxford, A. J. De Butts, A. Delve, T. S. Dennison, S. V. Duncan, W. R. Elphinstone, G. A. Ferraby, F. H. Horner, J. R. F. Hutson, E. E. Kershaw, R. J. Langley, P. S. L. MacDougall, H. E. Mahonie, C. G. A. Le Mesurier, J. D. Moulton, J. E. Moyse, J. Penny, J. D. Price, E. E. Prior, T. O. Raw, Marie Rockstro, J. L. Thomas, A. L. Travers, F. G. Vicars, B. Walker, R. F. Walker, A. W. Waller, H. W. Wedgwood, F. C. Wood.

The following candidate passed in Elementary Mechanics alone:—W. D. Gimson.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

BATTLE, W. H., F.R.C.S.—Surgical Registrar to St. Thomas's Hospital. (Re-appointment.)

MAKINS, G. H., F.R.C.S.—Resident Assistant-Surgeon to St. Thomas's Hospital, *vice* B. Pitts, F.R.C.S., resigned.

PITTS, BERWARD, M.A., M.C. Cantab., F.R.C.S.—Assistant-Surgeon to St. Thomas's Hospital.

SMITH, R. P., M.D. Lond.—Resident Assistant-Physician to St. Thomas's Hospital, *vice* C. E. Sheppard, M.D. Lond., resigned.

BIRTHS.

CROWFOOT.—At Beccles, Suffolk, the wife of William Miller Crowfoot, M.B., of a daughter.

GREATHEAD.—On December 19, at Graham's Town, South Africa, the wife of J. B. Greathead, M.B., M.R.C.S., of a daughter.

LITTLE.—On January 20, at The Elms, Victoria-park, Manchester, the wife of David Little, M.D., of a daughter.

NANKIVELL.—On December 12, 1882, at Butterworth, Transkei, South Africa, the wife of J. H. Nankivell, M.R.C.S., of a son.

PRINGLE.—On January 20, at Angelton, Bridgend, the wife of H. T. Pringle, M.D., Medical Superintendent of the Glamorgan County Asylum, of a son.

SELF.—On January 20, the wife of James Self, M.D., 28, Pembury-road, Clapton, of a son, who survived his birth only a few hours.

WALKER.—On January 16, at The Elms, Parkhurst, Isle of Wight, the wife of George E. Walker, L.R.C.P., of a son.

YOUNG.—On January 13, at Rose Bank, Merton-road, Bootle, Liverpool, the wife of T. Frederic Young, L.K.& Q.C.P., M.R.C.S., of a daughter.

MARRIAGES.

CALDER—MILLER.—On January 16, at Perth, Augustus Barclay Calder, M.D., of Perth, to Eliza Anne, eldest daughter of John M. Miller, solicitor, of Mayfield, Perth.

CARDEN—ROYLE.—On January 18, at Heversham, Westmoreland, John Condill Carden, L.R.C.P., to Florence Nightingale, youngest daughter of Octavian Newcome Royle, M.D., F.R.C.S.

CHAIX—FULTON.—On January 24, at Notre Dame de France, Leicester-place, London, Edward Pierre Benoît Chaix, M.D., of Versailles, to Isabella Dent, eldest daughter of William S. Fulton, Esq., of Bankend House, Appleby, Westmoreland.

CURTIS—GOLDIE.—On January 17, at Florence, Alfred B. Curtis, Chief Officer P. and O. Service, to Annie Eliza, daughter of William Goldie, M.D., of Greenhill Bank, Edinburgh.

PINKERTON—DREW.—On January 18, at Upper Norwood, Chas. Pinkerton M.D., of Southport, to Evelyn Sophia, youngest daughter of the late Rev. G. S. Drew, vicar of Holy Trinity, Lambeth.

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SCOTT—BEALEY.—On January 18, at Cheltenham, John Halliday Scott, M.D., Professor of Anatomy in the University of Otago, New Zealand, to Helen Gardner, eldest daughter of the late John Bealey, Esq., of Canterbury, New Zealand.

TUKE—WYLDE.—On December 12, at St. John's Church, Grove-park, Chiswick, Charles Molesworth Tuke, M.R.C.S., third son of Dr. Tuke, of The Manor House, Chiswick, and Albemarle-street, London, to Mary Ella, second daughter of William H. Wylde, Esq., C.M.G., of Westfield, Putney, Lieutenant-Colonel 2nd South Middlesex Volunteers.

DEATHS.

BLACKMORE, EDWARD, F.R.C.S., at Byrom House, Quay-street, Manchester, on January 20, aged 75.

DICKINSON, J. E., Deputy Surgeon-General of the Madras Army (retired), at 33, Hartington-villas, Ealing Dean, W., on January 18.

MASON, CAROLINE ANNE, wife of Samuel Mason, F.F.P. & S. Glasg., M.R.C.S. Edin., at Ryde, Isle of Wight, on January 15.

MASON, JAMES LINDSAY, M.D., of Brailsford, Derby, at Sunnyside, on January 18.

PAULL, ALEXANDER, M.R.C.S., at 74, Lemon-street, Truro, on January 18, in his 70th year.

SMITH, FLORENCE MARY, second daughter of Robert Smith, L.F.P.S., F.R.C.S., of Freetown, Sierra Leone, West Africa, at 75, Avenue-road, Regent's-park, on January 21, aged 14.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.—Resident Surgeon. Salary £180 per annum, with furnished house, gas, and coals. Candidates must be on the Medical Register as qualified to practise medicine and surgery. The candidate elected will not be permitted to practise privately in any branch of his profession. Applications, with copies of testimonials, to be sent to the Hon. Secretary, Cheltenham General Hospital, not later than February 1.

CHORLTON-UPON-MEDLOCK DISPENSARY, MANCHESTER.—Honorary Surgeon. (*For particulars see Advertisement.*)

KENSINGTON DISPENSARY.—Resident Medical Officer. (*For particulars see Advertisement.*)

LONDON FEVER HOSPITAL, LIVERPOOL-ROAD, ISLINGTON, N.—Assistant-Physician. (*For particulars see Advertisement.*)

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Salary £75 per annum, with board, lodging, and washing. Candidates must be qualified to practise in medicine and surgery, duly registered under the Act, and unmarried. Applications, with testimonials, to be sent to Thomas Taunton, Assistant-Secretary (from whom any further particulars may be obtained), on or before February 6.

THE MIDDLESEX HOSPITAL, W.—Dental Surgeon. (*For particulars see Advertisement.*)

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Atcham Union.—Mr. F. Whitwell has resigned the office of Medica Officer for the Workhouse: salary £115 per annum.

Church Stretton Union.—The offices of Medical Officer for the First District and for the Workhouse are vacant. First District: area 16,349; population 2440; salary £37 10s. per annum. Salary for Workhouse £12 10s. per annum.

Hackney Union.—Mr. C. H. Welch has resigned the Sixth District: salary £80 per annum.

APPOINTMENTS.

Driffield Union.—Seth Tinsley, L.F.P.&S. Glasg., to the Wetwang District.

Fylde Union.—Alex. M. Eason, L.R.C.P. Edin., L.R.C.S. Edin., to the Lytham District.

THE THERMO-CAUTERY IN GLANDULAR ENLARGEMENTS.—In a recent *thèse*, Dr. Leroy notices the success of this practice as pursued at the Lariboisière. In acute adenitis which has not yet suppurated, small points of cauterisation should be made as soon as possible in parallel lines at a centimetre distant from each other. Generally the tumour will be found to be considerably diminished even by the next day. A repetition must be made the next day, or next day but one; and the suppuration will be prevented, or, at all events, will not extend to the peripheric cellular tissue. If suppuration has taken place, the abscess should be opened with the thermo-cautery by a perpendicular aperture; and the same treatment is indicated for fistulæ which follow opening by the bistoury, as also when there is eversion of the edges of the wound, or an atonic condition of it, and when fungosities or exuberant granulations are present. When the wound is in a chancrous or phagedænic condition, its cavity and edges should be cauterised. In chronic adenitis the cautery applied every two or three days, at four or five points if required, will be found very advantageous.—*Bull. de Thérap.*, December 30.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 20, 1883.

BIRTHS.

Births of Boys, 1416; Girls, 1388; Total, 2804.
Corrected weekly average in the 10 years 1873-82, 2776·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	869	794	1663
Weekly average of the ten years 1873-82, corrected to increased population ...	934·5	913·6	1848·1
Deaths of people aged 80 and upwards ...	...	...	69

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	2	6	3	3	...	5	...	4
North ...	905947	2	9	12	4	2	...	3	...	3
Central ...	232233	...	13	6	...	3	...	2	...	1
East	692758	...	17	7	4	4	...	1	1	2
South	1265927	1	15	11	2	14	...	7	1	8
Total	3816483	3	56	42	13	26	...	18	2	18

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·776 in.
Mean temperature	42·9°
Highest point of thermometer	50·6°
Lowest point of thermometer	32·6°
Mean dew-point temperature	41·6°
General direction of wind	Variable.
Whole amount of rain in the week	0·56 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Jan. 20, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Jan. 20.	Deaths Registered during the week ending Jan. 20.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	Rain Fall. In Centimetres.
London	3955814	2904	1663	21·9	50·6	32·8	42·9	6·06	0·56	1·42
Brighton	111262	61	45	21·1	50·6	33·7	43·5	6·39	0·73	1·85
Portsmouth ...	131478	87	42	16·7	...	...	...	...	...	...
Norwich	89612	57	38	22·1	...	...	...	...	...	...
Plymouth	74977	54	23	16·0	53·0	30·8	45·3	7·39	0·82	2·08
Bristol	212779	139	81	19·9	53·8	32·8	44·0	6·67	0·87	2·21
Wolverhampton .	77557	58	34	22·9	52·0	30·6	40·1	4·50	0·54	1·37
Birmingham ...	414946	304	161	20·2	...	...	...	...	...	...
Leicester	129483	106	86	14·5	54·0	33·5	42·0	5·56	0·47	1·19
Nottingham ...	199349	151	80	20·9	53·8	31·2	40·7	4·83	0·35	0·89
Derby	85574	59	37	22·6	...	...	...	...	...	...
Birkenhead ...	88700	71	40	23·5	...	...	...	...	...	...
Liverpool	566753	433	333	30·7	53·6	35·0	42·7	5·95	0·92	2·34
Bolton	107862	59	61	29·5	49 8	30·7	39·8	4·34	1·50	3·81
Manchester ...	339252	250	204	31·4	...	...	...	...	...	...
Salford	190465	145	107	29·3	...	...	...	...	...	...
Oldham	119071	84	44	19·3	...	...	...	...	...	...
Blackburn	103460	80	48	23·1	...	...	...	...	...	...
Preston	98564	64	51	27·0	...	...	...	...	...	...
Huddersfield ...	84701	33	37	22·8	...	...	...	...	...	...
Halifax	75591	48	33	22·8	...	...	...	...	...	...
Bradford	204807	147	88	21·1	...	...	...	...	...	...
Leeds	321611	194	185	30·0	52·1	31·9	41·7	5·39	0·72	1·99
Sheffield	295497	215	147	26·0	52·5	31·5	41·5	5·28	0·58	1·42
Hull	176296	135	98	29·0	54·0	28·0	40·7	4·83	0·31	0·79
Sunderland ...	121117	100	66	28·4	59·0	37·0	46·4	8·00	0·34	0·83
Newcastle	149464	99	61	21·3	...	...	...	...	...	...
Cardiff	90033	57	24	13·9	...	...	...	...	...	...
For 28 towns ...	8632975	6094	3862	23·4	59·0	28·0	42·4	5·78	0·67	1·70
Edinburgh	235946	135	104	23·0	52·7	34·2	41·4	5·22	0·93	2·36
Glasgow	515589	415	300	30·4	51·0	40·0	45·6	7·56	1·94	4·93
Dublin	349885	176	171	25·5	55·4	32·0	43·1	6·17	0·44	1·12

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·78 in. The lowest reading was 29·20 in. on Monday morning, and the highest 30·15 in. both on Friday morning and at the end of the week.

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APPOINTMENTS FOR THE WEEK.

January 27. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Mr. R. Bosworth Smith, "On Henry and John Lawrence, 1849-57."

29. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Whipham, "On a Case of Acute Pulmonary Tuberculosis" (to open a discussion on the association of Tuberculosis and Bacilli).

30. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. W. C. Williamson, "On Primæval Ancestors of Existing Vegetation."

31. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

February 1. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Dewar, "On the Spectroscope and its Applications."

HARVEIAN SOCIETY, 8½ p.m. Mr. W. H. Lamb, "On a Case of Pleuro-Pneumonia." Mr. H. C. Stewart, "On Fevers and Exanthems treated by Antiseptics."

2. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

ROYAL INSTITUTION (Council Meeting, 3 p.m.), 9 p.m. Sir William Thomson, "On the Size of Atoms."

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture I.

WILLS AND BEQUESTS.—The will of Mr. John Francis de Grave, M.R.C.P., of Morland-road, Croydon, has just been proved, exceeding £33,000; he bequeaths to the Master and Wardens of the Society of Apothecaries £5000, to be applied by them in augmentation of the fund for the relief of decayed members of the Apothecaries' Company.—The Rev. Augustus Clissold, of Frant, Sussex, has bequeathed £500 to the Royal Hospital for Incurables, Putney, and a like sum to the Brompton Cancer Hospital and the Old Kent-road Deaf and Dumb Asylum.—The will and four codicils of Dr. Henry Bell, of Bath, has been proved, amounting to over £32,000.—The will of the Rev. Edward Hawkins, of Oxford (brother to Mr. Cæsar Hawkins), has been proved, exceeding £29,000.

RADICAL CURE OF HYDROCELE.—In a clinical lecture Prof. Agnew stated that he has found tincture of iodine to be the best means of effecting this, and never has known suppurative inflammation caused by it. He injects two drachms and a half, of which he does not allow a drop to escape, but endeavours by friction in different directions to diffuse it over the whole surface of the tunica vaginalis. It is a mistake to suppose that the hydrocele is cured by the two surfaces of the tunica becoming glued together. It is effected by a modification of the surface, which loses its moist, smooth, and glistening appearance, and becomes rougher and intersected at points by bands of lymph. After injection there is often pain in the loins, owing to the impression made upon the genito-crural nerve, which is reflected to the loins. The patient should be put to bed, and in two or three days the scrotum will have enlarged again, to again subside. In six or seven days a suspensory may be applied, and the patient allowed to go about, the cure being generally completed in three or four weeks.—*Philadelphia Med. Times*, October 21.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Mr. Martin.—We do not know what the duties of the office of inspector under the Cruelty to Animals Act are, but Mr. George Busk, F.R.S., holds the appointment, the honorarium of which is two hundred guineas per annum.

The Early Closing Movement.—From the annual report of the Early Closing Association, just issued, for 1881-82, this movement appears to be progressing. Its most liberal benefactors, however, are not the shop assistants, but their employers. The total income last year was under £1000, and but a moiety of this was contributed by the assistants. The Association has done good work, notwithstanding the absence of a generous support of those for whose benefit it was organised. To the untiring exertions of the Association is due the great reduction, the last few years, in the hours of work in shops by the leading retail establishments in the metropolis.

Mr. Williams, Liverpool.—The Inspectors of Anatomy are—for the metropolis, Mr. Charles Hawkins, a late member of the Council of the College of Surgeons; for the provincial schools, Mr. John Birkett, late President of the College; and for Scotland, Mr. J. A. Russell. The London office is in St. Martin's-place, W.C.

Police Supervision of Public-houses, Paisley.—The Provost and magistrates have just publicly intimated to publicans that they will put into active force the Act of Parliament for Scotland, which provides that the police shall report weekly any licensed publicans from whose premises persons in a state of intoxication have been seen frequently to issue, or against whom there is other cause of complaint.

M.D., Fowey, Cornwall.—Your communication should be addressed to Professor Huxley, F.R.S., Inspector of Fisheries, Home Office. He is a member of the Royal College of Surgeons, and succeeded the late Mr. Frank T. Buckland. The salary is £700 per annum.

Irregularities at a Workhouse.—The Local Government Board report on the irregularities at the Atcham Workhouse states that the master, matron, and medical officer are to blame, and calls upon the guardians to request them to resign. The resignation of the master and matron was accepted, but nothing was done in the case of the medical officer, in order that the central authority may be communicated with in the meantime.

The St. Leonards Convalescent Home for Poor Children.—Out of five hundred children admitted into the Home during the past year, upwards of four hundred were from London.

A Metropolitan Teacher.—Yes, the recent regulation of the Court of Examiners is now being carried out. When the candidates are found to be unusually deficient they have an extended period allotted to them before being permitted again to trouble the members of the Court of Examiners, as on the 23rd inst., when, out of twenty-six candidates examined, nine were referred for six months and six for three months. One year, we believe, is the severest period.

A Fortunate Dispensary.—The City Dispensary's income for the past twelve months was £3093 17s. 11d., and after paying all expenses there was a balance in hand of over £700.

Fatal Blood-Poisoning through Defective Drainage.—The evidence at an inquest, held at Poplar, on the body of a child twelve months old, showed that in the kitchen—underground—occupied by the mother of the deceased, when the floor-boards were taken up a great hole could be seen in the drain, and consequently there was a free escape of sewer-gas into the kitchen. In the house, which consisted of eight rooms, fifteen persons were living. Medical testimony, confirmed by a post-mortem examination, was to the effect that death was caused by blood-poisoning through defective drainage. A verdict in accordance with the medical evidence was returned.

Doctors attending Funerals.—"Don't be going to the funerals of your patients," said a physician's wife to her husband; "it looks too much like a tailor carrying home his own work."

The International Fisheries Exhibition, London.—One of the results to be looked for from the forthcoming Exhibition will be the introduction into London of what are now called "inferior" fish—haddocks, cod, ling, etc. Mr. Duff, M.P., states that the Exhibition Committee have secured the services of the Managers of the School of Cookery at South Kensington, who have undertaken to cook and supply in the cheapest form, at breakfasts and luncheons to be served in the Exhibition, dishes of the inferior fishes.

Kew Gardens.—We are glad to observe that renewed efforts are to be made to obtain an earlier opening of these Gardens. It may be remembered that some time ago an agitation was promoted, having the same object in view, but which was unsuccessful. A public meeting has just been held at the Chiswick Vestry Hall, and resolutions protesting against the exclusion of the public from the Gardens up to one o'clock were passed, and it was also resolved to memorialise the First Commissioner of Works on the subject.

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The South of France.—It is stated that numerous villas have been ordered on English account, to be built at Cannes, Mentone, and Nice, to be ready for next season.

The Premier and Officious Solicitude.—Mr. Gladstone's illness has been marked by the usual influx of offerings of patent medicines. The post-bag has been loaded with a miscellaneous collection of bottles of liquids, boxes of pills, packets of lozenges, and pots of ointment. In most instances the gift is accompanied by many interesting particulars of a certain illness which befel the writer, and how he (or she) took this medicine and was cured. Mr. Gladstone's recent local affection being stated to have been lumbago, embrocations in abundance have been received at Hawarden Castle.

A New Order of Earrings.—According to the *Court Journal* the institution of bronze earrings with "Merit" engraved on them is said to be contemplated by the authorities. These ornaments are to be given to female nurses who have distinguished themselves in hospital service during war.

Puzzling.—On the London water-supply in their last report, Messrs. Crookes, Odling, and Tidy state that, in regard to "aëration, colour and freedom from turbidity," the condition of the water consumed by Londoners "during the past month has been unexceptionable." In another report from another authority, submitted to the Registrar-General, it was stated that the water distributed by four out of five of the companies taking their supply from the Thames was, from "organic impurity, unfit for drinking." The former gentlemen now say that there was not sufficient ground for such an "appalling statement."

Incorrigible.—At Manchester a man has been committed to prison for six months without the option of a fine, and disqualified from ever holding a licence, for selling liquor without a licence. It was his seventh conviction. In the last five years his fines for a similar offence have amounted to about £200.

M. F. T.—In Liverpool, Hospital Sunday was first started in 1871, when the collections amounted to £4700, which was afterwards increased by £100 from the Hospital Saturday Fund. Last year the total from both sources reached £9632.

Without Mortuary Accommodation.—The coroner's jury, at an inquiry touching the death of a man who was employed at the New Law Courts, protested against their having been obliged to go through a labyrinth of scaffolding to view the body of the deceased, which lay in a vault in the new building, there being no mortuary accommodation in the district. It was, they added, a disgrace to the parish. The coroner concurred in these remarks, and observed that juries had complained time after time, but no action had been taken to remedy what was a great evil.

Royal Army Coffee-Taverns.—The Marquis of Hartington has become a vice-president of this movement. There are now Army coffee-taverns in London, at Aldershot, and Sandgate.

The Ill-paid Labours of the Parish Doctor.—A vicar writes to an evening paper:—"An experience extending over half a century in one of the unions in the South of England has given me many opportunities of witnessing the ill-paid labours of medical men, and the difficulties they have to contend against in dealing with the sick poor. The discretionary power given to the guardian of a parish, if he is a parsimonious and unfeeling man—as too many of them are,—enables him to put obstacles in the way of the parish doctor, which make it almost impossible for him to do what his heart frequently prompts him to do for the sick and indigent poor. I have known cases in which meat and medicine have been refused in spite of the doctor's order; and it is notorious that in some unions a union doctor tires out two horses almost daily in going his rounds. The case of medical aid and doctors' pay is one which requires immediate investigation. The doctor's grievance is almost as great as that of the class he is expected to attend to."

A Generous Offer.—Mr. George Courtauld, M.P., has offered to erect a cottage hospital at Halstead, at a cost of about £1500. A public meeting is to be held on the matter, when it is expected the offer will be accepted.

Football Casualties.—It may be remarked that at a recent meeting of the Football Association there was such a reduction of the rigorous "Association Rules" as will probably meet the approval of the players in the United Kingdom. The Association has, no doubt, done much good by the elimination of the bad, and the adoption of the good, from each system on which the game is played.

Great Growth of Beer-drinking in the United States.—Some statistics, just published, show that in 1870 the quantity of malt liquors, chiefly lager beer, produced in the States was valued at $55,000,000, while in 1860 the value reached the sum of $101,000,000. During the same period the increase in the production of distilled liquors was comparatively small, the value of the product being $36,000,000 in 1870, and $41,000,000 in 1860. The figures quoted show that whisky-drinking is giving way to the drinking of light beer—a fact which should be welcomed by the friends of temperance.

Hackney.—The Board of Guardians have decided to erect additional workhouse buildings for the reception of 500 paupers, and to borrow from the Metropolitan Board of Works £36,650 for the purpose. The increase of indoor pauperism has rendered necessary this additional accommodation.

The Working-classes and the Notification of Infectious Disease.—The Birmingham Trades' Council have passed a resolution that the compulsory notification of infectious diseases would be to the advantage of the public health, and should receive the support of the working-classes.

Palestine.—From its peculiar formation the country possesses much variety of climate. That of the hill country has been compared with the climate of Italy, while that of the Jordan valley is decidedly tropical. The rainy season usually commences towards the end of October, and lasts till March, after which the air clears, and for months the bright blue sky is unbroken by a single cloud. The annual rainfall is small, the average of seven years during which observations have been taken being only nineteen inches and a half.

The Royal Humane Society.—Dr. H. R. Silvester has been awarded the Fothergill Gold Medallion, value fifty guineas, for his researches and discoveries in the art of inducing respiration in cases of apparent death from drowning and other causes.

Polluting a Stream from Public Drainage Works.—The action brought by Sir Henry Hawley, Bart., in the Maidstone County Court, against the West Malling Rural Sanitary Authority, to compel them to abate a nuisance caused by the polluting of the Leybourne stream from the defendants' drainage works, has resulted in an order upon the defendants to abstain from committing the offence, but suspending such order for six months pending the carrying out the requisite works to remedy the nuisance.

The Proposed Hospital for Runcorn.—The meeting convened by Dr. Steele, the chairman of the Board of Commissioners, for the purpose of considering the necessity of providing an accident hospital—to which subject we referred last week—has been held. Dr. Steele presided. A letter was read from the London and North-Western Railway Company, stating that the directors would do for Runcorn what they did for other towns—make an annual contribution towards the expenses of any institution which might be started, provided their servants would avail themselves of its advantages to any reasonable extent. A resolution was unanimously adopted that measures be taken for establishing an accident hospital in the Town. The chairman, Dr. Steele, in answer to inquiries, expressed the opinion that at the commencement a hospital could be maintained for £150 a year. A committee was formed to take the necessary steps to carry out the object of the meeting.

Argyllshire.—The current number of the *Celtic Magazine* states that since the census of 1831 the population of Argyllshire has declined from 100,973 to 76,468, and as to the latter number no fewer than 30,387 are classified as urban. The conclusion arrived at is that the rural population has been reduced in the course of the last fifty years from 85,783 to 46,081, or nearly one-half.

The Charities of the City of London.—The recent investigation into the affairs of these charities has revealed the strange fact that in one parish alone—that of St Giles, Cripplegate—no less than nineteen charities, the total income of which should be over £1100, have utterly disappeared and cannot be accounted for.

COMMUNICATIONS have been received from—

Dr. Creighton Browne, London; Dr. Norman Kerr, London; Dr. Sansom, London; Sir William Mac Cormac, London; Dr. G. de Gorrequer Griffith, London; Dr. Norman Chevers, London; Dr. Gumbleton Daunt, Brazil; The Honorary Secretary of the Medical Society of London; Mr. J. Chatto, London; Mr. W. Lamb, London; The Registrar of the Apothecaries' Hall, London; The Secretary of the Chelsea Hospital for Women, London; Mr. Biss, London; Dr. A. T. Thomson, Glasgow; The Honorary Secretary of the Medical Union Society, London; The Honorary Secretary of the Royal Institution, London; Mr. Shirley Murphy, London; The Registrar-General for Scotland, Edinburgh; Dr. Willoughby, London; Dr. W. Alexander, Liverpool; Dr. Russell, Birmingham; The Secretary of the Cambridge Medical Society; Dr. Diamond, Stockwell, S.W.

BOOKS, ETC., RECEIVED—

On some Rare and New Diseases, by Sir James Paget, Bart., F.R.S.—Statistical Report of the Health of the Navy for the Year 1861—On some Dangers connected with Dwellings, and How to Avoid them, by Arthur Ransome, M.D., M.A.—Skizzen aus der Chirurgischen Klinik des Herrn Professor Dr. Ritter von Nussbaum, von Dr. Isenchmid—Transactions of the Pathological Society of London, vol. xxxiii.—Chromatoptometrical Table, by Dr. Ole B. Bull—A Pharmacopœia of Selected Remedies, by Edmund A. Kirby, M.D., M.R.C.S.—Address in Surgery, by W. A. Byrd, M.D., Quincy, Illinois—Epitome of Skin Diseases, by the late Tilbury Fox, M.D., F.R.C.P., and T. Colcott Fox, M.B.—Voluntary Lock Hospitals and the Contagious Diseases Act: Reply to Dr. Alexander Patterson, by F. W. Lowndes, M.R.C.S.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Deutsche Medicinal-Zeitung—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette Louisville Medical News—North Carolina Medical Journal—Medical News—American Journal of Obstetrics—Lincolnshire Chronicle, January 16—Journal de Médecine—Journal of Cutaneous and Venereal Diseases—Revue d'Hygiène—Westminster Review—Revue de Médecine—Revue de Chirurgie—Indian Medical Gazette—Canada Lancet—Quarterly Journal of Inebriety—New York Medical Journal.

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PRESIDENTIAL ADDRESS

DELIVERED BEFORE THE

CLINICAL SOCIETY OF LONDON.

By ANDREW CLARK, M.D., LL.D.,

Senior Physician to the London Hospital; President of the Society.

GENTLEMEN,—Another epoch in the history of the Clinical Society has come to an end, and a new epoch begins to-night with us. Standing thus between the past and the future—between the work which has been done and the work which lies before us to do,—the opportunity naturally offers, and we may profitably avail ourselves of it, to inquire somewhat concerning both. On former occasions of this kind you have been treated to dissertations on subjects occupying at the time the attention of the profession; to discourses upon what may be called the "philosophy of clinical medicine"; to delineations of the sorts of knowledge necessary to continued advancement in our art; and to eloquent exhortations to active, purposive, honest clinical work. To-night, for the short time that I shall presume to stand between you and the business which we are assembled to consider, I shall take humbler ground; and, contenting myself with a short survey of the completed labours of the Society, I shall endeavour to elicit therefrom such fresh helps for future guidance as may enable us to make our printed *Transactions* still more worthy of the work wherewith we are occupied, and of the workers therein.

It seems to me, after a careful examination of the contributions made to the *Transactions* of the Society during the reign of my illustrious predecessor, that both in matter and in manner, in abiding interest and in clinical importance, in fertility of practical suggestions, and in successful boldness of the operative procedures recorded therein, the volumes embodying those contributions will bear favourable comparison with any like number of volumes which have been issued before them. I discover in this later work no decay of earnestness or of strength; none of faith or of knowledge; none of foresight or of judgment; and in some ways, as in the recognition of clinical affections unconnected with sensible anatomical changes, it has taken, as I at least am convinced, higher and truer ground.

Examining the whole series of our *Transactions*, and calling to mind the character of the discussions elicited by many of the papers, one cannot fail to become impressed with a vivid sense of the great and growing importance of the work which the Society is silently but surely doing.

The *general* good results of the Society's work are now so obvious and have been so often mentioned that they need for remembrance only the barest notice. We see how, through diversity of inquiry, community of work, unity of purpose, and severity of procedure, we have improved our methods, added to our knowledge, established new connexions, multiplied our resources, settled a surgical revolution, and widened, deepened, and in some quarters transfigured our views. All this is plain, and the statement of it may be open to the accusation of common-place. But what is not so plain and what is not common-place is the influence which the Society has exerted and is exerting upon the scientific character of individual workers; and this, although less obvious, is not less important. The Society has improved the scientific character of good workers; it has repressed bad workers; and it has framed for the guidance of all alike a standard of work which is sensibly elevating the profession and benefiting our art.

In the work of the younger members of our profession I see, or at least I think that I see, greater care, patience, and accuracy in observation, a more rigorous fidelity in the record of therapeutical experiments, wiser caution in speculation, graver deliberation in judgment, a growing frankness in the confession of oversights and errors, increasing severity in the sifting and testing of their own conclusions, a readier effacement of the personality in the work, less unseemly eagerness for mere priority of publication, a deepened sense of the responsibilities of premature speech and writing, a rapidly abating bitterness in the conflicts of opposing views, a more robust and manlier spirit of scientific life, and less reluctance in making admission that there is no unconditional truth in the results of our inquiries—no finality in our finished work—no creed in medicine.

But the Society has done more than train good workers; it has repressed bad workers. For one competent and conscientious worker there are ten who are incompetent and unconscientious, and who in divers ways hinder our progress and spoil our present possessions. Intolerant of the patient and painful toil of the true worker, acute in power of superficial observation, gifted with a certain showy versatility, quick at catching hold of new ideas, ingenious in guessing, crude in experiments, loose in therapeutic trials, hasty in speculation, strong in dogmatic assertions, accomplished in the transfiguration and use of other men's work, finding what they want wherever they seek it, unhindered by difficulties, facile in speech, ready in writing, thirsting for notice—such men (now, alas! not uncommon in medicine) beget papers so quickly that they can have no necessary relation to time, observation, or thought, and flood our literature with their unworthy, if not unveracious, lucubrations.

The favourite hunting-ground of such men is therapeutics, and their favourite sport is the catching of new remedies, the putting of them to new uses, and the setting forth of their successful results. These men discern no difficulties and have few failures; they can illustrate their successes by scores of cases, and explain them by the most ingenious theories. There is scarcely any limit to the extent or the variety of their achievements; and as they flaunt along in the fulness of self-satisfaction, they look down with pitying condescension upon those in the strait and narrow way who conscientiously toil with small success in seeking after truth, but who nevertheless, missing the praise of men, find strength and solace in the sacred search.

Another great work of our Society has been and continues to be the gradual unfolding of the exact relations which morbid anatomy and, incidentally, experimental pathology should hold to clinical medicine. These two chief servants of our art—excited and carried away by their marvellous successes, and assuming a joint sovereignty over our art—look down with condescending superiority upon Clinical Medicine, ridicule her claims to supremacy, scoff at her empirical distinctions, reproach her with being unscientific, and strive to torture her into a slavish subjection to their theories. But the true relation is not this; it is indeed the converse of it. For the structural change is not disease, it is not even co-extensive with disease; and even in those cases where the alliance appears the closest, the statical or anatomical alteration is but one of other effects of physiological forces, which, acting under *un*physiological conditions, constitute by this new departure the essential and true disease. For disease in its primary condition and intimate nature is, in strict language, dynamic; it precedes, underlies, evolves, determines, embraces, transcends, and rules the anatomical state. It may consist of mere changes in the relations of parts—of re-arrangements of atomic groupings, of recurring cycles of vicious chemical substitutions and exchanges, of new conditions in the evolution and distribution of nerve-force; and any or all of them may be invisible to the eye, inseparable from life, and undiscernible in death. Undoubtedly the appearance of a structural alteration in the course of disease introduces a new order of events, sets in action new combinations of forces, and creates disturbances which must be reckoned with, even as mechanical accidents of the pathological processes.

But always behind the statical lies the dynamic condition. Underneath the structural forms are the active changes which give them birth; and stretching far beyond the limits of pathological anatomy, and pervaded by the actions and interactions of multitudinous forces, there is a region teeming with manifold forms of disease unconnected with structural change, and demanding the investigation which it would abundantly reward. It is in this mysterious and fertile region of dynamic pathogenesis that we come face to face with the primitive manifestations of disease, and learn how much knowledge from various sources is needed to understand it aright; it is here that we see how, without help from physics, chemistry, and biology, collecting, converging, and meeting in a common light, no single problem in disease can be completely solved; it is here that

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we are made to comprehend how the nature of a pathological product cannot be determined by its structural characters, but by the life-history of the processes of which it is only a partial expression; it is here that we observe how, in therapeutic experiments, the laws of the race are conditioned, and even traversed by the law of the individual; and it is here that we discover how Clinical Medicine is to become a science, and how she is already, beyond question, at once the mother and the mistress of all the medical arts.

And here, in this relationship of processes to products, although only incidentally and inferentially touched by them, I must advert for a moment to the results of pathological experiments. As to their necessity and value in the progress of medicine there cannot be any justifiable doubt. But for whatever purpose they may be employed, however carefully they may be designed and executed, however successful may be the precaution taken to exclude error—experiments have their subtle difficulties and dangers, which are perilous to truth and cannot be wholly averted. By the *prestige* of precision, which often undeservedly they possess, undue weight is attached to their results; and by the assumption, that in like conditions, the results would be the same in man as in the lower animals, flagrant errors are committed and currency is given to false or inadequate generalisations. The experimenter interprets the results of his experiments by the light of their structural results; he forgets, or he ignores, the life-history of the processes by which they have been evolved, and he takes no account of the fact beyond controversy that different clinical states find occasionally the same structural expression. In such circumstances doubt is inevitable, and it is only to Clinical Medicine that any just appeal for its solution can be made. To her at last all such experiments must be brought for trial; she must be their examiner, critic, interpreter, user, and judge. And no results of experiments can be made of any avail to Medicine, or be used with safety in her service, until they have been filtered through the checks and counter-checks of clinical experience, and have responded to the tests and counter-tests of clinical trial.

Had these principles exerted their just influence in the recent debates concerning questions of this kind we should not have had a seton in the neck of a man taken as the parallel of a seton in the neck of a guinea-pig; we should not have had the artificial tuberculosis of the rodent pronounced to be identical with the natural tuberculosis of the child; we should not have had grey tubercles and caseous pneumonias pronounced, on the grounds of mere likeness of structure, to be of one and same nature; and we should have been spared the sight of Science, drunken with success and drivelling with prophecies, soliciting the public on the common highway.

Of such examples of good work done by the Society there are many more that I could give if time permitted; and doubtless there are many more known to others that I could not give, because they have escaped my notice. But I have given enough to justify and even to require a little reckoning of our shortcomings. Happily, the Society has still its imperfections; and, as they are unlikely to be easily remedied, we shall not lack motives to endeavour, nor miss the reward which comes from rightly endeavouring.

One of the defects which I notice in the *Transactions* of the Society is an incompleteness outside the immediate objects of interest in the history of many of the cases recorded therein. If we are to make real use of a case, and if the case is to help us with other cases to make great and true advancement in our art, it must be given to us as a complete whole. We must have not only the family and personal history, but we must have also the nature, assemblage, and progression of symptoms elucidated by all the assistance that can be had from physics and chemistry, from the spectroscope and microscope, from physiology and experiment. I do not presume to say that incomplete cases are either valueless or unwelcome, for doubtless they have often an interest and value peculiarly their own; but I do say that for all the higher and truer objects of medicine our earnest and unfailing endeavour should be to make every case as complete as the collateral knowledge of the time will enable us to make it. Hence the necessity and value of purposive, concurrent, and co-operative work. Hence arose the great medical *renaissance* of Germany, when Virchow and Brücke, Ludwig and Traube, Meyer and Lieberkühn, Lehmann and Helmholtz, bringing together the results of their critical and experimental studies in various departments of knowledge, resolved, as if by magic, some of the obscurest problems in physiology and medicine.

But of all the defects in the work of the Society, the one which I consider to be at once the most important and the most inexplicable is the seemingly studied disregard, in the treatment of a patient's malady, of those minute conditions of his daily life which practically make and unmake health, so that—special management being almost nothing, and special medication almost everything—it would seem as if physiological principles were of no account in therapeutics. But a more critical study of disease will soon convince us that this inference is unsound and its application incorrect. Putting aside, for the moment, inherited affections and parasitic maladies of whatsoever sort, I shall assume that chronic disease—a state of parts, and not a thing interposed between them—is the eventual outcome of continued violation, conscious or unconscious, of physiological laws as they exist for the race, or as they are conditioned by the peculiarities of the individual organism. I shall further assume that those violations are not exceptional and gross, but daily and minute; and that their effects, infinitesimal from day to day, become visible only after longer periods of time, and so escape recognition except by those who are trained to discern the causal connexions of subtle things. And I shall furthermore assume that the organism, in virtue of the inherent forces maintaining its solidarity, tends to repair existing and to repulse threatened disorders, and that, when placed in favourable, and liberated from unfavourable, physiological conditions, this tendency issues and ends in successful action.

And now let us take for illustration a case of primitive uncomplicated gastric catarrh. Assuredly it does not come without a cause, and it is not introduced from without, but begotten within. It is, in fact, engendered out of a more or less prolonged, and perhaps petty, violation of the laws of stomach-digestion, and it is maintained by conditions which, although apparently too trivial to be worthy of notice, are yet sufficient to hinder the formation of healthy peptones, and to traverse the reparative powers of the organism. What is ordinarily done in such a case? The patient is told in a vague sort of way to have a light and nourishing diet, to take daily exercise, to avoid anxiety and overwork, and to try bismuth and alkalies with an occasional alterative aperient.

Now, speaking, if I may be permitted to do so, from my own experience, it is certain that in such a case management is of more moment than medicine, and that without a rigid, and even minute, obedience to the physiological conditions of healthy digestion, the chances are small of a speedy and permanent recovery from the gastric catarrh.

But the instruction of "a light and nourishing diet" admits of the widest diversity of interpretation, and, with the most loyal desire for literal obedience, the patient, according to his age, habits, and station in life, may be unwittingly guilty of doings the most conflicting and injurious. He may eat too often or too seldom; his food may be fresh or preserved, too highly seasoned or too insipid, too concentrated or too bulky. He may take too much liquid or too little, too often or too seldom, too hot or too cold, effervescent or still. And without a conscious, but yet real and great, departure from the intention of his instructions, he may frequently refresh himself with cups of tea and coffee, and make glad his heart by incidental glasses of wine or of beer.

Now, there is a right way and a wrong way in the management of every such case, and, although they lie so near together, and are so much alike that the distinction between them is not easy of discernment, it is necessary that the distinction shall be made. For it is upon a correct giving or not giving, a correct and minute attention to the physiological conditions affecting the quantity, quality, and character of the solid and liquid food, the times and circumstances of eating and drinking, the amount of exercise, work, and sleep, and the adequate discharge of the excrementitious functions, that our work will succeed or fail, that our case will turn for evil or for good, and that the patient will either recover his health or drift into permanent valetudinarianism.

If time permitted, and the occasion would justify it, I could easily produce, from the records of our common experience in every department of medicine, illustrations the

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most various and conclusive of the peril of neglecting and the profit of following minute physiological considerations in the treatment of disease. On this occasion I shall content myself with one.

Some eight years ago I was summoned to a consultation in South Kensington, where, in presence of the patient and his family, I met Dr. Andrew Stephen and Dr. Taylor. It appeared that the subject of our consultation having been ill for many weeks, and growing rapidly worse, had been brought from Wales to London for further advice, and that the advice given was opposed to the feelings and convictions of the patient and his friends. The family, therefore, refused, without the help of another opinion, to carry out the proposed treatment; and accordingly, with the acquiescence of the doctors, I was summoned to examine the patient, and to state my views without previous consultation with my colleagues, but in their presence.

The patient—a tall, stout man of about sixty, with flushed face, suffused eyes, anxious countenance, and swollen legs—sat, leaning forward in an armchair, partially undressed, breathing laboriously, and apparently in much distress. He complained of shortness of breath and palpitation; of confused sensations in his head, and occasional dizziness; of general weakness, and of indescribable depression.

The patient had a loaded tongue, with fœtid breath; and, although troubled with nausea, was able to take freely of food and drink. The abdomen was distended, and the liver distinctly enlarged. There were frequent discharges of fœtid gases from the bowels. The fæces, discharged twice or thrice daily, were dark, offensive, and unformed. The urine was scanty, pale, faintly acid, of the density of 1010, and slightly albuminous. The heart was large, flabby, murmurish, frequent, quick and irregular in time and force. The pulse was small, thready, irregular, and beating over a hundred times in a minute. The legs were œdematous, bluish-red, and cold. The cervical veins remained continuously distended. Both lungs were congested at their bases; and there was frequent cough with frothy and sometimes sanguinolent expectoration. Nothing worthy of note was discovered in the nervous system.

Inquiring now as to the treatment which was being pursued, I was told that, in the opinion of all who knew him, and of all the doctors, except the last, who had been consulted about him, the patient was a man of a naturally delicate constitution, that he needed constant keeping up, and that his chances of life were in direct proportion to the amount of support that he could take. Accordingly, he was taking food and wine every second hour, had iron, quinine, and strychnia three times daily, and, being increasingly thirsty, he drank milk and soda-water without much regard to frequency or amount.

Questioned as to my opinion of the patient's malady, and urged by my colleagues to say exactly what I thought, I replied that he was a man with deteriorated, but not seriously diseased, tissues and organs, and that he was in peril of death, not so much from his malady as from the means used for its cure; that he was being poisoned by food and wine; that he was in the condition of a fire having more coals put upon it than it could burn, and that, his chimneys being choked, he was in near danger of being suffocated with his own smoke.

My colleagues agreeing with this view of the case, and the patient, after much discussion and explanation, assenting, he was placed upon a precise and severe regimen. He was ordered to have four simple nursery sort of meals in the course of the day; to have an ounce of brandy diluted with eight parts of water at dinner and supper; to be restricted to two pints of liquid in the course of the twenty-four hours; to take nothing of any sort between meals; and, as soon as he was able, to move about the rooms in which he dwelt.

In the way of drugs, he was directed to take, for a week or longer, a grain of calomel at night, followed by a saline aperient on waking in the morning, and to have twice or thrice daily, two hours after food, infusion of gentian with bicarbonate of potash, iodide of potassium, tincture of digitalis, and aromatic spirits of ammonia.

For the first three days the patient was no better for this treatment. It tried him severely through the restriction of his liquids, and, declaring himself worse for it, he threatened to discontinue it, and to return to his former ways. But on the fifth day he began to improve, and then, his confidence being gained, there was no further difficulty in continuing the treatment, which, when digestion improved, was added to by the administration of reduced iron with meals.

At the end of three months the patient declared that he was well; and all that could be said against him was that he had a weakish heart, that he was breathless upon exertion, that he had rather inadequate kidneys, and that, to maintain his sense of well-being, he was compelled to live by rule. This rule was a midday dinner, with an ounce of brandy in half a pint of water; a moderate breakfast and tea, with eggs or poultry or fish; extreme moderation in the use of fluids; tepid sponging, warm clothing, gentle exercise, and early hours.

Within a year I heard of the patient being in fair health, and managing his ironworks in Wales. What I have since heard of him from time to time is instructive. Occasionally losing his faith, or lacking strength to follow his rules, he returns to the freedoms for which he longs; frequents society, dines late, rejoices again in his wine, and has all his heart's desire. For a time all goes merrily and well, and he breaks sarcastic jokes over the heads of his physicians. But sooner or later this seeming well-being ceases, and his troubles reappear. The urine diminishes in density and becomes albuminous; the heart loses its strength and regularity; the breathing is oppressed; the nights are sleepless and the days depressed; till at last, after much suffering, his obstinacy is conquered, and, reconvinced and humbled and penitent, he returns to his obedience, and again recovers his health.

Such cases are common enough, and my experience forbids me to doubt that in fevers and inflammations, in hæmorrhages and acute diseases of every sort, the issue of particular cases turns, oftener than we are perhaps ready to admit, upon an adequate understanding of the physiological principles applicable to the removal of the conditions imperilling life, and upon the resolution and patience, the minuteness and fidelity, with which they are enforced.

And such considerations are true and important not only in diseases jeopardising life, but also in common disorders, which, although devoid of serious peril, invade our comfort, hinder our work, and dull our joys in life. I do not forget that through hereditary influences, and unsuitable but inevitable environments, many persons are doomed to be constantly ailing without being ever really ill; that their normal state is one of suffering; that no physiological readjustments and no specific medication can give to them the pleasant sense of health; and that attempts to effect what is impossible issue only in greater suffering or in disaster. But, making full allowance for such cases, there remain countless numbers who suffer, through whom society suffers and the world is defrauded of service and knowledge, numbers who are yet willing and eager to make every sacrifice necessary to recovery, and who are left to continue in suffering because the physiological principles and compensations applicable to their relief are derided, disregarded, or denied.

(To be continued.)

COMPRESSION OF THE AORTA IN POST-PARTUM UTERINE HÆMORRHAGE.—Dr. Wilmart, of Brussels, relates, in the *Presse Méd. Belge*, a case of atonic uterus in which, after the rapid completion of delivery by the forceps, alarming uterine hæmorrhage set in, which reduced the patient to a moribund state. Having administered ergot in vain, he had recourse to the application of pressure by means of the fingers between the third and fourth lumbar vertebræ, the patient being placed in position with her head downwards and her feet uppermost. The compression of the aorta had to be maintained for a long period, every removal of the fingers being attended by a recurrence of the hæmorrhage; but eventually the compression, aided by ergot and brandy, proved completely successful. Dr. Wilmart observes that few know the difficulty and pain caused to the operator while making this compression for a sufficiently long time, especially, as in his case, where there is no assistant at hand.

INTERSTITIAL INJECTION OF ERGOTINE IN PROLAPSUS ANI.—Fresh ergotine one part, and cherry-laurel water ten grammes. Inject every second day a Pravaz's syringeful into the vicinity of the orifice of the anus, taking care to force in the injection pretty deeply (about four centimetres), in order that the liquid may penetrate the substance of the sphincter.—*Gazette Méd.*, January 27.

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THE LETTSOMIAN LECTURES
ON THE
TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

By A. ERNEST SANSOM, M.D. Lond., F.R.C.P.,
Physician to the London Hospital; Senior Physician to the North-Eastern Hospital for Children, etc.

LECTURE II.—MITRAL REGURGITATION.—JAN. 15.

(*Concluded from page 89.*)

IV. I now come to the fourth group, and assume that a murmur indicating mitral regurgitation is observed in the subjects of *acute or subacute rheumatism.* Attention has been frequently drawn to the fact that murmurs may arise in the course of evolution of the disease, and yet disappear, and patients being free from murmur have been considered to be free from cardiac complication. I have in my former lecture deprecated this as a too hasty conclusion. It may be well to inquire, in the first place, what is the probable nature of these transitory or evanescent murmurs, which are by no means uncommon, for they occur, as the statistics of the London Hospital for 1880 and 1881 show us, in about 10 per cent. of the cases. Rheumatism is a disease notably attended with anæmia. Is it probable that these bruits are of the nature of those which we have considered to be causally related with Anæmia? The evidence collected for me by Dr. Gabbett as to the site of such transient murmurs is, I think, against this view. It is well known that the murmurs heard in connexion with anæmia, though sometimes heard at the apex and indicating mitral regurgitation, are far more frequently audible at the base over the site of the pulmonary artery or aorta. Even when heard at the apex they are usually accompanied by other murmurs at the base. In rheumatism, however, the usual site of the evanescent murmur is the apex. The totals for 1881 show as follow:—Transient murmurs in mitral area fifteen, at base and apex seven, in aortic area five, in pulmonic area three. It would appear that a murmur which might suggest an anæmic causation is almost confined to a first attack of rheumatism; after two or more attacks no basic transitory murmurs are recorded. Then as regards the transient systolic murmur in the mitral area, we may ask whether it may be due to myocarditis. If so, it does not resemble in associated phenomena the murmur observed in typhoid, etc. The peculiar perturbations of rhythm are not recorded, and it would appear probable that if there be myocarditis it does not occur in disseminated areas as in typhoid. May it not be that the temporary regurgitation is due to a localised myocarditis, developed in the neighbourhood of the swollen valve or inflamed endocardium? Thus, though the swollen valve might not be in itself incompetent, a temporary incompetence would be produced by the impairment of the force of the muscle. As the myocarditis subsided the valve would become again competent, but probably, in many instances, to present a renewed imperfection when the swelling in the course of time has given rise to fibrous change and consequent retraction. I draw attention to this as a caution as to the expression of my opinion that a valve is sound after a murmur developed during rheumatism, even though the murmur be temporary.

Let us now suppose that owing to rheumatic endocarditis the mitral valve has been rendered incompetent. It is well known that such may be the case, and yet the subject of such incompetence present no sign nor symptom of deviation from health. We are familiar with cases manifesting the murmur of mitral regurgitation in childhood, who pass through the period of adult life without suffering from the distresses of cardiac disease, and who, perhaps, ultimately succumb to an affection, the course of which the valvular imperfection has in nowise sensibly modified. In such cases the valvular imperfection has become *compensated.*

Supposing a regurgitation just instituted, the first effect is upon the left auricle, which is now made to contain a quantity of blood greater than normal by so much as gushes into the auricular cavity at each systole. The effect is to distend and to dilate the auricle. The left ventricle, too, is filled more rapidly than under normal conditions, because the blood from the auricle enters it under pressure the moment that diastolic relaxation permits. Such entrance of blood is more free than the normal. Hence dilatation or hypertrophy of the left ventricle, or a *tendency* thereto. The most important of the induced conditions is, however, that of the pulmonic circulation. The reflux current overfills not only the auricle, but the pulmonary veins and the pulmonic capillaries. Against such resistance comes the force of the right ventricle in systole, which, in opposing the resistance, becomes hypertrophied. The hypertrophy of the right ventricle is essentially conservative, and the increased tension in the pulmonic circulation is an essential condition of compensation. The sign of such heightened tension, and therefore compensation, is, as long ago pointed out by Skoda, accentuation of the pulmonic second sound in the second left interspace.

Observation of the degree of pronunciation of the pulmonary second sound is of the highest importance as regards the treatment of mitral regurgitation. It is in a considerable degree a measure of the amount of such regurgitation. If the aperture caused by incomplete mitral closure in systole be small, the pulmonic tension is only slightly increased, and the pulmonic second sound may not be perceptibly intensified; but if the gap be wide, the tension, supposing the two ventricles to be in an efficient condition of compensatory hypertrophy, is great in the pulmonic circuit, and the second sound in the pulmonary area is very loud. If afterwards the loudness of such second sound is found to diminish, such sign is of very high importance. It suggests that the compensatory hypertrophy of the right ventricle is beginning to fail, that dilatation is in excess, and that the tension of the blood in the pulmonary artery is reduced by so much as regurgitates through the tricuspid orifice. Of course, the other signs of tricuspid regurgitation should be taken in conjunction with this, but I know no sign which is so valuable a guide for treatment.

As the left auricle is overfilled in proportion to the amount of blood regurgitating, so is the aorta, and from it the systemic arteries, ill supplied. A diminution occurs in the normal quantity of blood propelled to the tissues, while in the veins circulation is retarded, and the normal content is augmented. There is arterial anæmia and venous plethora. The institution, however, of compensatory hypertrophy of the right ventricle rectifies the ill supply to the aorta. The increased pressure in the pulmonic circuit at the time of systole opposes the reflux into the auricle, and the current thus opposed is urged in normal amount into the aorta. So, even supposing that the force of the left ventricle be not augmented, increased force of the right may restore the equilibrium by inducing a pressure in the auricle equivalent to that afforded by a competent valve.

As regards the mode of production of compensatory hypertrophy, I would draw attention to an excellent chapter in Dr. Milner Fothergill's work.(a)

The practical question which it becomes us to answer, when a patient comes before us who presents signs of mitral regurgitation the legacy of rheumatic endocarditis, is:—Is this valvular imperfection duly compensated or not? Subjective symptoms may tell us of such want of compensation, but they are often deceptive. In addition to the auscultatory sign I have mentioned, we may get valuable evidence from the use of the sphygmograph and cardiograph. The former may tell us of a fairly normal tension in the systemic arteries or otherwise; the latter, by recording the duration of systole and diastole, may inform us how far the normal rapidity of filling of the ventricle is exceeded, and thus may give evidence of the amount of regurgitation.

Supposing that we are satisfied that there is due compensation, medicinal treatment may be entirely unnecessary. I have no doubt that a vast amount of injury has been done to patients by a shaking of the head of the auscultator over the subject of a mitral murmur, who, perhaps, was no worse at the time of examination than he was ten, twenty, or thirty years before, and who might continue uninfluenced for harm by his cardiac complication all his days. He should be cautioned against strain, against exposure, and against irregularities of diet, etc.; he may be better occasionally for

(a) "The Heart and its Diseases, with their Treatment," second edition, chapter v., page 96. London: H. K. Lewis. 1879.

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treatment by iron tonics, cod-liver oil, or strychnine, but any special *cardiac* treatment is out of place.

Not so, however, if there is evidence that compensation is beginning to fail. I will pass in brief review the chief agents which are of service in such case.

(1.) Digitalis is *facile princeps* of drugs in the treatment of imperfect compensation. The researches of modern observers—Fuller, Handfield Jones, Ringer, Balthazar Foster, Traube, Wood, Lauder Brunton, Milner Fothergill, and others—have shown its mode of action; that it so influences the cardiac ganglia as to induce a more perfect contraction of the ventricular muscle, and hence a more complete emptying of the ventricles; whilst, at the same time, by an action on the vaso-motor centre, it causes contraction of the arterioles and a heightened tension in the arterial system. It slows the heart by lengthening the diastolic pause; so not only does it give rest to the wearied cardiac muscle, but—as this muscle is nourished only during such diastolic pause by the blood which then enters through the coronary arteries—it directly ministers to its nutrition. It is a matter of common experience how that digitalis, especially when combined with iron, strychnine, cod-liver oil, and other tonics, restores the *status quo ut ante* when, in a patient manifesting a mitral systolic murmur, the evidence shows that compensation is beginning to fail. As, however, with every other medicinal agent, caution must be used in the administration. As regards *dosage* a certain golden mean has to be observed. The often repeated maxim concerning the middle way points its lesson again:—

"Levis alit flammas: grandior aura necat."

A little over a suitable dose may induce nausea, vomiting, anuria, irregularity of pulse, and, instead of slowing, an enhanced rapidity of heart's action. Whilst a dose which produces a favourable result is constant and discoverable in regard to a large majority of patients, in a minority such dose is inconstant and even unattainable.

As regards the preparation used, we may have differences of result; and we know that, as in the case of so many vegetable products, the energy of different samples may vary. The pharmacopœial equivalents of the officinal drugs P.B. are a little awkward.

One grain of the dried and powdered leaves = one-third of an ounce of the infusion = eight minims of the tincture.

Practically, I consider the tincture most reliable, and that usually in small doses (♏v. to ♏x., increased only in exceptional cases, and then occasionally reduced). Next in value I esteem the powdered leaves (gr. ½ ad gr. ij.), the combination of which with alkalies I shall hereafter consider.

In some cases, even by increasing the dose no apparent influence appears to be exerted by the drug: then digitaline, especially when hypodermically injected, I have observed to give in many cases good results. The digitaline hitherto prepared has probably scarcely ever been the pure alkaloid; but it appears likely that by a new process it can be obtained in a state of purity. The usual dose for hypodermic administration is one-fiftieth of a grain. In a child of ten years of age, with dropsy and great distress from mitral regurgitation, I found, after each injection of one-hundredth of a grain of digitaline, hypodermically, at intervals of four hours, the pulse-rate reduced by eight per minute almost immediately. In this case recovery took place from the urgent symptoms, and the child was sent to a convalescent home. She relapsed, however, and died three months afterwards when away from our observation.

When the right ventricle has dilated so far that there is marked tricuspid regurgitation, the beneficial action of digitalis is by no means so decided. Nevertheless, in some cases, especially when occasional purgation is a part of the plan of treatment, the signs of tricuspid regurgitation may pass away. For instance, in a child (Alice B.), aged eleven, under my care at the North-Eastern Hospital for Children, mitral regurgitation with dropsy was manifested, and marked venous pulse was seen in the left external jugular. Treatment consisted of six-minim doses of tincture of digitalis three times a day. The child had taken previously, as an out-patient, four-minim doses with four grains of ammoniocitrate of iron three times a day. After twenty-one days all severe symptoms had passed away; there was no venous pulse, and the case was discharged as convalescent two days afterwards.

In other cases no such favourable result attends. In fact, as *à priori* consideration might suggest, any increased power of systole which the digitalis may bring about serves the more to force back the blood through the imperfect tricuspid orifice into the venous channels. But yet I have seen good results when the administration of digitalis has been combined with abstraction of blood by leeches or cupping. In a child of ten (Maria W.), manifesting mitral and tricuspid murmurs with percussion-evidence of greatly dilated right ventricle, after rest in hospital for a fortnight and administration of tincture of digitalis in four-minim doses with tincture of the perchloride of iron (♏x.), and a single leech applied to the epigastrium every other day for fourteen days, it was noted that the dulness over the right cavities receded to the mid-sternal line coincidently with general signs of amendment. I prefer very small abstractions of blood, repeated every two or three days, to larger bleedings at longer intervals. In a case lately under my care at the London Hospital this lesson seemed to be pointed, though the recovery was very satisfactory.

Alice F., aged eleven, was under my care for mitral and tricuspid regurgitation, with great and advancing œdema, orthopnœa, and cardiac distress. She was treated by twenty-minim doses of tincture of perchloride of iron, with five minims of tincture of digitalis. After twenty days, tincture of casca was substituted for digitalis, with no apparent benefit. Digitalis was then resumed as before, and, considering the great distension of the right chambers, six leeches were applied to the chest. Great relief of dyspnœa followed, and œdema became less. Improvement was maintained for ten days, and then urgent dyspnœa and signs of greater dilatation of right chambers occurred. Casca was again tried, and this time with some apparent benefit. Purgatives (pulv. jalapæ co. ʒ ss.) were also administered, but still the grave signs of right-ventricle engorgement continued. Again six leeches were applied to præcordium. A few days afterwards the right subclavian vein was found to be plugged, and the whole arm and forearm became enormously swollen. It seemed to me possible that the abstraction of blood, by rendering coagulation more easy, had perhaps disposed to the thrombosis. Nevertheless, I was convinced that the cardiac trouble was sensibly relieved by the leeching, and this was repeated, and saline diuretics and digitalis again administered, in doses increasing from ♏v. (♏vij., ♏ix., ♏x., to ♏xx.). Under this treatment there was gradual but very marked improvement. After five days of the full dose of digitalis it was altogether omitted for ten days, and then resumed in ten-minim doses. All the urgent symptoms passed away, the enormous swelling of the arm due to the venous thrombosis entirely subsided, and the patient was discharged convalescent and able to walk with comfort after having been in hospital for six months.

(2.) *Belladonna* is, I think, only useful in the treatment of failure of compensation in cases of mitral regurgitation when combined with, or *occasionally* substituted for, digitalis. Belladonna, like digitalis, increases the power of systole and raises the arterial tension. As Dr. Lauder Brunton has shown, it paralyses the cardiac terminals of the vagus, and reduces irritability by an anæsthetic effect on the sensory nerves of the heart. Very useful occasionally, it by no means compares with digitalis for prolonged employment. The hypodermic injection of one-fiftieth of a grain of digitaline, with one-sixtieth of a grain of atropine, I have found very satisfactory.

(3.) *Casca.*—A tincture made from the bark of *Erythrophlæum Guinense*, the ordeal bark of West Africa, has been employed as a substitute for digitalis. Dr. Lauder Brunton, in his Gulstonian Lectures for 1877, published the results of elaborate experiments as to its physiological action. In kind this action appears much to resemble that of digitalis. Dr. Brunton has said, "Digitalis has hitherto been our great resort in mitral disease, but I think it probable that in casca we possess a drug more powerful still; at least, its effect upon the arterioles appears to be greater than that of digitalis, and it is quite possible that it may succeed in those cases of advanced mitral disease where digitalis fails." I have myself employed the tincture of casca, substitutively for digitalis, in a considerable number of cases, but I have never yet been able to convince myself that it has any more beneficial action in mitral disease.

(4.) *Caffeine.*—Gubler, Shapter, Leech, Milliken, Brakenridge, Huchard, and others, have recorded observations showing the action of caffeine (or its citrate) in cases of

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cardiac disease, especially where dropsy is a marked symptom. Some of the cases show very forcibly that a beneficial influence has been exerted by the drug. There are many apparently contradictory *data* as to its physiological action, but the cardinal points are, that it first quickens, but soon after slows the heart's action, that it increases the general arterial tension, and acts in a very pronounced manner as a diuretic in cardiac dropsy. Dr. Brakenridge advises that digitalis be administered previously to, or in conjunction with, the citrate of caffeine, and that small doses (three grains) should be employed.(b) M. Huchard, however, recommends that caffeine, and not its citrate, should be used, and that in larger doses—four to six grains.(c) It produces diuresis more rapidly than digitalis, and has none of its nauseating effect. I have employed citrate of caffeine in substitution for digitalis without any marked benefit being manifest; indeed, I have found that in some cases it has induced insomnia. Nevertheless, I consider that the evidence is such that I shall certainly employ it in any case where, in cardiac dropsy, a rapid diuretic effect is desirable.

(5.) *Convallaria Maialis.*—This is the well-known lily of the valley, long employed by the Russian peasantry as a remedy for dropsy. It is botanically closely allied to asparagus, the diuretic effect of which is well known. M. Germain Sée has made a series of researches which point to it as probably a valuable agent in the treatment of failure of compensation in Cardiac Diseases.(d) The preparation used is an extract of the whole plant—flowers, stems, and roots. The mode of action of the extract of convallaria also resembles that of digitalis: it slows the heart whilst increasing the force of systole, and augments arterial tension. It is said that it does not, like digitalis, exhaust the contractibility of the heart and arteries. Administered in doses of fifteen to twenty-two and a half grains during the day it has apparently produced very favourable results. M. Sée has recorded five cases of mitral regurgitation in which it was employed. It entirely relieved the œdema and cardiac distress, and manifested a pronounced diuretic action. I am now employing the extract of convallaria, in mitral disease, in five-grain doses. I am convinced of its power of raising the intravascular pressure, and of its increasing the force of systole, but I am not yet convinced of its superiority to digitalis. The results, however, are such as to warrant an extended trial. I shall have to speak of it again in regard to the treatment of Aortic Disease.

(6.) *Morphia.*—Judiciously employed, I consider that this is one of the most valuable of agents, or rather adjuncts, in the treatment of the distress, especially the dyspnœa and insomnia, attendant upon failure of compensation in cases of mitral regurgitation. I am strongly of opinion that it should not be administered by the mouth, but by hypodermic injection. When given by the mouth it disagrees, just as opium frequently does; whereas, administered hypodermically, it calms the most distressing dyspnœa, without inducing, so far as my experience goes, any ill effect. The value of the hypodermic use of morphia in the distress of heart disease was brought before the profession, in his usual forcible and able way, by Dr. Clifford Allbutt in 1869.(e) I entirely endorse his view of the value of the remedy and its innocuousness in cardiac failure. I have found it valuable to combine the morphia (usually a hypodermic dose of one-third of a grain) with atropine (one-sixtieth of a grain), or digitaline (one-fiftieth of a grain), but the morphia is an essential agent for the successful treatment of mitral regurgitation when there is much respiratory distress coincidently.

In addition to such special cardiac treatment, general measures should be adopted for securing improved nutrition. The heart-muscle must not only be preserved from wasting, but it must also be fed. The problem of administering a due amount of nourishment is often a difficult one. Dr. F. T. Roberts has recommended in the gastric crises of cardiac disease, when there is an almost complete inability to take food, the use of peptonised aliment in a sipping fashion.(f)

This plan I would combine with the administration of nutritive enemata, as I have before mentioned. I feel sure, from my experience, that lives may be prolonged and crises tided over by such supplementary alimentation.

The foregoing is a brief sketch of the most important agents now at our disposal for restoring the power of the heart-muscle and inducing the compensation in mitral regurgitation occasioned by rheumatic endocarditis, when failure threatens. The restoration of such compensation may not, however, be the only indication. Accidents of the disease, so closely related therewith as to force the necessity of considering them in any question of prognosis and treatment, demand consideration. Such epiphenomena are renewed attacks of endocarditis, pericarditis (especially when accompanied by myocarditis and adhesions), and embolism. These subjects, however, being equally manifest in mitral stenosis and mitral regurgitation, may be conveniently postponed till the next lecture.

V. There is, however, yet another group of cases of mitral regurgitation to consider. In these there is no history of antecedent rheumatism, the modes of causation we have hitherto discussed are excluded, the condition has arisen gradually in *association with conditions of high tension in the arterial system.*

The differentiation of this class of cases is important both for prognosis and treatment. A considerable minority of cases manifesting mitral regurgitation come to us with no history whatever of rheumatism. I calculate from the hospital records that these are about one-fourth of all the cases. I have said, however, in my former lecture that rheumatic endocarditis may be established without other evidence of rheumatism. It is obvious, therefore, that such cases of insidious endocarditis inducing mitral insufficiency may be included in the minority we are considering. The diagnosis between these and the cases of regurgitation due to yielding of the ventricle from intra-arterial pressure may generally be arrived at without difficulty. In the latter the signs are those of hypertrophy rather than dilatation of the left ventricle. The aortic second sound, if there be no evidence of aortic disease, is pronounced, whilst (the amount of blood regurgitating being small) the pulmonary second sound is not accentuated. The arterial pulse is strong and incompressible, and often the arteries are tortuous and visibly atheromatous. It is obvious that these signs are very different from those usually met with in the rheumatic cases. Very important evidence is afforded by the sphygmograph, the pulse-trace showing in the non-rheumatic cases an ample tidal wave and the usual evidences of high arterial tension. Such cases are often associated with gout or with chronic renal disease.

In their treatment I have known no plan so successful as a protracted course of alkalies, with abstinence from alcohol, and as much rest as can be procured. Digitalis is not contra-indicated, notwithstanding the general high pressure in the arteries. I have found it of much service, probably by co-ordinating heart and arteries. In any of the accidents of high tension, such as symptoms of angina or dyspnœa, occurring in this class of cases, the administration of nitroglycerine or the inhalation of nitrite of amyl is of much service.

(b) *Edinburgh Medical Journal*, July and August, 1881.
(c) *Bulletin Général de Thérapeutique*, Paris, 30 Août, 1882, page 145.
(d) "Sur un Nouveau Médicament Cardiaque: Recherches Expérimentales sur le Muguet (Convallaria Maïalis)," par le Professeur Germain Sée: *Bulletin Général de Thérapeutique*, Paris, 30 Juillet, 1883.
(e) *Practitioner*, 1869, vol. iii., page 342.
(f) "Lumleian Lectures," *cf. British Medical Journal*, May 8, 1880, page 684.

ACCLIMATION OF THE TEA-TREE IN EUROPE.—The attempts at acclimation of the tea-tree in the Loire-Inférieure are getting on very well. Grafts on camellias have borne very well, in the open air, a temperature below zero. In Sicily, near Messina, 120 plants, planted three years ago, are very vigorous, and have produced abundance of leaves and seeds. It remains to be seen whether the aroma of the leaf will be preserved.—*Union Méd.*, January 16.

PRURITUS VULVÆ.—M. Vigier, in the *Gaz. Hebdomadaire*, January 26, gives the following preparations as the best in the treatment of this distressing affection:—1. *Gowland's Lotion*, which contains 15 centigrammes of sublimate to 100 grammes of milk of bitter almonds. 2. *Vidal's Lotion:* This contains 3 or 4 grammes of chloral hydrate to 100 grammes of rose-water. After each application the part to be dusted with starch-powder. 3. *Guéneau de Mussy's Pomade:* Glycéré of starch 20 grammes, subnitrate of bismuth and bromide of potassium āā 1 gramme, calomel 20 centigrammes, and extract of belladonna 25 centigrammes. To be applied every evening to the pruriginous region.

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ORIGINAL COMMUNICATIONS.

THE PLANNING AND CONSTRUCTION OF HOSPITALS FOR INFECTIOUS DISEASES.(a)

By Mr. PERCIVAL GORDON SMITH, F.R.I.B.A.

In order to prevent the extension of any infectious disease in a locality where it has begun it is important that, in addition to whatever other sanitary measures may be requisite, every practicable endeavour should be made to separate the sick from the healthy. This separation is comparatively easy if means to attain it are taken early and before the cases of sickness are numerous. Hence the means of isolating cases of infectious disease should be within the reach of all, should be ready beforehand, and be as little repulsive as possible. If the erection of a hospital is left until the necessity for it has arrived, it invariably happens that its arrangements are settled in a hurry and under all the influences of panic—influences alike prejudicial to the building, to the patients, and to those at whose cost it is erected. Infectious hospitals, therefore, form an important feature in the "defences" of a district against invasion by infectious diseases; and ample powers have been given by the Legislature to make, in anticipation, the requisite provision for repelling this invasion and for the treatment of patients needing proper isolation. Having regard to the serious pecuniary loss, no less than to the vast amount of individual anxiety and misery, caused by outbreaks of epidemic disease in any district, it is surprising that the degree to which it is possible to prevent the ravages of such outbreaks is at present so imperfectly appreciated by the public.

Hospitals for infectious diseases must provide for the admission and treatment of at least two kinds of infection, the arrangements being such as to allow of this being done with reasonable security, that a patient admitted for one disease shall not contract another disease consequent on his stay in the hospital. For small-pox the accommodation ought to be as completely separate from that for other infectious diseases as possible. Indeed, where practicable, it would be well to have an entirely separate hospital for that disease. In any case, however, the site for a hospital must be of such extent as to allow the several buildings to be at an ample distance from the boundaries, and well separated from each other, so as not only to permit free circulation of air and access of sunlight about them, but that the arrangement of them may prevent, as far as possible, intercommunication among the patients and nurses occupying the several ward-blocks. For aiding the free circulation of air, it is useful to raise the buildings on arches some four or five feet above the ground, so that the confined angles formed by the vertical sides of the building and the ground are obviated. The area of a site for a hospital should be ample not only for the buildings themselves, but for any future extensions (temporary or otherwise) that may be needed, as the difficulty and cost of obtaining additional land are often considerable. Spare land is most useful, too, for the convalescent patients. The extent of site should be such as to allow not more than about twenty patients to the acre, and it is useful to aim at securing one acre of land for even the smallest hospital. The site must be effectually enclosed with a solid fence, not less than six feet high. The hospital buildings may be divided into three classes—(1) the administrative and management; (2) the patients' department; and (3) the various out-offices.

The administrative department must be easily accessible from the patients' buildings, and conveniently near to the general entrance to the premises. The patients must be wholly excluded from this building, and its position must be such that persons (tradesmen and others) approaching it from the outside may not come in contact with the patients, or the nurses and ward-servants. Hence it should stand in advance of the ward-blocks, and be moderately near the entrance gates. It should also have an obvious front entrance, which should be wholly distinct from the means of access from it to the patients' blocks, and its external appearance should be cheerful and pleasing. The administrative block should contain the general kitchen and other usual domestic offices, also the apartments of the caretaker, a small room for the medical officer, and the necessary store-rooms. In an upper storey should be provided the bedrooms for the nurses, who should sleep here in preference to sleeping in the patients' blocks. A bath-room is a useful adjunct to this building.

The patients' blocks must be arranged so as to afford separate and distinct accommodation for the patients suffering from each different disease, and this must further be subdivided for the due separation of the sexes. Hence, at least two distinct pairs of wards are requisite. These must be so disposed on the site as not to necessitate the traversing of one ward-block to gain access to another; but each ward-block should be so arranged as to be wholly independent, and to have entirely open-air communication with the administrative block. Between the two wards in each ward-block it is convenient to place the nurses' room, also the bathing accommodation. Likewise a small, cool, and well-ventilated pantry, where the supply of milk, beef-tea, etc., for the day or night's use may be kept. Where this is not provided, inconvenience is often experienced in hot weather from the spoiling of food. The wards themselves, in order that each bed may have the requisite amount of space, are usually made twenty-four feet wide and fourteen feet high, each bed having twelve feet of wall-space. Advantage, however, may result from modifying these dimensions by making the ward twenty-six feet wide and thirteen feet high. The beds, while having slightly increased floor-space, may then be placed a foot or so away from the wall, thereby facilitating the free circulation of air about the head of the bed. It would seem undesirable to exceed the number of twenty beds in any single ward-block, while it would probably be better to restrict the number to a maximum of twelve or sixteen patients. Ward-blocks of two or more storeys in height are objectionable, as increasing the difficulty of supervision and administration, while on sanitary grounds they are open to the objection that the vitiated and infected air of the lower wards will be likely to find its way into the upper wards; and, accordingly, blocks only one storey high are to be preferred.

A few small wards for one or two patients each are always useful in an infectious diseases hospital. (Plans, prepared by Mr. Keith D. Young, architect, were exhibited, showing an arrangement of private rooms at a hospital for infectious diseases which Dr. Charles West hopes to get built at Nice.) Windows with double-hung sashes are ordinarily to be preferred; and flooring of oak or red deal, the boards being in narrow widths, and grooved and tongued, is to be recommended, the surface being polished with beeswax and turpentine. The walls internally may be finished in polished parian cement or be faced with glazed bricks set with fine joints in white-lead. No cornices, mouldings, or other projecting enrichments on which dust can lodge are permissible, and all internal angles should be rounded. For the further avoidance of accumulation of ward-dust, a flat ceiling is preferable in a ward to an open roof with exposed timbers. Water or earth closets and slop-sinks should be placed in a projection from the end of each ward, and be separated from the ward by a cross-ventilated lobby, the two closets themselves also having means of cross-ventilation independent of the lobby. The ventilation and warming of the wards must be considered together. To secure that effectual ventilation which is indispensable in the successful treatment of all sickness, and especially of infectious disease, it is necessary to provide, without possibility of failure, for the constant and uninterrupted renewal of ward-air from the exterior. For the small hospitals under consideration, powerful stoves or grates in the wards are to be recommended, and these may be supplemented, where desired, by hot-water pipes passing round the wards, but above the floor and away from the walls, so as to allow the space around them to be easily cleaned. For the admission of fresh air, openings having an area of about 100 square inches in the opposite external walls at the floor-level, one behind each bed, are to be recommended. Other openings may be formed near the ceiling, and roof ventilators where there is an open roof. In connexion with the ventilation of the wards, it is advocated that they should be kept well above the ground, and large arched openings provided in the side-walls so as to allow a free

(a) Read before the Epidemiological Society.

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current of air to pass beneath the wards, thereby effectually preventing stagnation of air beneath and around them. The ground beneath, and for a short distance on either side, should be covered with a layer of good concrete. By these means the ground-air will be excluded from the building, and the air-inlets to the wards will derive their supply of fresh air from a higher level, and it will therefore be altogether of a purer kind than is usually the case in wards built close to the ground-level.

The outbuildings of an infectious diseases hospital usually comprise a washhouse, a disinfecting-house, an ambulance-house, a deadhouse, and a post-mortem-room, together with the necessary sheds for fuel, etc. The washhouse and laundry should be of ample size, the latter being large enough to hold a mangle, and between them it is convenient to provide a drying-closet. The disinfecting chamber should be near the laundry building, and should have a thoroughly efficient apparatus, capable of dealing with mattresses, bedding, etc., as well as ordinary clothing, carpets, etc.

With regard to the drainage of a hospital for infectious diseases, it differs in no essential points from that of any other building. Drains, to be permanently efficient and satisfactory, require the most careful consideration in every particular, and constant supervision. It should, moreover, be clearly understood from the first by the contractor, and indeed by all concerned, that the drains, on completion, are to be tested in lengths by plugging the lower end of each length and then filling the length with water. If the drain then fails to hold the water for a specified time, it will be evident that means of leakage exist, for which the contractor should be held responsible. The drains should be laid in direct lines, with uniform gradients between the points where a change of direction or gradient occurs, and at each of these points means of access to the drain should be provided, either by a lamp-hole or a man-hole, so that the entire system of drains can be inspected with ease at any moment.

Treatment of Itch by Naphthol.—Introduced by Prof. Kaposi, of Vienna, naphthol has been substituted by him for tar in some affections of the skin, as eczema, psoriasis, prurigo, and especially itch. It has scarcely any odour, and even after long exposure to air only becomes of a pinkish colour, which does not permanently stain the linen. Prof. Hardy, it is stated in a *thèse* by Dr. Guérin, has substituted a very simple formula for the complicated one of Kaposi, consisting in vaseline 100 parts to 10 parts of naphthol. The pulverised naphthol is dissolved in half its weight of ether, and is then mixed with a portion of the vaseline, and heated to 30° to 40° Cent., until the ether is entirely evaporated. The rest of the vaseline is then added, and the mass carefully triturated. The homogeneous pomade which is produced is kept secluded from the air. It may be applied at all periods of itch, whether complicated or not; and it is applicable also to the eruptions which supervene in the course of itch, and for which sulphur ointment is unsuited. The furrows are by this ointment rapidly freed of their inhabitants, and other eruptions disappear. The treatment lasts from ten to fifteen days, which is very much longer than Prof. Hardy's rapid treatment by sulphur; but when we consider how long the itching persists often after the cure by sulphur—sometimes obstinately continuing for months—the treatment by naphthol is practically the shorter of the two. M. Guérin has never observed any ill-effects upon the kidneys result from naphthol.—*Jour. de Thérap.*, January 10.

A Cæsarian Operation performed by a Priest.—M. Blomme, the *curé* of St. Amand, Belgium, was called to one of his lady parishioners who seemed on the point of death and was far advanced in pregnancy. Seeing that the woman was lost, and having in vain sought for a medical practitioner or midwife, he resolved to remove the fœtus himself, and succeeded in extracting twins—the subject of the operation having in the meantime died. He was proceeded against for illegal practice of medicine, but the case was dismissed, and an appeal being made to the Tribunal at Ghent, it confirmed the acquittal of the accused, on the ground that what he had done did not come under the operation of any penal law. The Procureur-Général of the Ghent Appeal Court gave notice that he should take the case into the Cour de Cassation.—*Lyon Méd.*, January 28.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

SEAMEN'S HOSPITAL, GREENWICH.

ANEURISM OF INNOMINATE ARTERY, RUPTURING INTO APEX OF LUNG.

(From notes by Dr. Penny, House-Physician.)

Thomas H., aged forty-one, admitted into Seamen's Hospital, December 21, 1882, under Dr. Hale White, with pain in right side of chest, right shoulder and arm, of six months' duration.

Condition on Admission.—Apex beat in fifth space, extending to just outside the nipple line. A slight systolic murmur can be heard at the apex, diminishing in intensity upwards to the base, where it becomes again louder and harsher, and is continued thence up to the inner extremity of the right clavicle, and is heard loudly over a pulsating tumour which rises into the neck beneath the inner attachment of the right sterno-mastoid. The right carotid pulsates vigorously, but the pulsation of the right subclavian cannot be felt, though there is a very feeble pulse in the right radial. The trachea is slightly pushed over towards the left side at the root of the neck. The right pupil is contracted, though reacting well. The voice is hoarse, and occasionally there is a very hoarse, rough cough. By means of the laryngoscope the false cords are seen to be somewhat swollen, hiding the left cord except during the act of phonation, while the edge of the right one is always visible, and does not move at all in speaking.

December 27.—Distinct dropping of left side of face, while the left upper eyelid is raised higher than on the right side.

30th.—Pulsating tumour rises higher into the neck than on admission. Expectoration dirty-looking and slimy.

Early on the morning of January 3 profuse hæmoptysis came on, and persisted for some twenty minutes, when the patient sank.

Post-mortem.—Heart: eleven ounces; hypertrophy without dilatation of the left ventricle; aortic valve slightly atheromatous; ascending and transverse arch of aorta generally dilated and atheromatous, the dilatation extending into the innominate artery, and there forming an aneurism as large as a tennis ball, extending chiefly in the direction of the subclavian, in which position also clotting had occurred, partially obstructing the orifice of that vessel. To the same part the apex of the right lung was adherent over the space of about half-a-crown. On tearing away the adhesion, the lung-tissue appeared eroded, the destroyed part being bounded by a zone of dense, hard, greyish tissue to the depth of half an inch. Although no distinct tube could be discovered opening on the eroded surface, it was evident that the aneurism must have burst in that way. The larger tubes of both lungs contained clots; while the lower lobes, especially of the right side, showed numerous ecchymoses from inspired blood. Both lungs pale, bulky, and full of air. Considerable amount of clot in stomach. Recurrent laryngeal nerve involved in the walls of the aneurism. No examination of the brain could be made.

ANEURISM OF DESCENDING THORACIC AORTA, SIMULATING PLEURITIC EFFUSION.

(From notes by Dr. Penny, House-Physician.)

E. M., aged thirty-nine, sailor, admitted into the Seamen's Hospital, Greenwich, under Dr. Hale White, on November 18, 1882. He had had good health until the last three or four years, but during that period he had been subject to shortness of breath and pain in the left side, these symptoms having much increased during the past eighteen months. Occasionally he had a slight attack of hæmoptysis. No history of rheumatic fever.

Condition on Admission.—The lower part of the front of the left chest projects rather more than the corresponding part of the right side. The apex-beat is in the fifth inter space about one inch inside the nipple-line. The cardiac action is "heaving." On auscultation there is heard a loud systolic murmur about the end of the sternum, diminishing

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in intensity upwards to the base of the heart, but being throughout much louder on the right than on the left side of the sternum. Again, it can be traced outwards with diminishing loudness to the point of apex-beat, where it assumes a curious, high-pitched, squeaking character. Over the third interspace, close to the left margin of the sternum, the systolic sound of the heart is thick and harsh, while the second sound is accentuated and clear. Over the base of the heart, to the left of this region, a slight to-and-fro friction-like sound is audible. On percussion, there is dulness to half-way between the sternum and the right nipple. Examination of chest shows that the left side moves in respiration much less than the right. Behind, below the left scapula, there is complete dulness and absence of tactile vibration, marked deficiency of breath-sounds, and also of vocal resonance, while, in less degree, these signs are present over the blade of the scapula and in the left axilla. In front the left chest is resonant, indeed hyper-resonant, and air enters well. Exploratory puncture at the base behind produced merely a drop or two of blood.

November 26.—A systolic murmur can be heard over the head of the second right rib, continuous below with murmur previously noted. Other signs as before.

December 20.—Murmurs noticed on admission persist, while a short but loud and very rough systolic murmur can now be heard over the sternal end of the second left interspace, extending thence into the first right interspace. The dulness originally noticed to the right side of the lower part of the sternum is now found tapering upwards along the right border of that bone as far as the second rib. The finger pressed into the inner extremity of the second right interspace can detect a double impulse, the first synchronous with the cardiac systole, the second due apparently to the closure of the aortic valves. The second cardiac sound is short and sharp. The left radial pulse somewhat feebler than the right. On this day a slight attack of hæmoptysis took place, with severe pain in the cardiac region and left hypochondrium.

Death ensued on December 23, the patient having insisted on sitting up daily for some hours up to within a few days of death, and having complained little, except that at night some pain in the cardiac and epigastric regions would often come on, easily subdued by small doses of morphia.

Post-mortem.—On removing the sternum the heart appeared pushed forward and flattened by a large tumour behind. Both pleural cavities obliterated in their lower portions, while the upper on each side contained a considerable amount of effusion. On removing the organs, the tumour was found adherent to the posterior wall of the left chest, and became lacerated in the process of removal. It then became evident that the aorta was enormously dilated from about three-quarters of an inch below the orifice of the left subclavian to just above the cœliac axis, forming an aneurism which occupied nearly the whole of the lower part of the left chest. The lung was stretched over the tumour laterally and in front, intimately adherent to it, and so compressed as to be scarcely an inch thick and totally airless. Behind, the bodies of six lower dorsal vertebræ were much eroded, the intervertebral discs being less destroyed. The constitution of the aneurism was as follows:—The outer wall, thick and intimately blended with neighbouring parts, was very rough, and almost calcareous on its inner surface; next within came a large mass of fibrinous matter, beautifully laminated, firm and elastic outwardly near the outer wall, and gradually becoming less dense when traced inwardly, until the inner portion of the tumour was reached, which simply contained post-mortem dark soft clot. But depending into the central cavity was a curious structure, resembling a half-closed umbrella without its central stick, the edges of the orifice in the summit being continuous with the lining membrane of the arch of the aorta, while the free edge of the umbrella-shaped structure hung freely in the cavity of the aneurism, ending abruptly. The second cavity thus formed within the upper part of the aneurism easily contained the closed fist; its wall was soft and easily lacerated, transversely ribbed, and showed here and there round holes, which appeared to be the remains of the orifices of intercostal arteries. No similar structure could be discovered in the lower part of the aneurism. Apparently the aneurism had commenced as a "dissecting" one, the inner arterial coats being now represented by the umbrella-like structure. The clot within the aneurism weighed over four pounds, and was easily enucleated as a hard solid mass with a central cavity. The heart, compressed and flattened out, was almost square when viewed anteriorly, owing to hypertrophy and dilatation of the right side, apparently due to the complete functional destruction of the left lung. The pulmonary arteries (at least after removal from the body) seemed to have escaped extreme pressure. Large veins opening into right side of heart distended with blood. Aortic valves slightly atheromatous. Ascending aorta very atheromatous and somewhat dilated. Œsophagus pushed over slightly to the right side, but not involved in the aneurism. Liver and testes showed evidences of syphilis.

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The Medical Times and Gazette *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, FEBRUARY 3, 1883.

THE PRESIDENTIAL ADDRESS AT THE CLINICAL SOCIETY.

The Address delivered by Dr. Andrew Clark on taking the Presidential Chair of the Clinical Society, on Friday last week, is one of the most remarkable speeches hitherto given there or before any other of our medical societies. It deserves to be, and no doubt will be, carefully read and studied by the profession at large; for though we are not enabled to give the whole of it this week, what we do give contains many lessons and warnings that cannot fail to be highly useful, not only to the members of the Clinical Society, but to all medical men. Dr. Clark made use of the opportunity the occasion afforded him, to take a brief survey of the completed labours of the Society; and he is as courageous and outspoken in his condemnation of poor hasty, and imperfect work, as he is warm and hearty in his praise of good work well done. Dr. Clark has no hesitation in saying that the Clinical Society has improved the scientific character of good workers, and has gradually framed for the guidance of all alike a standard of work which is sensibly elevating the profession and benefiting our art. He thinks the younger medical men are working with greater care, patience, and accuracy in observation, that they observe "a more rigorous fidelity in the record of therapeutical experiments"; that they are more cautious in speculation, more deliberate in judgment, and more frank in confessing oversights and errors; that they show less haste

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to rush into print; and are much more tolerant towards such as hold different views from themselves. In short, he sees in them "a more robust and manlier spirit of scientific life, and less reluctance in making admission that there is no unconditional truth in the results of our inquiries—no finality in our finished work—no creed in medicine." Dr. Clark thinks that, in addition to this excellent work in training workers in the way they should go, the Society has repressed bad workers. This has been done, no doubt, to a considerable extent so far as the Society and its work are concerned, but we fear the lesson has not had a very far-spreading or deep-reaching effect outside the Society. Even Dr. Clark says, "for one competent and conscientious worker there are ten who are incompetent and unconscientious, and who, in divers ways, hinder our progress and spoil our present possessions"; and he depicts, in vivid colours, what manner of men these are—"Intolerant of the patient and painful toil of the true worker, acute in power of superficial observation, gifted with a certain showy versatility, quick at catching hold of new ideas, ingenious in guessing, crude in experiments, loose in therapeutic trials, hasty in speculation, strong in dogmatic assertions, accomplished in the transfiguration and use of other men's work, finding what they want wherever they seek it, unhindered by difficulties, facile in speech, ready in writing, thirsting for notice—such men (now, alas! not uncommon in medicine) beget papers so quickly that they can have no necessary relation to time, observation, or thought, and flood our literature with their unworthy, if not unveracious, lucubrations." The favourite hunting-ground of such men, he very truly remarks, is therapeutics. They are always catching new remedies, putting old ones to new uses, and rushing into print to proclaim their newest and latest successes. Who does not note this state of things with pain and wonder? Dr. Clark does not illustrate what he says by examples, but illustrations might be found in great abundance. We have not yet ceased to hear of new uses being found for the salicylates, and iodoform is gradually being experimented with in any and every disease, local or general. The two classes of workers whom Dr. Clark differentiates so sharply are unquestionably to be found, and the classes merge into each other, as do all classes in nature. On the one hand are the men who in all points work and live for medicine as a scientific profession; on the other, those who live by it as a trade: and no absolute, sharp, hard and fast line can be drawn between the two kinds.

Another great work of the Society has been, and is, Dr. Clark says, "the gradual unfolding of the exact relations which morbid anatomy and, incidentally, experimental pathology should hold to clinical medicine." He very forcibly and eloquently insists that these two are only the servants—chief servants truly, but only the servants—of our art; whereas men are very apt to forget this, and to endeavour to force medicine into a slavish subjection to theories framed and, in a way, proven by appeals to the revelations of morbid anatomy and the results of pathological experiment. The truth being that all experiments, all deductions from altered structures, must be brought to the test by Clinical Medicine: "she must be their examiner, critic, interpreter, user, and judge."

We have been led on to speak at greater length than we intended of Dr. Clark's address, for as it cannot all be placed before the profession this week, our purpose was to simply draw attention to it. But we must note that Dr. Clark speaks of defects, as well as of excellences, in the work of the Society. One of these defects is an incompleteness outside the immediate objects of interest in the history of many of the cases recorded in the *Transactions*. He insists, not that [illegible] cases are wholly useless, but that, to give its best and fullest aid in advancing medicine, every case should be as full and complete in every point, and from all points of view, "as the collateral knowledge of the time will enable us to make it." Another defect, and one that Dr. Clark considers "the most important and the most inexplicable," is "the seemingly studied disregard, in the treatment of a patient's malady, of those minute conditions which practically make and unmake health, so that—special management being almost nothing, and special medication almost everything—it would seem as if physiological principles were of no account in therapeutics." This is, of course, incorrect; put in this definite way no thinker would admit it. Dr. Clark says, putting aside, for the while, inherited affections and parasitic maladies, "I shall assume that chronic disease—a state of parts, and not a thing interposed between them—is the eventual outcome of continued violation, conscious or unconscious, of physiological laws as they exist for the race, or as they are conditioned by the peculiarities of the individual organism. I shall further assume that these violations are not exceptional and gross, but daily and minute; and that their effects, infinitesimal from day to day, become visible only after longer periods of time, and so escape recognition except by those who are trained to discern the causal connexions of subtle things. And I shall furthermore assume that the organism, in virtue of the inherent forces maintaining its solidarity, tends to repair existing and to repulse threatened disorders, and that, when placed in favourable, and liberated from unfavourable, physiological conditions, this tendency issues and ends in successful action." On this text Dr. Clark enlarges, insisting on the necessity of basing the management of cases of illness and of disease on a minute consideration of, and attention to, the physiological conditions affecting every side of the patient's life; for it is often upon a right attention to, or a neglect of, "the physiological conditions affecting the quantity, quality, and character of the solid and liquid food, the times and circumstances of eating and drinking, the amount of exercise, work, and sleep, and the adequate discharge of the excrementitious functions, that our work will succeed or fail, that our case will turn for evil or for good, and that the patient will either recover his health or drift into permanent valetudinarianism."

THE HEALTH OF THE ROYAL NAVY DURING THE YEAR 1881.

THE Statistical Report on the Health of the Royal Navy during the year 1881, ordered by the House of Commons to be printed on August 15 last, has just been published. The compilation of the Report has been continued as closely as possible on the lines laid down by the Parliamentary Committee on Statistics of 1879, when, it will be remembered, it was decided to make the annual volume a simple record of ratios and averages, and to eliminate special and noteworthy outbreaks of disease, etc., which formerly rendered it more or less interesting to the profession generally. The present Report states that during the year under notice the sanitary condition of the Royal Navy was satisfactory, and offers a fair comparison with former years. There was, noticeably, a considerable decrease in the sick-rate, amounting, when compared with the preceding year, to 30·36 per 1000. The invaliding-rate remained practically the same as that of 1880. The general death-rate showed a slight decrease, but was still abnormally large, owing to the loss of life caused by the blowing up of the *Doterel*. This is, we believe, the third consecutive annual Report in which the mortality recorded has been exceptional, owing to great disasters at sea; it is, however, unsatisfactory to find

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that the death-rate by disease alone shows a slight increase over that of 1880. An examination of the returns rendered from the Home Stations affords little that is worthy of special notice. The ratios of sickness, invaliding, and death for this portion of the force are all lower than the average of the last ten years. An unpleasant feature that has to be remarked upon, and one to which attention has been drawn by several medical officers of the Department, was the increased prevalence of scabies in the Home Ports. Although, the Report remarks, this disease is one essentially associated with uncleanliness, its occurrence on board ship neither reflects on the sanitation of the vessel nor the habits of personal cleanliness of the crew, as, whenever it makes its appearance on board, it is easily detected and at once extirpated. Its prevalence, the Report goes on to say, depends on the lower standard of cleanliness in that portion of the community with whom many of the men come in contact when ashore on leave, and the evil can only be remedied by the more general spread of attention to hygienic principles. A cursory examination of the diseases from which sickness occurred, shows that at the beginning of the year there was an outbreak of enteric fever on board the *Boscawen*, lying at Portland, which could only be traced to the fact that the ship is an old one, and that an offensive smell, due to a leak in the bilges, had been for some time previously perceptible. Of erysipelas sixty-nine cases were returned, and of these two died and two were invalided. Both the fatal cases were of traumatic origin. The boys' training-ships furnished the largest number of cases, and, as usual, in the greater number the lower extremity was the part attacked, following an abrasion or a boil. A peculiar case of fatal injury was recorded as occurring in the *Northumberland*. Whilst the lower yards were being sent down, the second captain of the forecastle, who was standing on the fore-yard whilst it was being lowered, was observed to fall slightly forward. The man who was next him thought he had fainted, and supported him till he could be taken to the sick-bay, where he expired immediately. On examination, a small puncture was detected close to the left nipple, and a post-mortem revealed a penetrating wound of the right ventricle of the heart. On inquiry, it appeared that the lashing by which a marlingspike was secured to the yard snapped in the lowering of the spar, and the marlingspike springing up, inflicted the injury. Turning to the different reports contributed from Foreign Stations, we find that an outbreak of dengue fever amongst the force at Malta is the most noteworthy incident during 1881 in the records of the Mediterranean Fleet. The disease would appear to have been imported into the island from the African coast; and though, as it always is, troublesome and highly infectious, involving considerable loss of service, was in no case attended with serious results. On the West Indian Station, though yellow fever was widely epidemic, only one case, but that a fatal one, occurred in the squadron. This, the Report points out, was undoubtedly due to the wise precaution, observed now so much more than formerly, of avoiding, as much as possible, infected places. For once it has to be recorded that the health returns from the West Coast of Africa for the year under notice were most satisfactory: the sick-rate showed no less a reduction than 321·43 per 1000 on the average rate of the last ten years. The health returns of the small naval brigade employed in the Transvaal War are included in the Report from this station; although the loss of life in action was considerable, the healthy condition maintained in the force, under exceptional circumstances, was excellent. On the East Indian Station there was considerable loss of service, invaliding, and mortality, caused by the prevalence of remittent fever; the *London* and *Ruby*, employed on the East Coast of Africa, suffered most in this respect. In the Appendix to the present Blue-book will be found the usual tables relating to the working of the Contagious Diseases Acts during the year 1881. It may be pointed out, the Report adds, that, while for the first two years in which these tables were compiled (1876 and 1877) the ratios given in the summary tended to show a decrease in syphilis, there has been a progressive yearly increase in these ratios for the last four years, so that the average of the years from 1871 onwards, since the institution of the present Acts, which is now being dealt with in these returns, is gradually rising. It is worthy of note, however, that while this increase has mainly taken place in ships at unprotected ports, there has also been a slight increase in those stationed at ports under the Acts. The ratios of increase during the last four years, on the ten years' average, are: Ports under the Acts, from 39·29 in 1878, to 41·84 per 1000 in 1881; ports not under the Acts, from 92 per 1000 in 1878, to 102 in 1881. Under the present limited application of the Acts, significantly remarks the Report, any large decrease in the amount of disease can hardly be looked for through their operation; and the facilities for their evasion are such that any hasty deductions from fluctuations in these figures as to the working of the Acts would not be advisable; but, allowing for all elements of uncertainty, there remains evidence to indicate a large restraining power, and a considerable amount of disease prevented.

THE COLLECTIVE INVESTIGATION OF DISEASE.

It is impossible to consider the movement in furtherance of the Collective Investigation of Disease without a feeling of pride. It is, we think, an illustration of the nobility of our profession that so many of its members should spend time and thought in a work undertaken for the public good alone, and which can bring to each one personally neither fame nor profit. Those pessimists who look on the lowest motives as the most natural and most prevalent may believe, if they choose, that general practitioners only keep themselves abreast with therapeutic science because they do not like to have patients, whom they have failed to benefit, cured by their better-informed neighbours, and that consultants only seek knowledge for the sake of the fame and the practice which reward successful researches into disease. But the labour of filling up the forms issued by the Collective Investigation Committee can bring with it no recompense except the satisfaction of the higher impulses, a love of knowledge for its own sake, and a desire to do something towards extending it. It is a sacrifice of time which can bring with it no immediat gain either in purse or reputation.

The contagious enthusiasm of the originators of the movement kindles a hope that great results may spring from it. But unless such hope is combined with a clear perception of the great difficulties, the many fallacies, which attend the investigation of disease in the manner now being carried out, it will be but a will-o'-the-wisp, not a beacon guiding the profession into the right path. Sir William Gull, in the extremely able address which he delivered last week at the Royal School of Mines, preferred, as perhaps was best for the occasion, to sketch in brilliant colours what might be accomplished, rather than to commit himself to a judgment of what was likely to be done.

There is one consideration which alone should incline us to view the movement with favour, and think it a duty to help it on. There are so many problems which can never be solved in hospitals, which require for their settlement observations which none but those engaged in general practice have the opportunity of making, that an organisation which induces general practitioners to record what they see, must at least in some ways do good work. The family

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history of disease (the importance of which was so eloquently set forth by Sir William Gull) can by them only be correctly ascertained. In a hospital, all that the best clinical clerk can do in this direction is to inquire of the patient, or some one closely connected with him; and, for reasons too numerous and obvious to need mention, the statements he elicits are only a vague and often distorted representation of the facts. It is the general practitioner, and especially the country general practitioner, who can supply us with exact knowledge: he who lives in a place so small that it is possible for him to get some personal knowledge of everyone in it. In many villages the bulk of the population is formed by a few families, who intermarry largely among one another, and continue to live where they were born. The doctor knows everyone; is the trusted counsellor, the confidant of all secrets, and watches over his patient often from the cradle to the grave. A general practitioner in such a place, who would keep an accurate record of his practice, could give information as to the family relationships of disease such as the most zealous hospital worker can never get, and which is equally out of the reach of the private consultant, who knows little, if anything, of his patients except during the moments they are in his consulting-room.

Besides the family history of disease, the general practitioner has unequalled opportunities of seeing its beginning. London consultants see plenty of its ending, both in hospital and private practice. But every disease has a beginning—a time when its manifestations are so slight that the patient is not sure whether he is ill or not, and if he consults anyone at this period of his illness, he is almost certain to go to a general practitioner. Later on, when the disease has become "gross as a mountain, open, palpable," he perhaps goes to a hospital. The first student who institutes a physical examination diagnoses the case, and thinks with some self-satisfaction that he is not as the general practitioner, who overlooked it. But, as it is scarcely necessary to point out, the task in the beginning was far more difficult. There are innumerable groups of slight symptoms, as to which no one can say whether they will quickly subside, or whether they will develope into those of some grave disorder. On the significance of these small beginnings it is only general practitioners that can enlighten us.

Although, as we have said, hospital physicians and surgeons see plenty of the later stages of disease, yet there is a large class of cases in which their knowledge of the final result is very imperfect. For many chronic diseases there are methods of treatment under which they improve wonderfully for a time, but only for a time. There are operations, of which relief to symptoms is the immediate consequence, while the ulterior benefit is much less certain. In deciding which of several methods of treatment is the best, we ought to have regard, not only to immediate, but it may be temporary, ameliorations, but to the final result; and this the metropolitan specialist often does not know. Upon these questions, general practitioners can give information of unique value. They can see and appraise what the work of the specialist has actually done for the patient.

In the very important lines of research which we have just indicated, the general practitioner has a monopoly of the field. Be the use which he makes of his opportunities little or much, it is to him that we must look for light. We hope that in the memoranda and schedules of the Collective Investigation Committee these most important and most fitting lines of inquiry will not be left unworked.

But there are other ways in which medical science progresses. In the minute observation of pronounced disease, with a view to differentiating its different forms, predicting its course with greater accuracy, ascertaining the nature of morbid processes, and defining indications for treatment, those who are attached to hospitals where every appliance that has been devised, and the help of skilled and zealous assistance, can be had, have enormous advantages over the general practitioner. In this kind of research, although it may be well to get general practitioners to make observations, yet we cannot but think the chief benefit will be to the observers themselves. Hospital physicians and surgeons are picked men, observing under the greatest attainable advantages. General practitioners are not selected for their ability, and observe under great disadvantages. Imperfect observations do not gain in weight by being multiplied. The statements of one good observer would, in our judgment, outweigh those of any number of bad ones. There is another point on which we would offer criticism. We think it quite a mistake to appeal to memory. Let a man be asked what cases of a particular kind he has seen in his life, he will remember the exceptional ones, those which had some unusual feature which attracted his special notice; and his recollections will be coloured, as to the points not deeply fixed in his memory, by suggestions made to him. To put questions of this kind, is to invite, not facts, but fragmentary recollections. The only way to obtain observations which are likely to be correct, is to get them recorded at the time they are made. Forms might, for instance, be supplied at the beginning of the year, with the request that *every* case of the kind specified, occurring during the year, should be included in them. Were we to attempt to specify every error that might creep in from the mingling together of the observations of men of various degrees of knowledge, accuracy, and industry, we should never finish. We have no doubt that, if by thoughtfulness and zeal they can be foreseen and eliminated, this will be done. It would be unreasonable, as well as uncharitable, to suppose that nothing can come of this movement. Good must come from an effort so noble in its aim, so thorough and methodical in its work. But the crop of fact may bear a large or a small proportion to the weeds of error; and we cannot but fear that the result they obtain may disappoint the more sanguine spirits who have laboured for it.

THE WEEK.

TOPICS OF THE DAY.

We had always imagined that that eccentric portion of the public who most appropriately designate themselves "Peculiar People" consisted of illiterate members of the lower class; it was, therefore, a surprise to learn recently that, at the Lambeth Police-court, Robert Cousins, a clerk in the War Office, was charged with neglecting to provide medical assistance for his child, in consequence of which it had died. Evidence was given as to the child, which was three years old, having been ill for some time, and it was also shown that no medical man had attended it. It was stated, however, that the prisoner and his wife, although they belonged to the "Peculiar People," had supplied every nourishment necessary for the child. The medical evidence was to the effect that life might have been prolonged, and perhaps saved, if medical aid had been called in. The magistrate said he had looked at a case in which it had been decided that a person was not liable under similar circumstances, but still it did not follow that a person in the position of the defendant was without blame. The evidence in the present case was weak, but, although the defendant had treated the deceased kindly, he wished to point out the dangerous position in which he and others holding these peculiar opinions placed themselves. If it had been shown that by his neglect the father had contributed to the death of the child, he

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would be liable to severe punishment. As there was not sufficient evidence to commit the prisoner for trial, he ordered him to be discharged, but he is to be indicted under the coroner's warrant.

A recent article in the *Citizen* shows that the gross yearly revenue of the three Royal Hospitals of St. Bartholomew, St. Thomas, and Bethlem, originally placed under the management of the Corporation for the benefit of the inhabitants, is computed at not less than £178,000, and as the average number of in-patients does not exceed 1500, the yearly cost of each bed amounts to £120. At Westminster Hospital, it is observed, the average cost of each patient is not more than £65, and at Fisherton—a preparatory institution for Broadmoor, receiving the most dangerous class of criminal lunatics—it is not one-half of that at Westminster. The cost of the medical staff, including nurses and other officials, for 200 patients at Bethlem exceeds £5000 per annum; whilst the expense of the entire staff of the Idiot Asylum at Caterham only amounts to £6361, with nine times the number of patients. The *Citizen* wishes its readers to believe, we suppose, that an institution for the care, treatment, and cure of *lunatics* ought to be managed as, or nearly as, cheaply as an asylum for *idiots*. It would have shown, moreover, something more of a spirit of justice towards the Royal Hospitals had their *net* income been stated.

A meeting of the Council of the Hospital Sunday Fund was recently held at the Mansion House. The Lord Mayor presided, and there were present, among others, Lord Ashley, Bishop Claughton, Hon. Reginald Capel, Rev. Canon Fleming, Colonel Haygarth, Rev. Canon Spence, Rev. Septimus Hansard, and Sir Rutherford Alcock. The Committee of Distribution was re-appointed as follows:—The Lord Mayor, Alderman Sir S. H. Waterlow, M.P., Lord Ashley, Sir W. McArthur, M.P., Mr. J. D. Allcroft, Mr. Thomson Hankey, Mr. Samuel Morley, M.P., Dr. W. Sedgwick Saunders, Mr. Jervoise Smith, and Mr. Alfred Willett. As honorary secretaries Sir E. Hay Currie and Mr. R. B. Martin, M.P., were re-elected, and as secretary Mr. H. N. Custance. A fourth donation of £105 from the trustees of the late Mr. J. Drew was announced at the meeting.

A telegram from Russia states that the ravages of diphtheria in that country, which have so long defied the efforts of doctors and sanitary committees, have now been surpassed by the fatal effects of scarlet fever. According to a statistical paper recently published, the mortality in St. Petersburg from diphtheria and scarlet fever has continually increased from the year 1878, until during the past year there were no less than 1323 deaths from the latter, and 1146 from the former, giving the alarming yearly total of 2469 deaths from these two diseases alone, in a population of about 800,000. From other official statistics it appears that during five years there have been 156,027 fatal cases out of 463,018 persons attacked by these two diseases in the empire. The *Golos* remarks on the subject that no war has ever been so disastrous, and that, considering the large percentage of young people among the victims (95 per cent.), it is really the future of the country that is in question. At the same time it is stated that the medical statistics do not extend, as a rule, beyond the large towns. In the whole of Russia there are not more than about 14,000 doctors, properly so-called. The Empress has given particular attention to the inadequacy of medical aid in contending against the enormous spread of disease; and recently, when the Government, instigated by the Minister of War, determined upon abolishing the medical schools for women, as a precaution against female Nihilists, Her Majesty distinctly expressed herself against the measure. As soon as it was known that the Empress recognised the necessity for female medical education, large sums of money were received from all quarters to support the threatened institutions.

A deputation from the Council of the Sanitary Institute of Great Britain, in acceptance of the invitation from the Lord Provost of Glasgow, on behalf of the leading interests of Edinburgh, Glasgow, Greenock, and the adjacent towns, attended at Glasgow last week to make the arrangements for holding the autumn meeting of the Institute in that city. The deputation consisted of Professor De Chaumont, Professor Corfield, Mr. W. Eassie, C.E., and several others. They were received by the Lord Provost, and gentlemen connected with Glasgow, and by a special deputation from Edinburgh. After the deputation from the Sanitary Institute had explained the purposes the Institute had in view, and the nature of the exhibition which is held at the annual meeting, a resolution was passed, expressing the gratification of the northern towns at the prospect of the visit from the Institute in September next, and an influential committee was formed to carry out the arrangements for the meeting of the Congress. The deputation afterwards visited the several buildings proposed to be set apart for the meeting.

The Board of Management of the National Hospital for the Paralysed and Epileptic have issued an earnest appeal for funds to complete the new building now in course of erection. With the amount already in hand, it is estimated that £20,000 would be sufficient; and, as patients are sent to the Hospital from all parts of the country, it is urged that there should be little difficulty in raising the sum mentioned. No building for the special treatment of nervous diseases has previously been erected in this country, yet the victims of these maladies cannot be admitted to general hospitals or infirmaries. The present institution claims to have received the unanimous support of the medical profession, and, although carried on in an unsuitable building, has already done a great deal of useful work. It is contemplated to provide at least 150 beds or cots in the proposed new building.

At a recent meeting of the St. Pancras Guardians, a letter was read from the Local Government Board, containing the report of Dr. Bridges, who had visited the workhouse to inquire into the effects of the consumption of alcoholic drinks in that institution. The Board stated that they do not advise the Guardians to interfere with the medical officer's decision. The report of Dr. Bridges was to the effect that the medical officer had in the main exercised a wise discretion in the matter.

RETENTION OF A DETRUNCATED HEAD AND THE PLACENTA IN UTERO FOR FORTY DAYS.

This astonishing case is reported in a recent number of the *Archiv für Gynäkologie* by Dr. Alois Valenta. The patient was thirty-five years old, and this was her fourth child. Labour came on at term, the child presenting with the shoulder. A medical man was called, who proceeded first to detach the lowermost arm, and then to bring down the feet. He delivered the body, but could not get the head to follow, so he cut through the neck and left the head behind. Two other doctors were then called in, but all they did was to administer ergot and advise that the patient should be taken to a hospital. This her husband would not hear of, and so nothing was done. Eight days after the medical men had seen her, a midwife was called in; but she did nothing except syringe the vagina with warm water every two or three days. The patient all the time had no bad symptoms—no rigor, no particular pain, no bladder or rectum trouble, ate well, and slept well; the only thing was that she felt weak, and that

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the lochia stank insufferably. Thirty-eight days after the labour the patient rebelled against marital authority, and had herself taken to the hospital. When seen there, her pulse was 72, temperature 99·5°. There was no sign of uterine action, and the uterus seemed to have undergone complete involution, being spread like a thin cap over the retained head. Three days after admission, the vagina having been first repeatedly syringed with a 3 per cent. solution of carbolic acid, the cervix was dilated with sponge and tupelo tents, and repeated doses of ergot were given. This brought away discharge and small fragments of bone, but the patient felt no pain, although intermittent hardening of the uterus was perceptible. After dilatation, the bones of the fœtal head were seized, as they could be got at, with strong polypus forceps, and carefully removed. The chief difficulty was found with the parietal bones, which were in such close coaptation with the uterine wall, that it was difficult to seize them, and when seized, it was necessary to double them up (a thing not easily done) in order to get them through the cervical canal. About forty bits of bone were taken away. Then the placenta, which looked quite fresh, was detached with the finger, and removed piecemeal—a proceeding which occasioned some hæmorrhage. The whole operation occupied about an hour and a half. When it was finished, the uterus was washed out with hot water, and ergotine injected subcutaneously. The patient recovered without a bad symptom. Dr. Valenta has only been able to find in literature one case resembling his. This is recorded by Freund. In his case the detached head was retained for ten years, the uterus, as in Valenta's case, showing no inclination to expel it.

THE IRISH MEDICAL ASSOCIATION AND DR. LITTLEJOHN.

We are requested by the Council of the Irish Medical Association to publish the following resolution passed by them:—"That this Council repudiates the unfounded imputation upon Dublin physicians contained in a statement publicly made by Dr. Littlejohn, Medical Officer of Health for the city of Edinburgh, in a recent letter to the *Glasgow Herald*, to the effect that 'the profession (in Dublin) protests loudly against a loss of fees where any of their patients, however badly housed, are removed to hospital so as no longer to be a source of danger to the community.' That this Council expresses its surprise and regret that Dr. Littlejohn should have publicly attributed such motive to the members of his own profession in Dublin, without attempting in any way to substantiate the accusation."

THE STRUCTURE OF THE SMALL INTESTINE.

A histological discovery, which at first sight appears sufficiently remarkable, has just been made in the small intestine by Professor von Thanhoffer. It has been found that structures almost exactly similar to the taste-organs of the tongue are disposed amongst the villi of the alimentary canal; but what function can possibly be possessed by "taste-organs" in such a situation is, of course, perfectly obscure (*Centralblatt f. d. Med. Wiss.*, January 20). The discovery of these bodies is entirely a matter of careful preparation and examination, osmic acid and chloride of gold being the most favourable reagents. The appearance of the organs is that of a bowl or a bud, lying, as a rule, at the base of the villi, where they are mutually connected; but occasionally they are found rather higher, or even close to the summit of the villus. Just like the taste-corpuscles, these structures vary considerably in actual size and in the relation of their height to their circumference. Their general appearance is readily described: they consist of two layers of epithelial cells—the one external, serving as a covering; the other layer internal, constituting the special organ. The latter are prolonged at their free extremity in the direction of a pore which lies at the apex of the bud, and some of them possess a short hair-like process. The actual connexion of these peculiar organs with nerves has not yet been traced.

METROPOLITAN GUARDIANS AND THE ASYLUMS BOARD.

On Monday last a conference of metropolitan guardians, called by the Guardians of the City of London Union to consider the Report of the Royal Commission on Fever and Small-pox Hospitals, and matters relative to the Metropolitan Asylums Board, was held at the City of London Union offices in Bartholomew-close. The meeting was by no means numerously attended, and at least fifteen of the metropolitan unions were not represented. A communication was read from the Metropolitan Asylums Board in reference to their action during the last epidemic of small-pox in the metropolis, and explaining, in answer to inquiries as to the position in life of the patients received, that upwards of 90 per cent. treated in the asylums had not before been in receipt of Poor-law relief. The Managers, moreover, pointed out that they had no power to inquire into the status of persons suffering from fever or small-pox brought to the asylums; that duty devolved upon the guardians as the sole relief authorities. The chairman commented upon the action of the Metropolitan Asylums Board in pressing the Government to act upon the lines of the Royal Commissioners' report, and expressed his dismay at finding that the recommendations of the Commissioners, if carried out, would involve much additional expense; another of the City of London guardians justified the condemnation of the work of the Metropolitan Asylums Board, when it was shown that nine-tenths of the patients treated were of the non-pauper class. This last official moved a strongly worded resolution condemnatory of the Board, and asking for an inquiry before further steps were taken. This was seconded by another of the five City guardians present, out of the total of eleven members in the conference. One of the non-City delegates pointed out that the rates of mortality had decreased in the late epidemic, as compared with former epidemics visiting London. He opposed the passing of any resolution until an opportunity had been given of studying the report. Dr. Felce and Mr. Foster, of Paddington, also upheld this view. Complaints were made that guardians generally of the metropolitan parishes did not support the conference, which was directed against the expenditure of the Metropolitan Asylums Board. Eventually the conference adjourned for a month, without passing the resolution which had been framed by the City of London guardians.

THE PARIS WEEKLY RETURN.

The number of deaths for the third week of 1883, terminating January 18, was 1135 (600 males and 535 females), and among these there were from typhoid fever 68, small-pox 15, measles 14, scarlatina 4, pertussis 6, diphtheria and croup 37, dysentery 1, erysipelas 5, and puerperal infections 5. There were also 39 deaths from acute and tubercular meningitis, 203 from phthisis, 35 from acute bronchitis, 93 from pneumonia, 66 from infantile athrepsia (23 of the infants having been wholly or partially suckled), and 31 violent deaths (24 males and 7 females). The number of deaths registered this week is about equal to the mean of the last four weeks. The deaths from typhoid are one less than last week, and measles 14 deaths instead of 28, while small-pox has increased from 6 to 15. The admissions for typhoid fever have risen from 78 to 135. The births for the week amounted to 1351, viz., 689 males (504 legitimate and

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185 illegitimate) and 662 females (468 legitimate and 194 illegitimate): 105 infants were born dead or died within twenty-four hours, viz., 59 males (39 legitimate and 20 illegitimate) and 46 females (34 legitimate and 12 illegitimate).

BACTERIUM OF WHOOPING-COUGH.

Dr. Carl Burger, of Bonn, claims to have discovered the bacterium of whooping-cough (*Berliner Klinische Woch.*, No. 1, 1883). With a magnifying power of 600 diameters, the bacilli appear as small rods of an attenuated ellipsoidal shape, and of different sizes, the smaller being about twice as long as broad; with the aid of higher magnifying glasses and an Abbé condensing lens, the larger rods are seen to have a constriction in the middle (biscuit-shape). The bacteria may be arranged in a chain or row, but generally they are equally disseminated over the field. The above-described fungi are quite distinct from the *Leptothris buccalis*, which is longer and thicker; further, the spores and long threads of the leptothrix may always be discovered in close contiguity. These observations are made on the sputa of patients. The bacteria are much more numerous in the opaque white pellets of the early stage of pertussis, though they may be detected in the muco-purulent abundant expectoration. It is best to examine the sputa before breakfast, or rather after fasting during the night, for the reasons that less foreign material is likely to be present; and that probably the bacilli luxuriate more when the vital activities are comparatively dormant. In order to prepare specimens of these lowly organisms very little trouble is required. A little of the sputum is placed between two cover-slips; these are separated and dried; the albumen is fixed by passing each glass through the flame of a Bunsen's burner or a spirit-lamp; the dye (watery solutions of methyl violet or fuchsin are good) is then used, but the specimens must not be left too long therein, nor should the dye solution be too strong. A little practice will soon teach the best arrangement. The cover-slips are then washed in distilled water, and are ready for examination (Burger used a water immersion lens). The bacteria keep very well for many days in Canada balsam. The bacillus is regarded by Burger as the cause of the disease, because—(1) he does not find the bacteria in other sputa; (2) they exist in such proportion in the expectoration of pertussis that their influence cannot be doubted; (3) their number is directly proportionate to the intensity of the illness, whether in the course of the same or different individuals; (4) the symptoms and progress of the disease may be best explained by the development of the bacteria. We do not think the force of the arguments numbered two and four so cogent as the others.

SMALL-POX IN WOLVERHAMPTON.

It is reported from Wolverhampton that there are now in the workhouse there seven cases of small-pox, admitted from different parts of the town, in addition to four others under treatment in the infectious wards of the hospital. In every case the houses from which patients have been removed have been thoroughly disinfected, and in some instances the bedding has been destroyed. The Sanitary Committee of the Corporation has expressed its indebtedness to the medical practitioners of the town for their ready co-operation in the endeavours which have been made to stamp out the disease. Another satisfactory feature is, that up to the present time no very great objection has been experienced on the part of patients or their friends to the removal of the different cases to hospital. In one instance the wife of the patient—a working-man—objected to his removal, but the man himself acquiesced in the arguments of the sanitary inspector, and agreed that his removal to an infectious ward was the best course that could be pursued. If, says a local journal, patients and their friends would see that isolation is impossible in their own homes, and that attempts to conceal the presence of the disease are sure to have the effect of spreading it, it would do much to prevent small-pox from becoming epidemic in Wolverhampton: the Sanitary Committee and their inspectors do all that they can, but unless the public assists their endeavours to detect and isolate every case, it is impossible to guarantee the immunity of the borough from an epidemic such as prevails in several towns in the immediate neighbourhood. This is undoubtedly true; but if Wolverhampton can succeed in infusing so much of common sense into the minds of its population, it will have effected more than has, as yet, been achieved in any other town in the United Kingdom.

M. PASTEUR ON THE VIRUS OF RABIES.

In a paper read before the Congress at Geneva last year, M. Pasteur showed that the poison of rabies present in most of the fluids of the affected animal was not an organism, and must not be confounded with the micrococci, which, though always found in the saliva of rabid dogs, are also found in that of other animals (man included) in many diseases, and which, though infective, do not produce rabies. He now reports, as the result of recent experiments, that the introduction of the virus—best obtained from the cerebro-spinal tissue—into the veins is followed by the development of rabies more certainly and speedily (viz., in from eight to ten days) than when it is inserted into a wound; but the disease is less grave, and not always fatal. Many of the dogs who survive seem to have become insusceptible to subsequent inoculation, and M. Pasteur has now four in which it is impossible to produce the disease.

ANNUAL REPORTS OF LIVERPOOL HOSPITALS.

January must be an anxious month for hospital committees, as the following statistics, taken from the annual reports for 1882 of some of the Liverpool hospitals, will show. As we never hear of hospital committees becoming bankrupt, it is possible that impecuniosity is their normal state, and that best adapted to increase the annual income. The Liverpool Royal Infirmary has expended £13,163 on the treatment of 2769 indoor and 8708 outdoor patients. This institution is £3662 in debt; besides, £75,000 has been raised towards the erection of a new infirmary, and £25,000 more is required before the Committee are in a position to commence building—or, in all, about £30,000. The Liverpool Eye and Ear Infirmary treated 642 in-patients and 9030 out-patients during 1882, and closed the year with a debt of about £4000. Of this sum £2000 is due to the building fund, and the remainder to current expenses. At the Liverpool Children's Infirmary 730 in-patients and 10,602 out-patients were treated, showing an increase of 24 in-patients and 2000 out-patients on the previous year. The Committee had to sell out £2203 worth of their investments, and yet £88 is still due to the Treasurer. The Liverpool Medical Mission attended to 13,656 cases at the two dispensaries during 1882, and treated 5623 cases at their own homes. The expenditure amounted to £1426, which was in excess of the income by £219. The Birkenhead Borough Hospital staff treated 487 in-patients and 7453 out-patients during last year, at a total cost of £2374. A balance of £67 is still due to the treasurer of that institution. At the Wirral Hospital for Sick Children 153 in-patients and 1928 out-patients were treated. The total expenditure was £713, leaving a balance *in hand* of £51. A new hospital is in course of erection, for which

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£7000 has been raised. And an appeal is made in the annual report for the £3000 necessary to enable this institution to start in its new premises free of debt. These six charities treat in the aggregate 4051 in-patients and 46,398 out-patients in the year, are about £8040 in debt, and want £28,000 for building purposes. There are eight other hospitals in Liverpool and its neighbourhood, and several dispensaries, whose annual reports have not yet been published. It is to be hoped that their financial condition is better than that of the hospitals and dispensaries here referred to.

THE ACTION OF THE SALICYLATES ON THE HEART.

THE vexed question of the action of salicylate of soda upon the circulation has once more been systematically taken up —this time by Professor Maragliano, of Genoa (*Centralblatt f. d. Med. Wiss.*, 1882, December 2). The results of the investigation will be so far reassuring to the English practitioner, inasmuch as they are opposed to the rather unfavourable opinion which is now generally held as to the effect of the salicylates on the heart. Dr. Maragliano finds, first, that the systematic exhibition of the soda-salt for several days, in increasing doses, causes progressive increase of the strength of the pulse, and a corresponding rise in the systolic portion of the sphygmographic tracing. Secondly, a single large dose (seventy-seven grains) began to produce the same effect on the pulse in the course of an hour; and this effect increased to a maximum in from two to three hours, and disappeared after from three to five hours. The normal dicrotism usually became more marked, and often the pulse became tricrotic. Thirdly, tested by von Busch's sphygmometer (an instrument on the principle of the mercurial barometer, by means of which the arterial pressure, say at the wrist, can be directly read off), the arterial pressure was found to rise about an hour after a single large dose (seventy-seven grains), and to fall again to the normal in the course of three hours, the degree of rise varying between ten and twenty millimetres of mercury. Dr. Maragliano concludes that these results completely dispose of the opinion that salicylate of soda is a cardiac depressant.

THE MEDICAL SOCIETY OF LONDON.

ON the 12th inst. Dr. Theodore Williams will re-open the debate upon the Association of Tuberculosis and Bacilli, which was started last Monday evening by Dr. Whipham. The Society may be congratulated on the way in which the debate was opened by Dr. Whipham, as also upon the vigorous manner in which it was maintained. Certainly the subject is full of interest, and that the question is an excellent one for discussion is shown by the crowded meeting which it drew to the rooms of the Society last Monday. On the 5th inst., Dr. Sansom gives his last Letsomian Lecture on Valvular Disease of the Heart.

FIBRINOUS COAGULA IN THE LEFT VENTRICLE.

WE notice, in the *Journal of Anatomy and Physiology* for January, a paper on the above subject, by Dr. A. M. McAldowie. It deals only with those clots formed during life, whose attachment to the walls of the heart is merely mechanical. Out of twenty consecutive cases that he examined, in fifteen there were clots on both sides of the heart, in three on the left side alone, in two on the right side alone. In most instances the clots were smaller on the left side than the right, and therefore might sometimes escape observation. In the right side the auricle is the favourite site, in the left the ventricle. The deposit of fibrin generally commences at the anterior segment of the mitral valve, and grows upwards towards the aortic orifice, being adherent only by its base, where it becomes embedded in the chordæ tendineæ. It is quite thin and flat, and on reaching the aortic orifice there is a marked constriction, after which the clot fills out again, and then gradually tapers off. The constriction is never so marked in the case of a clot on the right side of the heart. At the aortic orifice the clot is also more or less indented by the corpora Arantii. When first formed the clot floats up and down in the blood-current, and receives a fresh coating of fibrin at each contraction of the auricle and ventricle. After it has extended into the aorta, however, it becomes stationary, and then it is only during the ventricular systole that the deposition of fibrin takes place. Filaments are then sent out from the clot to the apex of the heart, becoming adherent to the columnæ carneæ, and sometimes a clot forms in the auricle about this time, and the two become adherent. The surface of the clot is usually smooth, and more or less flattened, sometimes grooved by channels for the blood-stream. These clots are mostly found in cases of slow death, and are commonly attributed to stagnation of the blood-current. In many cases of slow death, however, they are absent, and it should also be borne in mind that their point of origin (on the mitral valve) is just where the circulation is most active, and it is therefore much more probable that there is some change in the quality of the blood owing to the low state of vitality. As regards the symptoms to which the formation of these clots gives rise, in one case there were none, though the clot had extended into the aorta, producing a systolic basic murmur, recognised eleven days before death. In the other two cases alluded to in this paper there were attacks of disturbed action of the heart, with præcordial pain, similar to, but not so severe as, that in angina pectoris. There was great anxiety and dread of death, both during and for some time after the attacks. There was no true dyspnœa, and no lividity.

ILLEGAL OCCUPATION OF CELLAR DWELLINGS.

AT the December meeting of the Society of Medical Officers of Health, Mr. Lovett mentioned a curious instance of the inability of the law to deal with this question. Two years ago, and again recently, had a woman been found dead in a cellar in St. Giles, the fact being that, the doors of tenemented houses standing always open, homeless men and women walk in at night to seek the shelter of a cellar, staircase, or closet. And since the hours during which inspection of houses is permitted are from 9 a.m. to 6 p.m., the authorities are powerless to deal with such cases, while the usual occupants feel that they are performing an act of charity in thus offering a temporary and gratuitous lodging to others poorer than themselves.

DISCHARGE, IN ABORTION, OF THE EMBRYO WITH AN INTACT AMNION, DETACHED FROM THE CHORION.

A CASE in which this interesting mode of abortion took place is recorded in a recent number of the *Archiv für Gynäkologie* by Dr. G. Krukenberg, of Bonn. Those interested in it will find a case fully related by Smellie ("Midwifery," New Sydenham Society's edition, vol. ii., page 66). Velpeau has also described the occurrence. In Dr. Krukenberg's case the smooth translucent sac was of the shape of a hen's egg; weighed seven drachms; measured, when lying flat, a little more than two inches long, rather less than two inches in breadth, and four-fifths of an inch in thickness. It was not so full of fluid as to be tense. The liquor amnii and the sac were transparent enough to allow the fœtus and cord to be seen. The fœtus was judged to be of about six or seven weeks' intra-uterine age. Dr. Krukenberg enumerates four conditions which may lead to the separation of the amnion from the

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chorion. First, some fluid may remain between the amnion and the chorion, in consequence of the amnion not having at all points come into contact with the more external membrane. Next, hæmorrhage may have taken place between the two membranes. Thirdly, a velamentous insertion of the umbilical cord, by keeping the chorion and amnion apart over the space in which the umbilical vessels run, will favour their easy separation. Lastly, imperfect development of the allantois. If this has not reached the amnion, there will be no vascular connexion between the fœtal membranes and the chorion, and therefore no hindrance to the separate expulsion of the amniotic sac.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

At the annual meeting held on January 30, 1883, the following gentlemen were elected office-bearers for the ensuing year:—*President:* *Dr. D. Lloyd Roberts. *Vice-Presidents:* *Mr. Hardie, Dr. John Roberts, *Mr. Walmsley, Dr. Stevenson. *Treasurer:* Dr. Joseph Stone. *Secretaries:* Dr. A. Wahltuch, Mr. J. Broadbent. *Committee:* Dr. Barlow, *Dr. Collins, Dr. Cullingworth, *Mr. R. Dacre Fox, *Dr. Ledward, Dr. Mallett, Dr. Pierce, *Dr. Leech, *Dr. H. Simpson, *Dr. Walter, *Dr. J. Watson, Mr. Westmorland, (Those marked with an asterisk did not hold the same office last year.) The report showed that the Association continues in a prosperous condition, there being 125 members—an increase of six over the preceding year.

DR. HERON ON THE BACILLUS OF TUBERCLE.

For several months Dr. G. A. Heron has been studying the clinical and diagnostic applications of Koch's discovery of the bacillus of tubercle, and from his experience of sixty-two cases of phthisis of both sexes and of various ages, in which he was able sooner or later to detect it, he has come to the conclusion that such observations are of the highest value both in diagnosis and prognosis, apart from their pathological interest and bearings on public hygiene. Not only are the bacilli absent from those cases of chronic catarrh, emphysema, bronchiectasis, etc., which closest approach to tubercular phthisis, and always present in tubercular cases, but the number—*e.g.*, from three or four to thirty or fifty in a field—bears a direct proportion to the probable rapidity of the course of the disease to a fatal termination. The worst cases are those in which the bacilli are grouped in dense masses. Koch had found that the dried sputa from a hospital floor were as effective in inducing tubercle in animals when inoculated as were fresh sputa, and though heredity and other conditions may play a part in the propagation of phthisis, there can be little doubt of its infective character in the light of recent discoveries.

ADULTERATION OF QUININE SUPPLIED TO PARIS HOSPITALS.

It seems strange that in the country of the original production of quinine by Pelletier it should now be so abundantly falsified that in the hospitals it is only found in an adulterated condition. Dr. Laborde, as we noticed at the time, drew attention at the Société de Biologie to the fact that cinchonine was being administered at the hospitals when quinine had been prescribed. This having been brought under the notice of the Director of the Assistance Publique, he found on inquiry that the boxes of quinine furnished to the Pharmacie Centrale were discovered to contain excellent quinine at the surface, while lower down they were filled with cinchonine. The administration will in future see that the article supplied is pure; but their suspicions ought to have been aroused by its greater cheapness. It was supplied by a firm at Milan. The best sulphate of quinine, the *Union Médicale* states (January 27), that can be made is easily procurable in Paris if the proper price be paid for it. It seems that the manufacture of it there has descended from Pelletier, Delondre, and Levaillant (whose production is known as the *sulfate de quinine des trois cachets*) to MM. Armet de Lisle, who produce an article of such unrivalled purity that it fetches from 25 frs. to 30 frs. per kilogramme more than any other. "But competition has set its mark on quinine, and in spite of the continued increase of the price of cinchona barks, that of quinine has become considerably lowered. The solution of this enigma is found simply in the discovery of the new salt, cinchonine. It has the same form of crystal as the sulphate of quinine, the same appearance, whiteness, specific gravity and peculiar bitterness,—all but its febrifuge properties. As everyone now wishes for cheapness, and Pelletier's old quinine factory, which is an honour to France, has often been obliged to renounce sending in tenders, as its seal, indicating absolute purity, also indicated incompatibility with the present low prices. In the meantime, all who want the pure article know it is to be found under the celebrated *trois cachets*."

TRICHINOSIS IN PRUSSIA.

We mentioned some time ago, in a notice of the Report on Trichinæ and Trichinosis by the U.S. Marine Hospital Service, that the parasite was by no means confined to America, but had been found in every country where it had been sought for; and that, even as regards England, the only recorded fatal cases had been caused by the consumption in an insufficiently cooked state of home-fed pork. We have before us the annual report of the examination of swine for trichinæ in the kingdom of Prussia in the year 1881, and from this we learn that one animal in 1339 was found to be infested, the proportion in 1880 having been one in 1460. In all 3,118,780 swine (home bred) were examined in 1881, and trichinæ were found in 1695. Of American hams and sides of bacon 1895 only proved to be trichinous. The distribution of the disease in Prussia is remarkably unequal, as the following table will show. The proportion of infected animals in the province of

Posen	was one in . .	221	examined.
Dantzic	,, . .	377	,,
Königsberg	,, . .	494	,,
Marienwerder	,, . .	689	,,
Berlin	,, . .	1414	,,
Stettin	,, . .	2030	,,
Minden	,, . .	10,699	,,
Coblenz	,, . .	19,260	,,
Hanover	,, . .	20,892	,,
Cologne	,, . .	28,300	,,

Altogether, 1695 native animals were found trichinous, and 1895 hams or pieces of American bacon, but those which produced the disease in man were invariably of home growth, probably because cured in a less effectual manner. The examinations are made by 18,581 inspectors, who frequently pay for their negligence or incapacity by fine or imprisonment when ill effects follow the consumption of meat which they have passed.

THE OPIUM AND QUININE TRADE OF INDIA DURING 1882.

It is to be gathered from a review of the trade of India for the past year, that there has been a gradual decrease in the exports of opium since the year 1879-80, and during 1882 the value sank to rather under twelve and a half crores of rupees. The decline in the total quantity exported, as compared with the returns for the preceding year, was 2852 chests, valued at 116 lakhs. There can be no doubt that the falling off is not due to any decreased productive power in India, but rather to the powerful competition of the Persian and Chinese-grown opium. Evidence is not wanting of the

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increased and increasing cultivation of the poppy in the southern part of the Celestial Empire; while the imports of the Persian drug into China are said to have risen from about 1600 chests in 1876, to 7800 chests in 1881. That this enormous production must eventually greatly reduce the Indian supplies cannot be contested, and so far, it is presumable that it will gratify the Anti-Opium Society, though whether such a state of things will lessen by one whit the alleged miseries of opium-smoking among the Chinese is more than doubtful. It is likely that the finer quality of the Malwa opium will enable it to hold its own for some time to come against other competitors, more especially among the richer consumers, as there is no opium grown in China, except the small crops raised in Kansu, which can rival it in excellence. The Persian opium, however, is said to have greatly improved in quality, and, being nearly $200 per chest cheaper than the Indian drug, is already displacing the latter. The yield of the Persian crop for 1882 is estimated as equal to more than the total quantity (Patna, Benares, and Malwa) imported from India, so it would really seem as if the fiercely contested question as to the morality of the Indian Government in making a profit out of the drug were about to be settled in very practical fashion by the natural laws of supply and demand. Passing on from opium, we find that drugs and medicines exhibit an increase, chiefly owing to the larger imports of quinine, which have been nearly trebled in quantity, with a heavy fall in the average price. The receipts of quinine depend to a great extent upon the general health of the country, which, though fairly good during last year, was noticable for severe attacks of malarious fever in certain districts of Bengal; in parts of Northern India, also, fever was more than usually prevalent in the autumn of the year, and this, coupled with smaller receipts and higher prices of the preceding year, no doubt created an exceptional demand for this febrifuge. Cinchona from the Darjeeling and Neilgherry plantations was shipped to a much smaller extent, owing, as it would appear, to the decline of prices in London, which led to fewer Indian trees being "barked" than usual.

EMBOLISM OF THE FEMORAL ARTERY FOLLOWING DIPHTHERIA.

In the *Progrès Médical* (No. 1, 1883) we find a case of the above rare occurrence reported by M. Poupow. The patient was a little girl, seven and a half years of age, who had been under the care of M. Bouchut for diphtheria, and who had made a good recovery after tracheotomy. Eleven days after she left the hospital, her mother brought her back again, suffering from intense dyspnœa with marked pallor and some fever: these symptoms had been coming on gradually. There was no evidence of diphtheritic paralysis. There were physical signs of an effusion into the right pleura. Auscultation of the heart could not be satisfactorily accomplished, owing to the respiratory sounds being unusually loud. The day after her admission she had sharp pain in the right popliteal space; discoloured patches soon appeared on the foot, which became cold, and no pulsation could be felt in the popliteal or femoral arteries. The gangrene of the foot became more and more marked, and the child died on the following day. The artery was found to be completely occluded by a clot, which was not adherent to its walls. Unfortunately, the friends would not permit an examination of the rest of the body; the reporter therefore is reduced to discussing the probable causes of this embolism. Fatty degeneration of the myocardium and ulcerative endocarditis each receive some consideration, but are rejected in avour of cardiac thrombosis, which, he points out, would explain the other symptoms in the case – the dyspnœa for instance, which might well have been due to pulmonary embolism. Whilst not denying that the probabilities seem in favour of cardiac thrombosis, we cannot forget that a case was published in our hospital reports last year (vol. ii., page 377), in which embolism of the right middle cerebral artery took place during convalescence from diphtheria, and in which, at the post-mortem examination, infarctions were also found in the spleen and kidneys, but no clot was found n the heart.

DUBLIN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

At the sixth annual general meeting, held at the College of Physicians, Kildare-street, Dublin, on Thursday, January 25, 1883, the following members of the Branch were elected officers and Council for 1883:—*President:* *John T. Banks, M.D. *President-elect:* *Edward Hamilton, M.D. *Vice-Presidents:* Lombe Atthill, M.D., *E. H. Bennett, M.D. *Council:* Thomas Darby, F.R.C.S.I., J. M. Finny, M.D., Samuel Gordon, M.D., T. W. Grimshaw, M.D., S. Haughton, M.D., F.R.S. (*Clerk*), *G. H. Kidd, M.D., J. W. Moore, M.D., E. D. Mapother, M.D., Robert McDonnell, M.D., F.R.S., P. C. Smyly, M.D., William Stokes, M.D., H. R. Swanzy, M.B. (Those marked thus [*] did not hold the same office last year.) *Representatives on General Council:* Isaac Ashe, M.D., Thomas Darby, F.R.C.S.I., S. Haughton, M.D., F.R.S. (*Clerk*), James Little, M.D., R. McDonnell, M.D., F.R.S., J. W. Moore, M.D., G. H. Porter, M.D., William Stokes, M.D. *Hon. Secretary and Treasurer:* George F. Duffey, M.D., 30, Fitzwilliam-place, Dublin.

THE SO-CALLED SCARLATINA OF PIGS.

MM. Pasteur and Thuillier have published in the *Comptes-Rendus de l'Académie des Sciences* the results of their researches into the nature of the disease known here as the "scarlatina of pigs," and as *rouget* or *mal rouge* in France, where last year it caused, in the valley of the Rhône alone, the loss of over 20,000 pigs. They find a microbe, so small as easily to escape observation, of a figure-of-eight form, like that of the so-called fowl-cholera, but specifically different, for it is without action on fowls, though fatal to rabbits and sheep. It is easily cultivated out of the body; and inoculation with it, even in almost inappreciable quantities, is constantly followed by the development of the disease identical with that which appears spontaneously. This is the only satisfactory test of an alleged disease-germ. It is well known, and has been proved experimentally, that one attack of *rouget* confers immunity in future, and MM. Pasteur and Thuillier have already succeeded in conferring an immunity as complete by the inoculation of a very mitigated form of the disease. Further experiments in this direction are in progress. They consider that Dr. Klein, who in his work on the "pneumo-enteritis" of the pig, published in 1878, described as the bacillus of "porcine scarlatina" one with spores even more voluminous than that of anthrax, was completely in error—that disease, whatever it was, and its bacilli having nothing in common with the malady now under consideration.

DEATH FROM VACCINATION AT DERBY.

We have received Dr. Barry's report on the results of the inquiry which, at the request of the Local Government Board, he made into the circumstances attending the death in last November, of a child, Edith Chalkeley, who died from exhaustion two months after vaccination; having had a general eruption, swelling of both arms, and abscesses in each axilla, both sides of the neck, and elsewhere, clearly the effects of septic infection. An inquiry into the history

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of all the children vaccinated on the same day, September 13, and on the previous and following Wednesdays, the 6th and 20th, failed to discover the source of infection. The child from whom the lymph was stated to have been taken was an unusually healthy one, and all its family were healthy. But Dr. Barry's inquiries revealed a mode of procedure on the part of the public vaccinator so peculiar, so slovenly, and so opposed to the instructions of the Board, that it is a matter of surprise that more accidents have not occurred in his practice; besides which, the fact that a child was entered as having been the vaccinifer to two others, who, because suffering from bronchitis, was, by the advice of its medical attendant, not presented for inspection (!), is an error which throws a doubt on the correctness of the registers generally. The lancet which Mr. Legge, the vaccinator in question, used for vaccination, and the needle with which he opened the vesicles, were both rusty and dirty, and the lancet broken. Instead of transferring the lymph directly from arm to arm, Mr. Legge removed it by means of tubes, from which he transferred it to the lancet, or to pieces of glass, from which he then charged the lancet, and these tubes he used over and over again, after an attempt at cleansing them in water. Only when any were left unused did he seal them, at the end of his sitting of two hours; and some of these were imperfectly sealed, or contained opaque lymph or blood. Dr. Barry could not ascertain the actual source of infection in this particular case, but has no doubt that it was derived from one of the dirty appliances employed on the day of inspection. The case runs parallel with the similar inquiry lately held at Norwich; and shows a degree of carelessness that must be more injurious to the cause of compulsory vaccination than all the efforts of the anti-vaccinationists. The cases appear, moreover, to suggest, to say the least, some want of care on the part of the vaccine inspectors.

SOME INTERESTING POINTS IN RELATION TO HYDRAMNIOS.

DR. FRIEDRICH SCHATZ contributes to a recent number of the *Archiv für Gynäkologie* an able and interesting paper on cases of homologous twins, with poly-hydramnios in the one, and oligo-hydramnios in the other. In plainer language, this means an excess of liquor amnii in one, and deficiency in the other, of twins developed from the same ovum, and therefore having a common chorion and placenta. Twins of this kind are usually of the same sex, and remarkably alike in physical characters. The two Antipholuses, and the two Dromios, were doubtless homologous twins. Schatz has collected ten cases of homologous twins, in two of which, observed by himself, the unusual condition as to liquor amnii mentioned above was present. The two cases observed by himself were carefully and thoroughly investigated; the records of the other cases are much less complete. The remarkable point about them was this: that instead of the close resemblance in all points generally found in homologous twins, in each of these cases the twin that had the larger amount of liquor amnii was bigger and stronger than the one which had little liquor amnii; that it passed, subsequent to birth, more urine than its fellow; that it perspired freely, and the other one little or not at all; and that, on dissection, it showed a decided hypertrophy of the heart and of the kidneys. In both the cases, moreover, when the placenta was injected and examined, it was found that, while each twin had a portion of the placenta to itself, between these parts there was a bit common to both, the vessels of which could be injected from either umbilical cord. The inference which Dr. Schatz draws from this coincidence of hypertrophy of the kidneys, free action of the skin, and hypertrophy of the heart, with excess of liquor amnii, is that the liquor amnii must be largely, if not entirely, made up of fœtal secretions poured into it. The two amniotic sacs have everything else in common. It is the freely acting kidneys and sudoriparous glands stimulated to more vigorous action by an unusually active circulation of blood propelled by a hypertrophied heart, that to his mind is the only source of difference. But this, of course, is only one step in the explanation of the matter. The reason of the hypertrophied heart and kidneys has to be found. The following is Dr. Schatz's theory of their origin. The intermediate bit of placenta common to the two fœtuses, and through which their circulations communicate, is, either from the first or from a later period, unequally supplied with blood from each of them. This may happen either from unequal size or unequal length of the vessels leading from each twin to the common bit of placenta. If this be the case, the fœtus whose blood has the easiest access to the intermediate portion of placenta will send more blood through it. Consequently its heart will have more work to do, and will hypertrophy. This hypertrophy of the heart will in its turn produce increased blood-pressure and increased rapidity of circulation. The kidneys of the fœtus with the hypertrophied heart will have more blood sent through them, and at a greater pressure, than usual, and a more active secretion of urine will be the result. The kidneys, being called on to do more work, become, like the heart, hypertrophied. Dr. Schatz concludes with some practical remarks on the diagnosis of hydramnios, which in these cases is sometimes difficult. The twin with the scanty liquor amnii may be forced down into the pelvis, and therefore the signs on vaginal examination be much as in normal pregnancy; while above, by abdominal examination, a freely fluctuating tumour is felt, which is apt to be taken for something else than the uterus—*e.g.*, for ovarian disease. The points in diagnosis are these. First, there is no sulcus such as would be felt between a pregnant uterus and a tumour. Then the tumour is central. With ovarian disease and pregnancy, the one or the other must lie somewhat laterally; they cannot both be in the middle. Lastly, the round ligaments can be traced running to the inguinal canal. This, Dr. Schatz says, can always be done, although in fat people it is difficult.

WE understand that among the names favoured by the Liberal students of Edinburgh University for the office of Lord Rector are those of Earls Granville, Rosebery, and Selborne; Viscount Sherbrooke, Mr. Trevelyan, and Mr. Campbell-Bannerman. A proposal, which emanates from a section of the Conservatives, that the Duke of Albany should be unanimously elected to the Rectorship, finds no favour in the Liberal ranks.

GRESHAM LECTURES.—Four lectures will be delivered in Gresham College by Dr. E. Symes Thompson on "Alpine Health Resorts." The lectures will be given on Monday, February 5; Tuesday, February 6; Thursday, February 8; and Friday, February 9—commencing each evening at six o'clock.

HYPODERMIC INJECTION OF IODIDE OF POTASSIUM.—M. Gilles, communicating to the Société de Biologie the results of his experiments, made with M. Goguenheim, at the Lourcine, stated that an injection of fifty centigrammes of the iodide is very well tolerated. It is somewhat painful, but the pain soon passes off, and is easily relieved by simple friction made on the region. The injection should be carried deeply, and should be of a strength that admits of a solution of fifty centigrammes filling an ordinary Pravaz syringe. The iodide is soon found in the urine. This method is only applicable to cases in which, for some reason or other, the medicine cannot be given by the mouth.—*Gaz. des Hop.*, January 16.

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THE ROYAL COLLEGE OF PHYSICIANS, LONDON.

At an ordinary meeting of the Royal College of Physicians, held on Thursday, January 25, Sir William Jenner, the President, alluded with great feeling to the loss the College had sustained, since their last meeting, by the death of Sir Thomas Watson. At his suggestion the College passed by unanimous vote the following resolution:—"The College at this, its first meeting since the death of Sir Thomas Watson, Bart., M.D., desires to express, and to place on record in its annals, the deep sense entertained by the Fellows of the College of the eminent merits and high character of their late distinguished colleague. Sir Thomas Watson filled in succession all the usual offices in this College, and for five years presided over us with honour to himself, with the affection and marked approval of the Fellows, and greatly to the advantage and reputation of this College." The resolution was directed to be forwarded to Sir Thomas's family. Drs. Quain, Sir H. Cooper, Balfour, and W. Ogle (of London) were elected Councillors, in the place of Drs. Wilks, Stone, G. Buchanan, and Fox, who retired. The annual report was received from the Examiners, in which it was stated that, during the year 1882, 507 candidates presented themselves at the First Examination, and of these 377 were approved, and 130 were referred for three months. At the Second Examination, 60 candidates, of whom 33 were approved and 37 were referred to their studies. At the Third or Final Examination, 136 presented themselves, of whom 113 obtained the Licence of the College and 23 were referred to their studies for six months. In 1882 the Examiners reported that the number of candidates who had presented themselves for the First Examination in the year 1881 had exceeded that of the year 1880 by 300. In the year 1882 the number of candidates for the same examination exceeded that of 1881 by some 40 per cent.

A report was received from the Sanitary Committee, with remarks by Dr. Corfield, who had inspected the College. He stated that the "sanitary arrangements of the College are now in a very perfect condition, but the Committee wish me to add that the self-acting air-inlet ventilator which has been fixed by the architect will require to be examined from time to time, and perhaps be ultimately removed in favour of a simple open grating."

A report from the Finance Committee also was mentioned and was ordered to be printed, circulated among the Fellows, and considered at the next meeting of the College. The Treasurer presented a report, which gave rise to some discussion, on the means to be adopted to preserve the College from fire. In the end a small committee was appointed to consider and report on the best mode of securing the College against fire, and of promptly dealing with such an accident should it occur; and it was ordered that the building should at once be insured for £18,000, and its books, pictures, and furniture for £7000. Directions were given for the sale and reinvestment of Dr. Lambert's legacy to the College of Great Western Railway shares, now worth some £1400. A communication was received from Earl Granville regarding the Medical Section of the International, Colonial, and Export Trade Exhibition, to be held at Amsterdam from May to October in the present year. The Committee to whom the communication had been referred recommended the College to reply to Lord Granville that, "Considering the great interests, national and colonial, which are involved, it would be most desirable to respond affirmatively to the request of the Netherlands Government. The College, while thanking his lordship for the promised facilities, should also express regret that Her Majesty's Government did not see its way to assist in meeting the expenses which would necessarily be involved in the proposed representation of the College."

It may be stated here that the International Congress for Colonial Medicine will meet in the Medical Section of the Exhibition in September.

Objects for the section will be received up to April 1, and must be marked "Exhibition of Amsterdam: Section, Colonial Medicine." A very important report was received from the Council, recommending the College—"1st. To institute a special examination on the subject of Hygiene or State Medicine. 2nd. To institute a special examination on the subject of Psychological Medicine. 3rd. That such examinations be conducted by special examiners appointed by the College"; and, lastly, that all registered practitioners be admissible, under conditions, to either of these examinations, in order to qualify for a diploma or certificate of proficiency on these subjects. The committee appointed by the College to consider the report of the visitors from the General Medical Council had suggested whether the College might not institute separate and voluntary examinations in hygiene and psychological medicine. The suggestion was referred to the Council, and they believe that a scheme for conducting such examinations "will confer a great benefit on the public, and supply a much-needed want in the profession."

FROM ABROAD.

Dr. Archambault on Intestinal Invagination in Children.

In a clinical lecture delivered at the Hopital des Enfants Malades (*Gaz. des Hopitaux*, September 26), Dr. Archambault observed that, while intestinal invagination is a very serious lesion in adults, it is far more so in young children—*i.e.*, children who have not yet reached their fourth year. The accidents attending it are also very different in the adult and the child; and it is of far more frequent occurrence in children of this age than later on, in consequence of the mode of attachment—the cellular tissue being much more loose, and the walls of the intestines being very thin. It is always at the ileo-cæcal valve that the invagination commences, the intestine advancing gradually into the ascending, transverse, and descending colon, so that at last the cæcum may arrive even at the anus, like the finger of a glove reversed on itself. When the subjects succumb to the accidents of the invagination itself, we find the small intestine lodged on the right, more or less inflammation of the mucous membranes in contact with each other, with more or less intimate adhesions.

While, in the adult, invagination is one of the forms of intestinal occlusion, with absence of stools and vomiting of fæcal matter, this is not the case with young children, who may continue to go to stool, and in whom vomiting, while it exists, is not of the same nature. In them, the stools on the first day are still composed of fæcal matters, but from the evening of that day they are changed in nature, and contain blood and mucus, as in dysentery. Sometimes the flow of blood constitutes a true hæmorrhage, at the same time that the child vomits. At the onset there is violent pain, the features are altered, the eyes are hollow, and the face is contracted; the pulse is very small, the extremities are chilled as in infantile cholera—and then all becomes calm again. The onset is, then, characteristic, with its sudden invasion and the absence of all fever. A new crisis soon occurs, the stools becoming bloody, while the vomiting persists.

There are but three intestinal affections which could, although with some difficulty, be confounded with invagination, viz.:—1. Infantile cholera; but the stools which characterise it speedily differentiate it. 2. Dysentery and melæna; but the onset of these is never so sudden, their progress is less rapid, and they never give rise to that special change in the features which is observed in invagination from the first day. Moreover, in melæna the stools are black, consist of nearly pure blood, and are not accompanied either by violent pains or vomiting. Again, we often find that there are other concomitant hæmorrhages, nasal, umbilical, and others. Thus, on the first day the diagnosis is not difficult to establish. By the second day the symptoms have increased in intensity, and when the abdomen is examined, there may be felt a sausage-like mass, formed by the invaginated portion of the intestine, and situated in the *left* iliac fossa. This localisation enables us to distinguish invagination immediately from typhlitis or peri-typhlitis, the seat of which is in the *right* iliac fossa. Although there

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can no longer be any doubt as to the nature of the disease, when the existence of this tumour formed by the intestinal mass has been made out, yet the diagnosis, in certain cases, may be confirmed by rectal examination, which will not infrequently furnish the sensation of an invaginated intestine.

The progress of the accidents is always very rapid, the child speedily falling into collapse, the general coldness becoming permanent, the abdomen being distended, and the child dying on the fourth or fifth day. The prognosis is always very unfavourable—less so, however, at the present time than formerly, when death was the most frequent termination. Now we succeed more easily in producing a cessation of the invagination and in causing the intestine to resume its normal position; in a word, disinvaginate it and effect a complete cure. Elimination sometimes takes place in the adult, but we must not count on this in children, and we must interfere medically, and that as promptly as possible. The treatment, indeed, is simple enough. Many authors have advised purging children who are the subjects of invagination, and it is surprising to find Rilliet and Barthez among them, for it is the best means of increasing the invagination, however mild may be the purgative that is administered. Local bleeding, too, which has been much praised, never leads to good results, for at first there is no inflammation, the peritoneal accidents only supervening secondarily. Before all, what is to be done is to endeavour to arrest the peristaltic contractions of the intestine by narcotics, such as laudanum, which may be given to the extent of three, four, five, or six drops, in divided doses, until narcotism is produced. Syrup of chloral is also in these cases a good medicine. The child having been narcotised, we may then have recourse to mechanical means, taking care to administer chloroform first in order to prevent the child crying, so that we may not have to struggle against the contractions of the intestine. The means to be employed is insufflation, which may be performed by various procedures, for the purpose of forcing the invagination upwards. The most simple of all means is the employment of the ordinary bellows, which is attached to a caoutchouc sound, of the volume of an œsophageal sound, introduced nto the rectum. Care must be taken to keep the anal aperture quite closed around it, so as to prevent any issue of air. The insufflation should be made slowly and gently, so as to dilate the intestinal tube gradually. "This means, I repeat, is excellent, and I have more than once seen an instantaneous and complete cure follow its use." Another very efficacious means consists in introducing carbonic acid gas into the intestine, and several examples of its employment have been given by Dr. Laboulbène. There are two procedures for effecting this. The first consists in injecting the *potion de Rivière* (this consists of solutions of citric acid and of bicarbonate of soda, which, on being successively injected, give rise to the evolution of carbonic acid gas), after which the anus is to be hermetically closed immediately. The abdomen becomes gradually distended, and when the procedure is successful the invaginated intestine is thrust upwards and resumes its proper position. In the second procedure a siphon of a bottle of seltzer-water is placed in communication with the caoutchouc tube; on pressing the piston the liquid penetrates into the intestinal tube, dilates it, and forces back the invaginated portion. Forced enemata of water, and the introduction of a sponge at the end of a flexible tube, have been proposed, but these means are not so good as the others, and the sponge is dangerous as being liable sometimes to cause rupture of the intestine; in fact, it should be rejected. If all these means fail, there is only enterotomy that can be resorted to—an operation which has almost always proved fatal in young children. The discussion of the feasibility of this operation belongs to surgery.

Sponge-Grafting.

In the *Philadelphia Medical News* (November 25), Dr. Estes, Medical Superintendent of St. Luke's Hospital, communicates the results of seven trials which he has made of sponge-grafting in indolent ulcers supervening on severe injuries, and passed into an obstinately chronic condition. He employed small bits of sponge as grafts. Fine surgical sponges were selected, which, after being well beaten to free them from all sand and calcareous matters, were soaked for forty-eight hours in dilute muriatic acid. This was then removed by frequent washings in cold water, and the sponges were placed in a well-stoppered jar, filled with a 5 per cent. carbolic acid solution. After remaining in this for a week they are ready for use. The ulcer, as well as all instruments, etc., employed, are also disinfected by a 2 per cent. solution. Pieces of sponge are then snipped off, falling into a similar solution, and are carefully laid amongst the granulations, a rupture of capillaries and effusion of blood being carefully avoided. The size of the pieces used is about one-tenth of an inch, that of an ordinary skin-graft. The whole is covered with a Lister dressing, which is re-applied on the third day, strict antiseptic precautions being observed for at least a week. On the third day the grafts are firmly adherent, radiating bands of lymph inclosing minute blood-vessels running into the sponges; and if the graft be now examined microscopically, capillaries and large nucleated cells will be found everywhere filling the sponge, the proper substance of which is beginning to disintegrate. From this time the sponges are steadily absorbed, and in fourteen days they are usually not to be seen, or only indistinctly under the granulations. If from too rough application of the grafts, or attempts at removal of any of them, after skin had formed over them, hæmorrhage occurs into them, a circumscribed ulcer may be formed at the spot, which, however, closes at once after the removal of the portion of unabsorbed sponge.

The *modus operandi* appears threefold:—1. The grafts afford support and lodgment for the new bloodvessels forming the granulations. 2. They encourage by direct protection, and a stimulation difficult to understand, the genesis of the large nucleated cells and so-called "lymph-bands" into distinct centres of cicatrisation. Granulations are loops of newly formed bloodvessels with coverings of mucoid or embryonic tissues, and a few intercellular fibrillæ. From the bloodvessels there is a constant migration of white blood-corpuscles, also a rapid endogenous multiplication of the mucoid cells. Unprotected under ordinary circumstances, a large number of these cells die, and are swept away as pus from the surface of the ulcer. If, however, a porous animal substance, rendered perfectly unirritating, be interposed, it will furnish lodgment, in the aggregate, for a large number of the cells, and protect them—while being itself absorbed—during their higher development. Small pieces of sponge are preferable to a large piece covering the whole area, because the large piece is much longer of absorption, is difficult to fit and be retained immovably in place until firmly adherent; while an ulcer may be too irritable to bear the application of a large piece, where it would tolerate small pieces disseminated over its surface. 3. The chief action of the grafts is to stimulate to a remarkable degree the activity of the marginal cicatrisation. This is a very marked feature in sponge-grafting. One of the very first effects observed in the ulcer is the renewed activity of its edges, so that a contraction of half an inch may be observed on the third day after grafting. This is probably due to the stimulation of the largely increased number of capillaries formed in the ulcer by aid of the sponge supports, and the super-nutrition thus insured, epithelial proliferations keeping pace with mucoid. Reverdin noted as one of the chief benefits of skin-grafting the stimulating action it exercised on the margin of the ulcer—one which every surgeon since his time has awaited anxiously as the sure harbinger of rapid cicatrisation. This effect is observed usually *after* the skin islands have formed in the skin-graft method, whereas in sponge-grafting it appears almost immediately, and, once started, it never ceases until the ulcer is healed.

A comparison of the two methods results in the following conclusions:—1. Sponge-grafts are available when skin cannot be obtained. They cause no pain in preparing them, nor any annoying little wounds as an additional tax on the healing power of the patient. They do not subject the recipient patient to the danger of inoculation of specific diseases, as skin may do when taken from a cachectic donor. 2. Sponge-grafts take more surely—invariably, when proper care is exercised. 3. They stimulate marginal activity much earlier, and to a greater degree than skin. 4. In sponge-grafting, skin or cicatricial islets are much slower of formation, and not as sure as after skin-grafting. 5. Healing seems equally rapid with sponge-grafts, if not more so. 6. Resulting cicatrices are equally good, and contractions equally prevented.

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PROVINCIAL CORRESPONDENCE.

SCOTLAND.

(*From our own Correspondent.*)

Glasgow, January 30.

ANNUAL MEETINGS OF MEDICAL CHARITIES: THE GLASGOW ROYAL INFIRMARY; THE GLASGOW EYE INFIRMARY; THE GREENOCK HOSPITAL AND INFIRMARY; THE EYE INFIRMARY, EDINBURGH—SCARLET FEVER ON BOARD THE "MARS" TRAINING-SHIP—GLANDERS AMONG THE TRAMWAY HORSES IN GLASGOW.

THE annual meeting of the subscribers of the Glasgow Royal Infirmary was held on the 29th inst. The report states that (Superintendent's report) in 1882 the admissions were 5601, against 5107 in 1881. The cases treated to a conclusion were 5564, with 446 deaths, or 8 per cent., against 445 in 1881, or 8·6 per cent.; 79 died within twenty-four hours after admission, and, extending the period to forty-eight hours, the number is increased to 103. The number of patients remaining in the Hospital on December 31 was 523, and the daily average number resident 507 against 487 in 1881. The average cost of each occupied bed was £46 5s., against £48 5s. in the preceding year. It is somewhat disappointing that, although there has been a slight increase in the income this year over last year, it has been barely sufficient to meet the increased expenditure. Ordinary income was in round numbers £18,914, and the extraordinary £7482, giving a total income of £26,396, while the total expenditure was £25,778—so that there is certainly not much to complain about. The mortality in Glasgow for the past week has been at the rate of 30 per 1000 per annum, against 33 in the preceding week, and 22, 46, and 30 in the corresponding periods of 1880, 1881, and 1882.

The annual general meeting of the Glasgow Eye Infirmary was held on the afternoon of the 26th inst. The report states that on December 31, 1881, there remained on the books of the Infirmary 3474 cases. The number of new cases admitted in 1882 was 9733 cases, making the total number of cases under the care of the medical officers during the year 13,207, as against 10,873 in 1881. Of these cases there were dismissed cured by ordinary treatment 6906, dismissed cured by operation 1193, dismissed relieved by ordinary treatment 1253, and dismissed relieved by operation 138. In the ten years beginning 1872 there has been a steady increase of patients, and last year this increase amounted to 10,000 as compared with 1872. With so great an increase it is satisfactory to note that the income has been quite sufficient to meet the increased outlay. The subscriptions of the working classes show a very gratifying increase. The total income during 1882 amounted to £3531, and the total expenditure £3515, leaving a small balance in hand. During the year there have been 994 house-patients, as compared with 921 in 1881, and 965 in 1880. The average residence of each indoor patient in 1880 was 23½ days; in 1881, 24½ days; and in 1882, 22 days.

The annual general meeting of the Greenock Hospital and Infirmary was held on the 18th inst., when the seventy-fourth report by the directors was received. The general abstract of diseases treated in the Infirmary during the year 1882, as reported, showed the total admissions to be 1306, as against 1 75 in 1881, an increase of 31 cases. In the fever-house 365 cases were admitted during the year, as against 498 last year, a difference of 133; the great increase on the total cases having been in the medical and surgical house. The total number of cases treated to a termination was 1325, or 86 more than in 1881. The total mortality was 123, as against 106 in 1881, or 9·3 per cent. against 8·5 per cent. in the previous year. The calls made by outdoor patients numbered 7040. In the fever department 157 cases of scarlet fever were treated, of enteric fever 86 cases, and of typhus fever 38 cases. The largest number of admissions on any one day was 9, admitted on August 28; and on 200 days there were no admissions. The average period of residence in the fever-house was 32·08 days, as against 32·42 days in 1881; the average mortality was 6·7, as against 7·5 per cent. in 1881. In the medical and surgical departments accident and urgent cases were very numerous, numbering 389; and of these 33 died. The average residence was 26·65 days—about two days less than the year previous. The ordinary income was, in round numbers, £4638, against £4224 in the year 1881; while the ordinary expenditure was £6092, against £5823 the preceding year. The ordinary income was supplemented by legacies amounting to £2281, of which, however, £1350 was invested. Enough was added to the ordinary income to reduce the deficiency of this to £934; and at the close of the year the charity remained in debt to the bank to the amount of £2310—a less unhappy condition than that of many medical charities. The number of outdoor patients attended to at the Eye Infirmary during the year was 2467; sixty-nine cases were admitted and treated as in-patients. The Chairman, in the course of his remarks, observed that the community had in the Hospital a noble institution, unfettered in its charity by any bonds of church, sect, or creed, its doors being open to all comers who bore upon their faces the passport of disease and suffering, and who required help in their extremity; and there they got the best surgical skill and appliances. During the last year the medical and surgical cases, including accidents, had been 164 in excess of the previous year, the figures being 941 cases treated in 1882, as against 777 in 1881. As many as 389 accident cases were admitted—a proof of the prosperity of trade and the increased number of workmen in the town. A motion was passed expressing regret that the annual subscriptions are insufficient to meet the annual expenditure. It is much to be regretted that the funds of so valuable an institution are still in an unsatisfactory condition; and this chronic state of financial difficulty reflects little credit upon a town where so much wealth has been accumulated. The spirit of its citizens has never risen to a due appreciation of the importance of such an institution. The liberality of the people in support of medical charities generally keeps pace with their remuneration of medical labours, and medical fees in Greenock have always been very low. Glasgow seems to be an exception to that rule, for, notwithstanding the low condition of medical fees, its support of hospitals and other charities is out of all proportion to professional remuneration, which is not much to boast of.

The annual meeting of the subscribers of the Eye Infirmary of Edinburgh was held on the 19th inst. The report showed that, since the re-opening of the institution thirty-three years ago, 27,272 persons had applied for advice; and of these 405 had been accommodated in the house for longer or shorter periods. During last year the number of applicants was 1142, of whom there were eight treated in the house. A large proportion of the cases were of a severe character. Upon an average about a fifth part of the number applying for advice came from the country, and not a few from remote districts of Scotland and the North of England. The income for the year 1882, including about £40 the balance from the previous year, was just under £138; and the expenditure about £67, leaving a balance of £70. The total sum at the credit of the Infirmary amounts to £100. The report was adopted. The premises contain a male and a female ward, a consulting-room, two waiting-rooms, a chamber for ophthalmoscopic examination, etc.

A rather alarming outbreak of scarlet fever has taken place on board the *Mars* training-ship in the Tay. The directors of the Dundee Royal Infirmary having refused to receive the patients, a temporary hospital was provided for their accommodation in the top flat of a building formerly used as granaries at Woodhaven, on the Fife shore, opposite to where the *Mars* is moored. In all there have been about twelve cases of fever amongst the boys, but only six remain under treatment, and the flat in which they are located has been isolated from the other part of the building. It is believed that the outbreak of fever is due to some of the boys carrying the contagion on board ship after visiting some friends or relatives on shore.

The tramway horses in Glasgow have been suffering from an epidemic of glanders, which at one time promised to assume serious proportions, but we understand that immediate steps were taken to stamp out the disease by at once destroying the affected animals. In their annual report the chairman stated that up to December 31 only forty-three horses had died of it out of 107 deaths.

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IRELAND.

—— DUBLIN, January 29.

ANNUAL MEETING OF THE DUBLIN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE sixth annual meeting of this flourishing branch of the British Medical Association was held on Thursday, January 25, in the College of Physicians. There was a large attendance. The chair was taken by the outgoing President, Dr. George H. Kidd.

Dr. George F. Duffey read the annual report, from which it appeared that the total number of members at present is one hundred and eighty-two, being an increase of seven upon last year. At the last annual general meeting a draft Bill to provide for the better notification of infectious diseases in Ireland, which had been prepared by a joint sub-committee of the Committee of the Council of the Irish Medical Association and of the Council of the branch, was read and discussed. The King and Queen's College of Physicians, the Royal College of Surgeons in Ireland, also gave it their approval. Mr. Meldon introduced this Bill last February, but, in common with Mr. Gray's Bill, and a Bill on the same lines as Mr. Gray's, introduced by Mr. Hastings for England, it was hopelessly blocked. A draft Bill for the registration of midwives in England and Wales was brought before the Council, who referred it to a committee, consisting of the President (Dr. Kidd), Dr. Atthill, and Dr. Darby, to report upon. The Council recommended the branch not to support the Bill, as they believed it was not expedient, and not calculated to meet the difficulties of the case. The Council had had under their anxious consideration at several meetings the "Report of Her Majesty's Commissioners appointed to inquire into the Grant of Medical Degrees, etc., with subjoined Memoranda." One of the members of the Council, Dr. Robert McDonnell, F.R.S., sat on this Commission, and several members of the branch gave evidence before it. The Council could not endorse all the recommendations of the Commissioners. They believed they would best discharge their duty to the branch by placing before the members a *précis* of the Report, together with some remarks thereon, drawn up by a committee of the Council. The Council regret that, owing to the views expressed in this special report, they could not advise the branch to accede to the request of the Medical Reform Committee of the parent Association to memorialise the Government to introduce a Medical Acts Amendment Bill, based on the Report of the Royal Commissioners.

The Rev. Dr. Haughton, F.R.S., moved the adoption of the report, which was seconded by Dr. W. I. Wheeler, Vice-President of the Royal College of Surgeons in Ireland. Dr. Atthill, in an able speech, proposed as an amendment that the passage in the report relating to the Report of the Royal Commissioners on Medical Degrees, etc., be omitted and referred to the incoming Council for reconsideration, with a recommendation that the policy of the parent Association in reference to medical reform be supported by the Dublin branch; and that, with that exception, the report be adopted. The Registrar-General for Ireland, Dr. Grimshaw, seconded the amendment; and at the conclusion of his speech Dr. Jacob moved that the debate on the report and amendment be adjourned to a day to be fixed by the President and Honorary Secretary. Dr. Robert McDonnell seconded the motion, which was agreed to.

When the result of the ballot for officers was announced, Dr. Banks, the newly elected President, took the chair.

On the motion of Dr. William Moore, President of the College of Physicians, seconded by Dr. Barton, President of the College of Surgeons, a vote of thanks was passed to Dr. Kidd for the manner in which he had presided during his year of office.

Dr. Kidd returned thanks.

Dr. Mahomed, Assistant-Physician of Guy's Hospital, London, and Honorary Secretary of the Collective Investigation Committee of the British Medical Association, explained the functions of that Committee, and requested co-operation for it. Its object was to obtain a view of medicine from the side of the general practitioner. They had never had that view. Their knowledge of medicine up to the present rested almost entirely upon the view which was obtained from hospital practice, and which only gave cases of organic diseases at stages when they could not be remedied. The object was to get statistics of disease in its earliest stages. If medicine was to advance it would be by enabling them to postpone the periods when organic diseases would develope—by the prevention of disease. The President expressed the great obligations the meeting were under to Dr. Mahomed for his statement.

The President then delivered an address, in the course of which he criticised the Report of the Royal Commissioners; and, alluding to the Royal University of Ireland, observed that it was something more than a mere successor of the Queen's University. In the curriculum there were new features to which he would refer. The first was the requirement of one year of arts from the students in medicine; the other, the requirement of three months' clinical instruction in a hospital for the insane. The Royal University and the London University were the only bodies into the curricula of which this course enters. Medical men have frequently been placed in positions in which their ignorance of the subject has been a source of regret and humiliation. It was no light matter the medical witness had frequently to deal with when called to give evidence in courts of justice. In his hands might be the issues of life or death. The question as to responsibility or irresponsibility of the person accused of crime might rest on his decision; and so might the rights of property—the question of testamentary capacity, of mental soundness or unsoundness. It might be supposed, from the neglect on the part of the medical authorities in requiring teaching in mental disease, that a knowledge of it comes by intuition, that every fairly educated physician should be as competent to undertake the investigation of mental disease as he was of bodily—to the study of which he had devoted years—albeit he might have never previously seen a single case. It would be no difficult task to point out the lamentable mistakes often made, and the disastrous consequences to the reputation of the medical man who had no acquaintance with the mind diseased. Dr. Banks, in conclusion, alluded to the amalgamation of the four medical societies of Dublin into one Academy of Medicine, which he said was an event of surpassing interest, and from which they might expect developments of fresh vigour and energy.

The proceedings then terminated.

In the evening the members dined together in the large hall of the College of Physicians, Mr. Maurice Brooks, M.P., Dr. Lyons, M.P., Mr. Edward Gibson, M.P., and Dr. Mahomed being amongst the guests.

OBITUARY.

DREWRY OTTLEY, M.D., M.R.C.P. LOND.

IT was with much regret that we had to record the death of this learned physician two or three weeks ago, at the advanced age of eighty years. He was born in 1803. After studying medicine at St. George's Hospital, he became a Member of the Royal College of Surgeons in 1826, and a Licentiate of the Apothecaries' Hall in 1828. He subsequently visited the Paris schools, then much in vogue. Shortly after his return he settled at Exeter in general practice. Whilst here he wrote the Life of John Hunter, which is prefixed to Palmer's edition of Hunter's works. After a few years he removed back to London, when he became a Fellow of the Royal Medical and Chirurgical Society; but, in consequence of repeated attacks of hæmoptysis, he was obliged to seek for health in a warmer climate.

Meanwhile, at the request of the Sydenham Society—on the Council of which he was a very active member—he had undertaken to translate and edit a selection from the memoirs of the French Academy of Surgery, then one of the foremost surgical societies in Europe. The memoirs selected all relate to Injuries and Diseases of the Head and Neck. The work is still worthy of perusal and study, even in these days of advancing science; for among them will be found cases of great practical and theoretical interest. The translation is unusually smooth, and betrays a writer equally conversant with the French and the English languages. This work appeared early in 1848.

Dr. Ottley selected Pau, in the Basses Pyrénées, France, for his residence, and there he resided and practised successfully from 1848 until 1872, when he was compelled, by

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increasing debility, arising from an affection of the spinal cord, to give up further active duty. He always kept himself abreast of the times; he graduated M.D. Aberdeen a few years after leaving London, and became a Member of the Royal College of Physicians in 1859.

His retirement from practice and departure from Pau were much regretted by a large circle of friends, both French and English, who, to mark their esteem, presented him with a handsome testimonial. He returned to England with his family, and has since lived in the neighbourhood of London. He died full of years on December 31, 1882, only fourteen days before the sudden death of his son, Dr. Walter Ottley, of whose life we hope to give a brief notice in our next issue.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 23.

JOHN MARSHALL, F.R.S., President, in the Chair.

SIR HENRY THOMPSON (availing himself of the recently established rule) then proceeded to read his two papers, of which the following are abstracts:—

FOUR CASES OF POLYPOID TUMOUR OF THE BLADDER REMOVED BY OPERATION.

The paper consists of the history of symptoms, the removal by operation, and the results, in four cases of vesical tumour, each of large size, one of them extremely so, and filling the bladder. In two the patients recovered; in the third, with the large tumour, the issue was fatal; the fourth is still under observation. A carefully made microscopical examination is described, and the report is appended in each case.

ON AN OPERATION FOR EXPLORING THE BLADDER BY PERINEAL SECTION OF THE URETHRA, AND FOR REMOVING VESICAL TUMOUR, IMPACTED CALCULUS, ETC.; WITH CASES.

The author desires to ask the attention of the Society to a method of investigating obscure diseases of the bladder, which promises to be valuable in certain conditions occasionally met with. Everyone sometimes meets with a case in which the symptoms of vesical disease are severe and obstinate, and although very careful examination has been made, he is unable to arrive at a rational diagnosis. The occurrence is doubtless not a common one. In the great majority of cases carefully made observations demonstrate the nature and seat of the disease. But for the exceptional cases, always important—cases generally marked by frequent or persisting hæmaturia of some standing, manifestly not renal, and without local sign of cancerous tumour—he proposes to take decided action, and to submit, further, that such action should not be unduly postponed. The essential step in the method proposed is to examine the entire internal surface of the bladder with the finger, by which means we can recognise the presence of any tumour, large or small, the existence of encysted calculus, etc. The method of doing this is illustrated, and shown to be a proceeding simple and easy of performance, and at the same time one which involves little, if any, danger to life. It consists in making a small opening from the raphé of the perineum to the membranous urethra, which is opened on a grooved staff, just enough to admit the left index finger to enter the canal and to be pushed on to the neck of the bladder. Provided the anæsthesia of the patient is so complete that the abdominal muscles are perfectly relaxed, every portion of the internal surface of the bladder may be brought consecutively by suprapubic pressure into close contact with the tip of the finger, and any deviation from the natural condition, however slight, may be noted. The operation is an external urethrotomy only, and involves neither the prostate nor the bladder. The application of the proceeding not only to diagnosis, but subsequently to treatment, is then discussed. It is shown to offer facility for the removal of tumour, impacted calculus, etc. Seven or eight cases in which the operation has been performed are cited, and several examples of tumour are exhibited which were removed by the author. These latter are examples of a disease which is inevitably fatal unless removed by operation. The signs and symptoms of their presence are discussed. Great care is necessary in examining the state of the patients before having recourse to operation. The two conditions, the absence of which are so important to be assured of before interfering, are renal disease and cancer. Hæmaturia from either of these sources of course absolutely contra-indicates an operation. Two forms of forceps, designed by the author for removing growths, were exhibited.

The PRESIDENT congratulated the author of the papers on having, by them, opened up new resources, both for the diagnosis and treatment of certain forms of obscure bladder-disease.

Mr. LUND (Manchester) could bear testimony to the great value of the proceeding just advocated. He felt that, as surgeons, we should now be able to diagnose and to deal with cases which before had presented many difficulties. The proposal to substitute an external urethrotomy for a lateral lithotomy was a very important one, the proceeding being less dangerous; while, on the other hand, it would now be as easy to explore with the finger the male as the female bladder. He then proceeded to read from a letter, which he had received from Mr. Whitehead, particulars of some cases in which he (Mr. Whitehead) had performed a similar operation some years ago for the purpose of exploring the bladder, and which he had repeated during the past year for the purpose of removing growths from the bladder. Mr. Lund had been present at one of the operations, which was on a medical man, aged seventy, who had suffered from persistent hæmaturia with the occasional passage of villous shreds. After the incision, a Volkmann's spoon was used, with which the growth was scraped away, and recovery took place. Other cases were related. Mr. Whitehead thought the proceeding free from risks; even in cases of malignant disease it had the advantage of draining the bladder effectually, and thus secured for it physiological rest.

Mr. HARRISON (Liverpool) referred to a case recently under his care in the Infirmary—a man, who had suffered from persistent and profuse hæmaturia, and had become very ill and low in consequence. He explored the bladder through an incision in the prostatic urethra, and found a hard mass of new growth, which he succeeded in enucleating with his finger. There was no great amount of hæmorrhage; the patient was completely relieved, but he suffered afterwards from slight incontinence of urine, and for this he wore a perineal truss, which answered perfectly.

Mr. DURHAM congratulated the author on the success which had attended his operations. He could not, however, admit that the plan of operation as described in the second paper was a new one. At Guy's Hospital both he and his colleagues had long practised this operation, which was known to them as Cock's operation, and which had been devised for the relief of cystitis accompanied by stricture. In such cases it was often necessary to cut without a staff. In the hands of a good operator the staff was really unnecessary. The operation differed from the author's in this last point only. It was free from risk, easily performed, and very useful in all cases of irritable bladder.

Dr. WOTTON remembered a case in his late father's practice in which tilting the pelvis in such a way that the urine was kept away from the neck of the bladder, proved of great value in a case similar to those under discussion.

Mr. MORRIS said that in those cases in which Cock's operation was indicated there was dilatation of the urethra at the point to be incised, which considerably facilitated the operation of urethrotomy without a staff. He could hardly think, however, that any surgeon would prefer to operate without a staff if a staff could possibly be used. He had himself practised this method of exploring the bladder about five times: in one case for an obscure disease, which proved to be prostatic calculus, and which quite recovered; in others for cystitis; and in one, which was still under observation, for enlarged prostate. This last case illustrated that it was not always easy, or indeed possible, to explore the bladder through this incision.

Mr. JACKSON (Wolverhampton) said he had not gathered that Sir Henry Thompson's object was to merely enter the bladder; its novelty consisted in the suggestion of this means of exploring the bladder with the finger in obscure cases, and in removing growths through it, should they be discovered. He had himself frequently tapped the bladder

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through the perineum, and, as a student, remembered Mr. Quain doing the same thing at University College Hospital twenty years ago.

Mr. THOMAS SMITH could not agree that this was "a new method," for it was one with which he had been familiar for many years. He believed it quite usual to examine the bladder with the finger after lithotomy. It was certainly the rule at St. Bartholomew's Hospital.

Mr. SPENCER WELLS had removed polypi from the female bladder through the urethra. He believed many of the cases of hæmaturia supposed to be due to malignant disease were really due to polypi, which might effectually be got rid of by this method.

Mr. BERKELEY HILL was struck with the fact that the tumours in all four cases were fibromata, for the fibromata were generally considered as of rare occurrence in the bladder. He was inclined to attempt the removal of such tumours with the écraseur, or to adopt Billroth's compound method of écraseur and opening the bladder from above. He thought the possibility of exploring the bladder depended on whether it was empty or not.

Dr. AVELING suggested that the female bladder might be better entered and explored through an incision in its septum.

Mr. EVE thought that histologists now inclined to regard "the papillomata" of the bladder as fibro-cellular growths. There were others, however, of an epitheliomatous type, which were very liable to recur if interfered with.

Mr. STANLEY BOYD had examined two of Sir Henry Thompson's cases. In both, the surface was almost smooth; they consisted chiefly of soft fibrous tissue. He thought that all tumours on mucous membranes tended to be warty on the surface.

Mr. SHATTOCK showed an instrument for exploring the bladder and removing any small growths that might be discovered. It was on the principle of the lithotrite, but with lateral movements of the blades. He was surprised that none of the speakers had suggested cystectomy in the treatment of growths in the bladder. The diseased portion would have to be excised, and the margins of the bladder then carefully sewn together again. Papillomata he thought especially affected the trigone, surrounding the orifices found there.

Sir H. THOMPSON, in replying, said he appeared to have been misunderstood. He did not wish it to be understood that he brought this forward as a new operation. Its novelty consisted in its application. Cock's operation had been known for two centuries at least. He proposed this plan for the diagnosing of obscure disease within the bladder, and for their removal if so found. He was confident that neither Guy's nor St. Bartholomew's Hospital could bring forward five such cases as he had related. This class of cases for the most part came under the physician, and were treated, he thought, by the injection of styptics. He still doubted whether it was the custom to make a special digital examination of the bladder after lithotomy. He was glad to hear that Mr. Whitehead had tried the method.

The meeting then adjourned.

An interesting collection of specimens illustrating Disease of the Bladder was on view from the Museum of the Royal College of Surgeons, and from St. George's and University College Hospitals. Dr. H. Gibbes and Mr. Stanley Boyd showed microscopic preparations of the healthy and diseased bladder. Mr. Pearce Gould showed the latest modification of Dr. Bigelow's Instrument for withdrawing calculous fragments. Sir Henry Thompson and Mr. Jackson (Wolverhampton) also showed their modifications of Bigelow's instrument.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 3.

G. BUCHANAN, M.D., F.R.S., President, in the Chair.

MR. P. GORDON SMITH read a paper, a full abstract of which is given elsewhere in our columns, on "The Planning and Construction of Hospitals for Infectious Disease." This paper was followed by one on "The Use of Tents for the Treatment of Small-pox," by Mr. G. W. Collins, of which the following is an abstract:—

Mr. COLLINS claims the superiority of the hospital marquee over the Radcliffe tent and wooden buildings on the following grounds. The marquee contains double the amount of cubic space, the ventilation can be regulated at will, a more even temperature can be maintained with less trouble, it is less affected by wind, rain, snow, and external temperature, it has greater facilities for attendance and supervision, and it is more suitable for confluent cases; and, further, an invariable preference was shown for the marquee by the patients. Mr. Collins found that, with due attention to the hot-water apparatus and the ventilation, the temperature of these tents could with ease be kept between 60° and 65° Fahr., even when the external temperature was as low as 18° Fahr.; and, in order to show that tent hospitals can be conducted equally well in summer and winter, he quotes the following statistics, obtained through the Meteorological Society during his stay at Wednesbury:—Highest temperature 66·8°, lowest 17·4°; highest mean 46°, lowest 33°; on fourteen days the temperature was above 60°; on twenty-three days it was below 32°. There were recorded nine days of snow, sixteen of fog and rain, forty-two of rain alone, and twenty-three of frost. During the summer of 1880, when in charge of the Small-pox Hospital at Finchley, he found that, with a temperature of about 104° in the sun, the tents could be kept perfectly sweet by looping up the sides and opening each end of the tent, and in neither epidemic did the tent life give rise to any pulmonary complications whatever. An abstract of the cases treated at Wednesbury during three months and a few days gives the following result:—Of the 118 patients treated in the tents, twenty-four were unvaccinated, and amongst these there was a mortality of 21 per cent., the death-rate of the vaccinated patients being only 7½ per cent. Of confluent cases there were 32 per cent., and in eleven instances the rash aborted either in part or entirely.

In the discussion which followed the reading of the papers Dr. Thorne, Surgeon-General Gordon, Dr. C. E. Saunders, Dr. Collie, and Messrs. Saxon, Snell, and Robins took part.

THE CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 26.

ANDREW CLARK, M.D., President, in the Chair.

THE PRESIDENT delivered an address, which appears elsewhere in our columns.

Dr. GLOVER proposed that the best thanks of this Society be given to the President for his address, and that a complete report of the same be published in the *Transactions* of the Society. The motion was seconded, and carried with acclamation.

ON THE ACTIVITY OF THE INFECTIVE POWER OF THE POISON OF SCARLET FEVER DURING THE PRE-ERUPTIVE STAGE OF THE DISEASE.

Dr. LONGHURST read this paper, and said that in a short paper on the infection of scarlet fever, in the *Lancet* of July, 1877, he expressed a belief that the period of greatest activity of the fever-poison was in the early stage of the disease. Extended observation has strengthened such belief, which has been borne out in the cases reported. This seems to encourage a line of investigation in connexion with the study of acute specific diseases advocated by the late Dr. Murchison in a paper on the period of incubation of scarlet fever, and the probability that they may be transmitted even during the stage of incubation. Case 1 supports such a view, and forcibly demonstrates that the fever-poison is not absorbed by, nor developed in, all persons with the same rapidity and activity, and that possibly even during the stage of incubation the poison may be passed on from one member of a family to another, the latest case having little, if any, direct relation to the first, but being due to the further development of the poison through fresh systems. Cases 2, 3, and 4, all point to the activity of the fever-poison in the very earliest stage; whilst Case 4 is especially interesting as proving that the long isolation and confinement still enforced by some is not always necessary. It is most important that a belief in the activity of the infective power of the fever-poison during the very earliest stage, possibly

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also during that of incubation, should be generally accepted; for then, instead of risking the spread of the disease by scattering at once the members of a family, thus forming new and fresh centres of infection, ought we not rather to be content by isolating the sufferer in his own home, or by removal to hospital, according to circumstances, and by rigidly adopting all sanitary precautions? If also we admit the activity of the fever-poison to be in the earliest stage rather than during the stage of desquamation, as still held by some, then we shall feel that the long period of isolation and confinement of two or three months, as still in the opinion of many deemed necessary, may be safely shortened, to the very great relief of both the sufferer and his family.

Dr. BROADBENT said that it seemed to him that the evidence of the contagious power of scarlet fever in the pre-eruptive stage was by no means convincing, if, indeed, there could be said to be any evidence at all of its occurrence. In the first series of cases read by the author of the paper, no allusion was made to the original source of infection, and it was not stated whether the child who first showed signs of illness only was exposed to the contagium, or whether all the sufferers were equally submitted to the chance of infection. With regard to the children's party in another series, this may or may not have been the source of the disease. In measles the frequency with which infection occurred in the stage of preliminary catarrh was, in Dr. Broadbent's experience, very great. The early isolation of cases of measles and of mumps was often of no avail in the prevention of the spread of the disease. But it was quite the opposite in instances of scarlet fever. That the scarlatinal poison was, on the other hand, very potent to communicate the disease in the later period of the affection, there could be no doubt.

Mr. B. O'CONNOR narrated the outline of an epidemic of scarlatina reported by Buchanan, which was attributed to the use of infected milk at a public entertainment. This account showed that although the time of receipt of the virus was the same, yet the interval of incubation varied even to the extent of several days.

Dr. GILBART SMITH instanced an example of scarlatina in which the incubation period was not more than twenty-four hours; and said that the Resident Medical Officer at the London Fever Hospital, Dr. Tonge Smith, had informed him that the period of incubation had been determined to be not more than three days.

Dr. GLOVER said he thought that it was thoroughly understood by all practitioners that scarlatina was very little infectious in the pre-eruptive stage, and it was the usual thing to isolate in an early stage without any fear that the isolation would be of no value. He thought that sending a child out of town as early as the twentieth day was decidedly wrong.

Mr. S. SPICER agreed with the remarks of the last speaker, and believed that there was great danger of infection in the period of desquamation. He could testify to the truth of Dr. Broadbent's remarks on the infectiousness of measles in the pre-eruptive stage, and related the case of an epidemic which seemed to have started and spread from a calico ball.

Dr. GEORGE EASTES recounted his personal experience, which showed that his brother, who contracted the disease from the speaker, who had been ill for twenty-six days, failed to impart the affection to any of fourteen other boys who slept in the same dormitory whilst the pre-eruptive period of the malady was progressing. The infectiveness at a very late stage was instanced in another case, where, after six weeks had passed by, and abundant bathing had been practised, yet, on the return of the infected one to his family, the fever broke out in a very extensive manner.

Mr. BLACK was visited by a student who was suffering from coryza, but no rash, and fourteen days later both his (Mr. Black's) children were laid up with measles.

Dr. DYCE DUCKWORTH thought that sound rules ought to be laid down and carried out irrespective of the demurs of the relations. In all cases, slight or otherwise, a good working rule was to keep the patient between the blankets for three weeks, and confine him or her to his or her room for eight days more. This was the best way of warding off renal complications.

The PRESIDENT was of opinion that Dr. Longhurst had not proved his case. He mentioned an occurrence in which it seemed likely that scarlatina might have been communicated even after six weeks had elapsed. To isolate for six weeks was the period which he adhered to in his own practice.

Dr. LONGHURST, in reply, admitted that his views were at variance with those of the profession at large, but yet seemed to think that the cases he had brought forward supported the notions which he had now entertained for some years. Yet he admitted the justice of Dr. Broadbent's criticism as well as that of the other members whose experience was opposed to his. He questioned whether the practice at a hospital was not different from that of private practice—whether there was not a greater concentration of disease in the former, which brought with it calamities.

Dr. SAMUEL WEST exhibited a living specimen of very extensive Sclerodema in a man.

Dr. LEDIARD showed a living sample of alleged Osteitis Deformans in a miner.

Mr. SHUTER also brought a patient in whom Subperiosteal Amputation at the Hip-joint had been performed.

The meeting then adjourned.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Members on January 25:—

Ashby, Henry, M.D. Lond., Manchester.
Beckett, John, M.D. Glasg., Windermere.
Carpenter, Alfred, M.D. Lond., Croydon.
Haig, Alexander, M.B. Oxon., 23, Chepstow-villas, W.
King, David Alexander, M.B. Lond., 51, Pembridge-villas, W.
McConnell, James Frederick Parry, M.D. Aberd., Calcutta.
Phillips, Sidney Philip, M.D. Lond., 12, Radnor-place, W.
Richardson, Adolphus Joseph, London Hospital, E.
White, William Hale, M.D. Lond., 4, St. Thomas-street, S.E.

The following gentlemen were admitted Licentiates on January 25:—

Allen, Frank James, Shepton Mallet.
Bateman, Hinton Ernest, St. Bartholomew's Hospital, E.C.
Boxall, Robert, Cranleigh, Guildford.
Browne, Ralph Henry, Guy's Hospital, S.E.
Buol, Florian, Davos Platz, Switzerland.
Caiger, Frederick Foord, St. Thomas's Hospital, S.E.
Chadwick, Charles Montague, London Hospital, E.
Cookburn, Lestock Weatherley, St. Bartholomew's Hospital, E.C.
Codd, Arthur Frederick Gambell, 72, Clarendon-road, W.
Coward, Richard Courtenay, 41, Penywern-road, S.W.
Dimsey, Edgar Ralph, Middlesex Hospital, W.
Etches, William Robert, Guy's Hospital, S.E.
Graham, Samuel, Carnaughliss, Ligoniel, Belfast, Ireland.
Grant, James Alexander, jun., M.D. McGill, 103, Guilford-street, W.C.
Griffith, Walter Spencer Anderson, St. Bartholomew's Hospital, E.C.
Gwillim, Richard Davis Hoyle, Marlborough.
Hebbert, Charles Alfred, 7, Sanctuary, S.W.
Jones, Owen Clayton, City of London Hospital, Victoria-park, E.
Jones, William Hugh Fenton, 28, Duke-street, Manchester-square, W.
Kilham, Charles Speight, West Pelton, Chester-le-street.
Orford, John, 27, Villa-road, S.W.
Paget, Charles Edward, 212, Princes-street, Hanover-square, W.
Palmer, Frederick Stephen, M.D. Brux., Compton Lodge, East Sheen, S.W.
Power, Charles John, 3, De Laune-street, S.E.
Prangley, Henry John, West Cowes, Isle of Wight.
Rygate, David John, 126, Cannon-street-road, E.
Salmon, Arthur Guy, 37, Granville-square, W.C.
Sheppard, William John, Rotherwood, Oakhill-road, Putney, S.W.
Shore, Thomas William, 43, Beaumont-street, W.
Spitzly, John Henry, 9, Grange-road, N.
Sunderland, Septimus, Montague-road, Edgbaston, Birmingham.
Thring, Edward Thomas, University College Hospital, W.C.
Travers, Geoffrey Frederic, 18, Nevern-road, S.W.
Treaddder, Edward Stanley, Guy's Hospital, S.E.
Wakley, Thomas, 96, Redcliffe-gardens, S.W.
Waring, John Arkle, 39, Princes-gardens, S.W.
Winder, William Henry, 255, York-street, Cheetham, Manchester.
Wynter, Walter Essex, Templecombe, St. Margaret's, Twickenham.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 25th ult., viz.:—

Bluett, J. Duncan, Montague-street, W.C., student of University College Hospital.
Browne, R. Henry, L.R.C.P. Lond., Southend, of Guy's Hospital.
Bruce, R. M., L.S.A., Lordship-lane, of St. Thomas's Hospital.
Buksh, Raheem, Calcutta, of the London Hospital.
Coward, R. Courtenay, L.R.C.P. Lond., Penywern-road, W., of St. Thomas's Hospital.
Dent, H. L. Richards, L.S.A., Woolwich, of King's College Hospital.
De Prenderville, Arthur, Cornwall-road, W., of St. Mary's Hospital.
Gaudin, G. Charles, L.R.C.P. Edin., Jersey, of St. George's Hospital.
Goddard, E. Ernest, Cambridge-gardens, N.W., of King's College Hospital.
Huntington, William, Liverpool, of the Liverpool School of Medicine.
Long, J. W. Francis, Stamford-street, of Guy's Hospital.

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Paley, John, Bournemouth, student of St. Bartholomew's Hospital.
Pigeon, H. Walter, B.A. Cantab., Clifton, of Guy's Hospital.
Prangley, H. John, L.R.C.P. Lond., West Cowes, of St. Thomas's Hospital.
Shore, F. William, L.R.C.P. Lond., Southampton, of St. Bartholomew's Hospital.
Spitsby, J. Henry, L.R.C.P. Lond., Canonbury, of St. Mary's Hospital.
Tatham, C. J. Willmer, Dallington, of King's College Hospital.
Wallis, F. Charles, Southampton, of St. Bartholomew's Hospital.

Four candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the College. Nine candidates were referred for six months and three for three months. The following gentlemen passed on the 26th ult., viz.:—

Beves, Edward A., L.R.C.P. Edin., Ladbroke-grove, student of St. Bartholomew's Hospital.
Champ, J. Howard, L.S.A., Chelmsford, of Guy's Hospital.
Dimsey, E. Ralph, L.R.C.P. Lond., Highgate, of the Middlesex Hospital.
Downes, Howard, Canonbury, of University College Hospital.
Grün, E. Ferdinand, L.S.A., Putney, of the London Hospital.
Harding, C. O'Brien, Hornsea, of St. Bartholomew's Hospital.
Lewers, A. H. Nicholson, L.S.A., Gower-street, W.C., of University College Hospital.
Norry, W. Augustus, L.S.A., Wokingham, of the London Hospital.
Partridge, W. Thomas, Luton, of St. Bartholomew's Hospital.
Stewart, Rothsay C., L.S.A., Clifton-gardens, of King's College Hospital.
Wynter, W. Essex, L.R.C.P. Lond., St. Margaret's, of the Middlesex Hospital.

Eight gentlemen passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the College. Two candidates were referred to their studies for three months and five for six months. The following gentlemen passed on the 29th ult., viz.:—

Cave, J. Edward, L.R.C.P. Lond., Melbury Osmond, student of St. Bartholomew's Hospital.
Dalton, A. John, South Norwood, of Guy's Hospital.
Fairles, A. William, Seymour-street, W., of St. Mary's Hospital.
Griffin, A. Watson, Peterborough, of St. Bartholomew's Hospital.
Harlock, Harry, Ely, of University College Hospital.
Longman, Arthur, L.S.A., Andover, of St. Thomas's Hospital.
Miller, R. Booth, Newport, Isle of Wight, of St. Bartholomew's Hospital.
Montgomery, W. A. Dawson, M.B. Toronto, Toronto.
Plimmer, H. George, Waldegrave-road, S.E., of Guy's Hospital.
Roberts, Henry, L.S.A., Shaftesbury, of St. Bartholomew's Hospital.
Scanlan, A. de Courcy, L.S.A., Eastbourne, of the Westminster Hospital.

Six gentlemen passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the College; and seven candidates were referred, viz., one for three months, five for six months, and one for nine months. The following gentlemen passed on the 30th ult., viz.:—

Green, Henry, L.R.C.P. Edin., Norfolk-crescent, student of St. Mary's Hospital.
Halliburton, W. Dobinson, Upper Norwood, of University College Hospital.
O'Kane, Michael, L.S.A., Camberwell, of Guy's Hospital.
Parsons, C. William, L.S.A., South Hackney, of the London Hospital.
Treasure, W. B. Crawford, L.S.A., Crewkerne, of Charing-cross Hospital.
Trinder, Alfred Probus, Highgate, of St. Bartholomew's Hospital.
Watson, R. Walker, L.S.A., Highbury New-park, of University College Hospital.
White, Thomas H., L.S.A., Lincoln, of St. Bartholomew's Hospital.

Six candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted members of the College. Eight candidates were referred for six months, one for three months, and one for nine months. The total number of candidates examined was 175, against 123 for the corresponding period last year; of these, 67 were referred—19 for three months, 43 for six months, and 5 for nine months.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 25:—

Clarke, Charles Frederick, Crescent-road, Plumstead.
Evans, Willmott Henderson, Montagu-place, Russell-square.
Joaling, Charles Langford, The Parade, Epsom.
Murray, Charles Stormont, Cumberland-place, Hyde-park.
Orford, John, Villa-road, Brixton.
Vinrace, Edward Dennis, Hockley, Birmingham.

BIRTHS.

BRUCE.—On January 25, at 70, Harley-street, Cavendish-square, the wife of J. Mitchell Bruce, M.D., of a son.

DEWAR.—On January 30, at 132, Sloane-street, S.W., the wife of John Dewar, L.R.C.P., L.R.C.S., of a son.

LEACROFT.—On January 29, at Feckenham House, near Redditch, the wife of J. W. Leacroft, M.B., of a daughter.

LEWERS.—On January 4, at 88, Gower-street, Bedford-square, the wife of Arthur H. N. Lewers, M.R.C.S., L.R.C.P., of a daughter.

SMYTH.—On January 20, at Pelham House, Poole, Dorset, the wife of Hatton Smyth, M.D., of a son.

WEIR.—On January 29, at Ghasipur, India, the wife of Dr. P. A. Weir Principal Assistant Opium Agent, of a son.

MARRIAGES.

CLEGG—MORGAN.—On January 11, at Cloudesley-square, N., John Hague Clegg, M.R.C.S., of Stockton-on-Tees, to Alice Louise, third daughter of C. J. Morgan, Esq., of Barnsbury-park, N.

HOYLAND—HARDY.—On January 25, at Hatfield, Yorks, Stanley Stenton Hoyland, M.R.C.S., to Mary Florence Maude, younger daughter of George Hardy, LL.D.

JOBSON—SMITH.—On January 25, at Ashwood, Broughty Ferry, N.B., Surgeon-Major William Jobson, Army Medical Department, to Jane Amelia, daughter of Thomas Smith.

LEIGH—JONES.—On January 24, at Cefn Coed, Breconshire, William Watkin Leigh, M.R.C.S., L.R.C.P., eldest son of John Leigh, F.R.C.S., J.P., of Llanfabon, Glamorganshire, to Jessie Louisa, youngest daughter of William Jones, Esq., of Glanyrafon, Cefn Coed, Breconshire.

DEATHS.

BROWN, RICHARD, M.D., late of Cobham, Surrey, and Hove, Sussex, at Newlands, Ryde, I.W., on January 28, aged 61.

DUCAT, GERTRUDE, youngest daughter of Andrew D. Ducat, M.D., at Gloucester House, 154, St. Paul's-road, Highbury, on January 25, in her 3rd year.

DUIGAN, JOHN PHILIP, M.D., at Gainsborough, on January 25, in his 61st year.

GAUNT, JOHN SMITH, M.R.C.S., at Alvechurch, Worcestershire, on January 19, aged 65.

MIDDLETON, JOHN, M.D., L.R.C.S., at 17, Straiton-place, Portobello, on January 16.

PINK, JANE CHARLOTTE, wife of Henry N. Pink, M.R.C.S., of Greenwich, on January 24, aged 62.

TAYLOR, ROBERT, M.D., at 10, Portman-square, W., on January 26.

THOMAS, Surgeon-Major JOHN RICHARD, Fellow of the Royal Geographical Society, at The Cliff, Goodwick, Fishguard, on January 16.

SAVAGE, JOHNSON, M.D., Deputy Inspector-General of Army Hospitals, late of the Royal Artillery, at Dover, on January 27, in his 79th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, PARK-PLACE, MANCHESTER.—Honorary Surgeon. Candidates must be Fellows of one of the Colleges of Surgeons of the United Kingdom, or hold a degree in surgery granted after examination by a University recognised by the General Medical Council. Applications, with testimonials, to be sent to the Secretary, not later than February 6.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, PARK-PLACE, MANCHESTER.—Honorary Assistant Medical Officer. Candidates must be either physicians or surgeons. Applications, with testimonials, to be sent to the Secretary, not later than February 6.

LONDON FEVER HOSPITAL, LIVERPOOL-ROAD, ISLINGTON, N.—Assistant-Physician. (*For particulars see Advertisement.*)

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—House-Surgeon. Salary £100 per annum, with board and residence. Candidates must be medical graduates of a University or members of a College of Surgeons of the United Kingdom, registered, and unmarried. Applications, with testimonials, etc., to be addressed to the Chairman of the Committee, Vicarage, Portsmouth, on or before February 8.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Salary £75 per annum, with board, lodging, and washing. Candidates must be qualified to practise in medicine and surgery, duly registered under the Act, and unmarried. Applications, with testimonials, to be sent to Thomas Taunton, Assistant-Secretary (from whom any further particulars may be obtained), on or before February 6.

SALFORD AND PENDLETON ROYAL HOSPITAL AND DISPENSARY.—Honorary Surgeon. Candidates must be registered Members of the Royal College of Surgeons of England, Edinburgh, or Dublin. Applications, with testimonials, to be sent to the Secretary, at the Hospital, on or before February 6.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Bromsgrove Union.—The Alvechurch District is vacant by the death of Mr. John Smith Gaunt: area 10,999; population 2806; salary £36 per annum.

Bromyard Union.—Mr. John W. Hinings has resigned the Cradley District: area 11,926; population 2692; salary £70 per annum.

Foleshill Union.—Mr. E. J. Pritchard has resigned the Shilton District: area 4585; population 850; salary £15 per annum.

Skipton Union.—The office of Medical Officer of the Workhouse is vacant by the death of Mr. W. Jackson: salary £45 per annum.

APPOINTMENTS.

Ecclesall Bierlow Union.—Howard H. Dummere, M.R.C.S. Eng., L.R.C.P., L.S.A., to the Fifth District.

Lymington Union.—Henry William Hartford, L.K. & Q.C.P., L.M., and L.R.C.P. Ire., to the Fourth District.

Monmouth Union.—Thos. G. Prosser, M.R.C.S., L.S.A., to the Rockfield District.

Spilsby Union.—Charles Walls, L.R.C.P. and M.R.C.S. Lond., to the Burgh District.

Wolstanton and Burslem Union.—Frank de Beauchamp Collenette, L.R.C.P., M.R.C.S., and L.S.A. Lond., to the Silverdale District.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, January 27, 1883.

BIRTHS.

Births of Boys, 1352; Girls, 1281; Total, 2670.
Corrected weekly average in the 10 years 1873-82, 2619·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	807	741	1548
Weekly average of the ten years 1873-82, corrected to increased population ...	944·4	950·2	1894·6
Deaths of people aged 80 and upwards ...	...	...	93

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	2	4	4	5	...	5	...	2
North ...	905947	1	7	9	7	7	1	4	...	2
Central ...	282238	...	3	4	3	2	1	2	1	...
East	697733	1	7	17	3	6	...	2	...	3
South	1265927	6	14	6	7	17	...	4	...	6
Total	3816483	8	33	40	24	37	2	17	1	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·838 in.
Mean temperature	38·9°
Highest point of thermometer	50·0°
Lowest point of thermometer	28·8°
Mean dew-point temperature	33·6°
General direction of wind	Variable.
Whole amount of rain in the week	0·38 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Jan. 27, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Jan. 27.	Deaths Registered during the week ending Jan. 27.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2670	1548	20·4	50·0	28·8	38·9	3·83	0·38	0·97
Brighton	111262	71	27	12·7	48·0	32·0	39·3	4·06	0·75	1·90
Portsmouth ...	131478	101	43	17·1	...	...	...	...	...	...
Norwich	89612	51	41	23·9	...	...	...	...	...	...
Plymouth	74977	45	43	29·9	52·8	35·9	44·3	6·84	0·85	2·16
Bristol	212779	141	67	10·4	49·8	30·5	40·7	4·83	1·01	2·57
Wolverhampton .	77557	31	38	25·6	44·5	29·7	36·6	2·56	1·01	2·57
Birmingham ...	414846	291	182	22·9	...	...	...	...	...	...
Leicester	129483	78	40	16·1	46·0	28·0	37·3	2·95	0·52	1·32
Nottingham ...	199349	144	71	18·6	45·6	26·5	37·0	2·78	0·38	0·97
Derby	85574	61	30	18·3	...	...	...	...	...	...
Birkenhead ...	88700	73	31	18·2	...	...	...	...	...	...
Liverpool	566753	421	338	31·1	48·0	33·7	38·7	3·72	0·67	1·70
Bolton	107862	96	42	20·3	...	...	...	...	...	...
Manchester ...	339252	235	188	28·9	...	...	...	...	...	...
Salford	190465	132	95	26·0	...	...	...	...	...	...
Oldham	119071	78	52	22·8	...	...	...	...	...	...
Blackburn	108460	76	61	29·3	...	...	...	...	...	...
Preston	98564	69	41	21·7	...	...	...	...	...	...
Huddersfield ...	84701	41	29	17·9	...	...	...	...	...	...
Halifax	75591	47	38	26·2	...	...	...	...	...	...
Bradford	204807	111	83	21·1	44·3	32·7	37·4	3·00	1·68	4·27
Leeds	321611	233	150	24·3	51·0	30·0	38·4	3·55	0·76	1·93
Sheffield	295497	221	154	27·2	43·0	29·5	36·8	2·67	2·31	5·87
Hull	176296	125	103	30·5	43·0	25·0	35·5	1·95	1·16	2·95
Sunderland ...	121117	94	71	30·6	57·0	32·0	42·2	5·67	0·57	1·45
Newcastle	149464	119	64	22·3	...	...	...	...	...	...
Cardiff	90033	63	33	19·1	...	...	...	...	...	...
For 28 towns ...	8620975	5918	3703	22·4	57·0	25·0	38·7	3·72	0·93	2·36
Edinburgh	235946	152	96	21·2	45·6	30·4	37·4	3·00	0·76	1·93
Glasgow	515589	384	293	29·7	49·0	32·0	38·8	3·78	1·66	4·22
Dublin	349885	216	234	34·9	52·0	30·7	41·8	5·45	1·01	2·57

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·84 in. The highest reading was 30·49 in. on Tuesday morning, and the lowest 28·90 in. on Friday morning.

APPOINTMENTS FOR THE WEEK.

February 3. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Mr. R. Bosworth Smith, "On Sir John Lawrence and the Mutiny, 1857."

5. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Royal Institution, 5 p.m. General Monthly Meeting.

Royal College of Surgeons of England, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture II.

Odontological Society of Great Britain, 8 p.m. Inaugural Address by the President. Casual Communications. Mr. Sewill will open a discussion on the Proofs of the Present Theories of Caries in the Teeth. Mr. Stevenson will explain his Electric Lamp.

Medical Society of London, 8½ p.m. (Dr. A. Ernest Sansom, "On the Treatment of some Forms of Valvular Diseases of the Heart—Mitral Stenosis; Lesions of Aortic Valves." (Lettsomian Lectures—III.)

6. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. W. C. Williamson, "On Primæval Ancestors of Existing Vegetation."

Pathological Society, 8½ p.m. Dr. Mahomed—1. Clot from Pulmonary Artery; 2. Cancer of Undescended Testis." Dr. Norman Moore—1. Deep Ulceration of Cranium; 2. Rheumatic Arthritis. Dr. Samuel West—1. Tubercle Bacilli; 2. Aneurism of Arch of Aorta (two cases). Mr. Sutton—Rickets in a Lizard Mr. Godlee—Unilateral Anophthalmos (living specimen). Dr. Silcock—Aneurism of Abdominal Aorta. Mr. Lockwood—Abnormality of the Bones and Muscles of Shoulder-Joint.

7. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

Royal College of Surgeons of England, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture III.

Epidemiological Society (Council Meeting, 7½ p.m.), 8 p.m. Deputy Surgeon-General (retired) A. C. C. De Renzy, C.B., "On the Sanitary State of the British Troops in Northern India."

Obstetrical Society of London, 8 p.m. Annual Meeting. Election of Officers and Council. Specimens will be shown. President's Address. Dr. Godson—Clinical Cases of Interest, with Remarks thereon.

8. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Spectroscope and its Applications."

9. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture IV.

Clinical Society of London, 8½ p.m. Mr. Shuter, "On Subperiosteal Amputation at the Hip-joint." Mr. Bennett May, "On a Case of Nephro-Lithotomy—Stone weighing 473 grains—Complete Recovery." Dr. J. K. Fowler, "On Two Cases of Pseudo-Hypertrophic Paralysis in Adults" (patients exhibited). Mr. Godlee, "On a Case of Fracture of the Radius and Dislocation Forwards of the Ulna at the Wrist, in which the lower end of the latter bone was removed to effect reduction" (patient to be shown).

Royal Institution (Council Meeting, 6 p.m.), 9 p.m. Mr. M. D. Conway, "On Emerson and his Views of Nature."

Hydrophobia in Paris in 1882.—Dr. Dujardin-Beaumetz read, at a meeting of the Conseil d'Hygiène, a report on three cases of hydrophobia, one of them having been produced by a bite on the hand, and the other two by simple contact of the tongue of the dog with the epidermis. The number of deaths from hydrophobia during 1882 amounted to 10, the number having been 20 in 1881.—*Lyon Méd.*, January 20, from *Abeille Médicale.*

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Steam and Steam-Draft Kettles.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the number of your journal for February 22, 1879, there is a letter written by the late Mr. W. D. Napier on "Steam and Steam-Draught Inhalers," which was occasioned chiefly by the following circumstances:—

For several years Mr. Napier, with whom I was very intimately acquainted, and whose interest in mechanical science was well known, discussed from time to time the experiments which I was engaged in upon the properties of a steam jet as a motive force in the construction of inhalers and similar machines, apart from its application to medical purposes. The subject was one of considerable interest, as it had engaged the attention of the leading engineers, and is still a matter on which there are great differences of opinion. It was at Mr. Napier's suggestion that I was induced to apply the results of experiments to practical purposes, and with the feeling that no better use could be made of any kind of knowledge than by adding to the power of the physician and surgeon to relieve suffering.

Early in 1879 there was a meeting of the Medical and Chirurgical Society, at which an apparatus was exhibited by Mr. R. W. Parker, which was such a direct imitation of my steam-draft inhaler that Mr. Napier pointed it out to the meeting, and the following morning called on me to say that he could not allow the circumstances to pass without protest. I particularly begged him to give Mr. Parker all the benefit of any merit he might have shown in this apparatus, and to act independently of me, as no one would be more pleased than myself to see others improving on what I had done. The letter which he addressed to you was the result of his reflections.

This week an advertisement has appeared by J. Allen and Son in the medical journals, and is circulated among the profession, which would lead to the belief that Mr. Parker had introduced to the profession a valuable article.

When I inform you that Mr. Parker was House-Surgeon at the Children's Hospital, where I was engaged in using my machine in various ways, it is unnecessary to show what opportunities he had for taking advantage of my special knowledge of the subject. I could easily point out in what respects Mr. Parker's machine shows his ignorance of the scientific principle on which the steam-draft inhaler depends, and that instead of being an improvement it is the contrary.

By the publication of this letter with that of Mr. Napier you will greatly oblige Yours, &c., Robert J. Lee.

6, Savile-row, W., January 20.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I thank you for giving me the opportunity of replying to Dr. Lee's letter in the same number of your paper as that in which the letter itself appears.

I am sorry that Dr. Lee should feel aggrieved by Allen's advertisement of a croup-kettle, in which the principle of the steam-draft was, at my suggestion, introduced. I acknowledged both at the Royal Medical and Chirurgical Society, and in my little work on Tracheotomy (page 41), my indebtedness to Dr. Lee for the idea. Having been House-Surgeon at Great Ormond-street (to which hospital Dr. Lee was appointed Assistant-Physician about the same period), I was acquainted with Dr. Lee's inhaler; this allows me authoritatively to assert that Allen's croup-kettle is *not* an imitation of Dr. Lee's instrument. Moreover, the croup-kettle is intended for a totally different purpose to that for which the inhaler was invented and used.

Dr. Lee, in the foregoing letter, says that the subject—a steam jet as a motive force—"had engaged the attention of the leading engineers, and is still a matter on which there are great differences of opinion." This statement at once disposes of any claim to the invention of the principle, which Dr. Lee may seem to possess. Then he states, "it was at Mr. Napier's suggestion that I was induced to apply the results of experiments to practical purposes." So that, in reality, it is to the late Mr. Napier, "whose interest in mechanical science was well known," and not to Dr. Lee, that we owe the introduction of the steam-draft at all into practical medicine. I must apologise to Dr. Lee for having hitherto credited him with the idea.

I had a long conversation with Mr. Napier at the meeting of the Medical and Chirurgical Society referred to in Dr. Lee's letter, and, among other things, I expressed to him my regret that Dr. Lee had not accepted my invitation to inspect the first Allen's kettle at my house along with me; and also to be present at the meeting and to say his say about it, instead of entrusting his remarks to a second person—for I gathered from Mr. Napier that he had come practically at Dr. Lee's request to say that which I venture to think would have come with much better grace from Dr. Lee himself.

Dr. Lee says he "could easily point out in what respects Mr. Parker's machine shows his ignorance of the scientific principle on which the steam-draft inhaler depends." I am pleased, for Dr. Lee's sake, that there is at least this difference between his machine and mine. In actual use I can assert, however, that the croup-kettle answers admirably the purposes I had in view in suggesting it. I must apologise, sir, for trespassing so far on your space, in a letter which, so far as I am concerned, will be final. I have been anxious, while doing justice to Dr. Lee, to defend myself against his charge of mechanical plagiarism. I am, &c.,

London, January 30. Robert W. Parker.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—A correspondence is taking place in the medical press about our steam-draught kettle, as advertised in this and the other medical papers. In justice to Mr. Parker we desire to say that we alone are responsible for the advertisement and the use of this term, "steam-draft"; and would also say that, beyond having suggested this machine to us, Mr. Parker has no personal interest of any kind in our croup-kettle.

A letter appeared in your columns some time ago from Mr. D. Napier, stating that ours was an imitation of a machine in use at Great Ormond-street. This statement we desire to say is quite inaccurate; and we challenge Dr. Lee to produce the instrument if it existed. We are, &c.,

21 and 22, Marylebone-lane, W. James Allen and Son.

Professor Parker, F.R.S.—This gentleman will commence his annual course of nine lectures, "On the Metamorphosis of Suctorial Fishes and Batrachia," in the Theatre of the Royal College of Surgeons, this day (Friday), and will be succeeded by Professor W. H. Flower, F.R.S., who will deliver nine lectures "On the Anatomy of the Horse and its Allies," followed by Mr. Frederick S. Eve, F.R.C.S. (the Erasmus Wilson Lecturer), who will deliver three lectures "On Cysts and Cystic Tumours in General."

A New Magistrate: Crewe.—Mr. William Hodgson, surgeon, has been appointed a magistrate for the borough.

A Thorough Examination.—The Sanitary Committee of the Dundee Police Commission, on considering what steps should be taken with the view of checking the spread of diphtheria and fever which prevailed in the north and north-eastern district of the town, decided to appoint a sub-committee, to engage a practical plumber to inspect the drains and connexions in the houses of the infected districts, and the burgh surveyor and his staff were to be asked to co-operate, with the view of making a thorough examination of the street sewers at various points.

The late Mr. Darwin.—The Swedish enthusiasm for the memory of the Professor is demonstrated by the fact that the public subscriptions for the memorial to the great naturalist already amount to upwards of £4000.

Dr. Williams, Liverpool.—Wadd does not mention it in his interesting book, but a recently published correspondence states that it was the celebrated Garrick who wrote the epigram on Sir John Hill, viz.:—

"For physic and farces
His equal there scarce is;
His farces are physic,
His physic a farce is."

Hydropot.—The Head Constable reports that drinking has increased 40 to 50 per cent. in Cardiff since the advent of Sunday closing.——The Royal Naval Reserve men in Stornoway have resolved to form a temperance association embracing the members of their own body only.——The Birmingham Coffee-house Company has declared a dividend of 10 per cent. for the year, and the directors have been able to give bonuses amounting to £338 to the officers and *employés* of the Company.

"First Aid" in the Hunting-field.—The St. John Ambulance Association class formed at Bicester by Viscountess Valentia, who acted as honorary secretary, has been examined by Dr. Potter. Lady Valentia and Lady Brassey have set a worthy example to the wives of other masters of hounds. There is often ample opportunity for their skill in rendering "first aid" in the hunting-field.

"One and All," Fowey, Cornwall.—For your proposed "Cornish Worthies," you may know that the celebrated Dr. Theophilus Lobb was one of them. There is a good portrait of him. He was born August 17, 1678, and was a successful Dissenting preacher. He was elected a Fellow of the Royal Society. The late Mr. William Coulson was a Penzance man. Mr. Clift, the Conservator of the Hunterian Museum, was born in Bodmin. Dr. William Munk is a Devonshire man—born, we think, in Honiton. Write to Mr. Stone, late of the College of Surgeons, and your letter will be forwarded to him.

Patent Medicines: Italy.—A law has just come into force in Italy, which prohibits the sale of patent medicines throughout the kingdom unless the precise composition of the medicine is stated. This important decree has been promulgated by the Minister of the Interior, the Customs, and the sanitary authorities.

The Lichfield Trust for Clinical Instruction, Oxford.—In a Congregation holden last week at this University, an addition to the form of statute respecting this trust, providing that the statute shall remain in force only until the end of the next term after any vacancy may occur in the Regius Professorship of Medicine, was carried on a division by a majority of twenty-two, there voting *placet* twenty-seven, *non-placet* five.

A Want of Vaccine Lymph, and the consequent Difficulties.—The Alverston Board of Guardians had brought under their notice lately an application by Surgeon O'Donovan, of the Royal Artillery stationed at Fort Rowner, to Dr. Hunter, the public vaccinator. It appears that there were thirty recruits at the fort who required to be vaccinated, but as he (Surgeon O'Donovan) was short of lymph, he applied to the public vaccinator to supply him with some. The latter replied that he would in his private capacity vaccinate the men or supply the lymph on receipt of the usual fees, but if he were required to vaccinate the men in his capacity as public vaccinator he must decline to do so. Hereupon Surgeon O'Donovan informed him that there was no money which could be appropriated from the Army funds for vaccination. The Clerk advised the Board of Guardians that if they acceded to the present application they might be called upon to vaccinate the whole of the marines. A suggestion was made by a Local Government Board Inspector, who happened to be present, that the correspondence should be forwarded to the central authority,—which was adopted.

Ignoramus.—The results of the Education Act are seen by comparison of the work done in 1870, when the Education Act was passed. An accommodation for 1,878,000 scholars has expanded to 4,536,000; the average attendance has increased from 1,152,000 to 3,015,000; and the Government grants have grown from £1,072,000 to £3,599,000.

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Irregularities at a Workhouse.—In reference to this matter, which we noticed last week, the Atcham Board of Guardians have decided not to press for the resignation of the medical officer. The latter has, it is stated, rebutted the charges the central authority made against him, and the guardians have appealed against the inspector's decision in the matter. Considerable public interest has been felt in the case.

London Smoke.—*A propos* of the smoky atmosphere of the metropolis, it seems, according to the *Citizen*, that, owing to the mildness of last year and to the increased use of gas-stoves, there has been an extraordinary decrease in the consumption of coal and the production of smoke. The statistics of the City dues upon the entry of coal show tolerably accurately that, notwithstanding the increase in population of the metropolis, nearly two million tons less of coal were received within the area of the City taxation in 1882 than in the previous year.

Colour-Blindness.—Dr. J. Argyll Robertson, in a lecture on "The Eye, the Organ of Vision," delivered at the Edinburgh Health Society, spoke of colour-blindness. He cited a number of examples of colour-blindness, and stated that an examination of above 50,000 males showed that about 4 per cent., or one in twenty-five, of the whole population were colour-blind; while colour-blindness was much more rare in females, only one in five or six hundred being thus afflicted. The large extent to which this defect existed among males showed the necessity there was for a careful examination as to their colour-sense of a large number of men employed upon railways, steamers, etc.

A Novel Habitation.—The King's Norton Rural Sanitary Authority prosecuted a man for living in a "house unfit for habitation," namely, two old railway-carriages. It appears that the carriages, with four others, were placed in a field by the Harborne (Birmingham) Local Board as a "hospital" for small-pox patients, but had not been used.

Timely Precautionary Improvements.—Amid the very natural doubts as to the adequacy of the present means of exit from our theatres in the event of any sudden emergency occurring, it may be stated that the structural alterations required by the Metropolitan Board of Works at Drury-lane Theatre have been carried out to the satisfaction of the superintending architect, and the works executed have been accepted as a compliance with the terms of the Board's notice. Similar improvements are in progress in other theatres under the supervision of the Board's architect, the completion of which will remove any existing apprehension of danger in the public mind should an accident happen.

The Middlesex Coroners.—The Middlesex magistrates, at their recent meeting, ordered the disbursement of the following accounts:—Sir John Humphreys, salary £551 18s. 8d., expenses £478 14s. 6d.; Dr. J. D. Thomas, salary £524 18s. 4d., expenses £561 19s. 6d.; Dr. Diplock, salary £300, expenses £358 3s.; Mr. Payne, salary £13 12s. 4d., expenses £38 19s. 6d.; Mr. C. St. Clair Bedford, salary £125, expenses £123 18s.: making a total of £2697 3s. 10d.

In Memoriam.—A lady has given £500 to the Chelsea Hospital for Women for the purpose of naming after her deceased sister one of the memorial wards in the new building, which is situated in the Fulham-road, and will be ready for occupation in the approaching spring. This lady has also given £50 for the furnishing of the ward. Of the seventeen wards there are now but three which remain to be furnished by special donations of a similar amount. How many beds does each such "ward" contain, we wonder?

Services Worthy of Appreciation.—The departure for Egypt of Lieutenant-Colonel F. Duncan, R.A., the deputy chairman of the Committee of the St. John Ambulance Association—who has been appointed to the command of the artillery of Sir Evelyn Wood's army—is felt to be a great loss to the Association. Colonel Duncan has devoted, since the establishment of the Association five years ago, nearly all the time he could spare from his professional and public duties to the extension of the movement, and much of its success may be attributed to his zealous advocacy and energy in all parts of the kingdom.

The very Poor and the Distinction of "Doctor."—A graduate in medicine at a university in Scotland once declared that he found that those of his poorer patients in London who happened to have been under the care of a druggist for a little while, almost invariably spoke of him as "Dr." Brown or Jones, as the case might be, but placed no such distinction before the name of the man who had really taken that degree. The poor often, no doubt, apply to a druggist for medical advice under the belief that it will be as good and cheaper than that of a qualified medical practitioner, and evidently regard the former as entitled to the prefix in question.

Foiled.—Three years ago the Medical Officer of Health for Brighton condemned an area under the Artisans' Dwellings Act, and the Town Council, accepting his report, prepared to carry out an improvement scheme. Difficulties ensued, which delayed the improvement proposed being carried out; but a new member of the Council a few days since urged that the work should no longer be deferred. It appears, however, that the property-owners in the district in question had subsequently so improved the property with the view of obtaining increased compensation that the necessity to enforce the scheme had ceased to exist. So many members of the Council coincide with this view that there is little prospect of the scheme being revived.

Citizen.—The patients' pence paid at the Finsbury Dispensary last year amounted to £257—the largest amount ever received from that source. This small payment of one penny demanded of each patient was very cheerfully paid by them.

Expressive.—A publican displays a sign bearing the simple but expressive words "Nose Paint."

Unhealthy Position of a Cistern.—The owner of a house in Peckham-park-road has been summoned by the Vestry of St. Giles, Camberwell, under the Nuisances Removal Act. It appears that in the house of which the defendant was the proprietor there was a cistern under the floor of a water-closet in such a position as to be a nuisance and injurious to health. After hearing the evidence on both sides, the magistrate held that the cistern was in a position which was injurious to health; or, in the words of the Act, "the premises are so constructed as to be injurious to health." He therefore made the order asked for by the Vestry for the removal or abatement of such nuisance.

Marcus.—The last year's Hospital Sunday collections at Birmingham were for the amalgamated charities of the town, and amounted to £5195.

COMMUNICATIONS have been received from—

Messrs. Baillière et Fils, Paris; The Registrar of the Apothecaries' Hall, London; Mr. Wm. Gurner, London; Mr. T. J. Barnardo, London; Dr. W. R. Smith, Cheltenham; Mr. John Bellamy, Local Government Board, London; Mr. J. M. Stone, London; Dr. Alexander, Liverpool; Dr. Willoughby, London; The Honorary Secretary of the Medical Society of London; Mr. J. Chatto, London; The Honorary Secretary of the Obstetrical Society of London; The Honorary Secretary of the Pathological Society of London; Mr. J. Broadbent, Manchester; Messrs. Allen and Son, London; Mr. White Wallis, London; Dr. R. S. Archer, Liverpool; Dr. A. T. Thomson, Glasgow; The Registrar-General for Scotland, Edinburgh; Mr. Shirley F. Murphy, London; The Secretary of the Royal Institution, London; Mr. J. F. Underwood, London; The Secretary of the Agricultural Hall, London; Dr. J. W. Moore, Dublin; Dr. Andrew Clark, London: Dr. C. Mercier, Dartford; Dr. J. Mitchell Bruce, London; The Secretary of the Irish Medical Association, Dublin; Dr. W. H. Pearse, Plymouth; The Honorary Secretary of the Clinical Society of London.

BOOKS, ETC., RECEIVED—

Die Massenverhaltnisse des Menschlichen Herzens, von Wilhelm Muller—On some of the Advances which have been made in Surgery during the Last Decade, by James Whitson, M.D., F.F.P.&S.G.—The Value of Graduated Pressure in the Treatment of Diseases of the Vagina, etc., by Nathan Bozeman, M.D., New York—Sessional Proceedings of the National Association for the Promotion of Social Science—What is Religion? by Robert Lewins, M.D.—Curvatures of the Spine, by R. Noble-Smith, F.R.C.S., L.R.C.P.—The Life and Work of St. Paul, part 13—China Imperial Maritime Reports—Medical Reports for the Half-year ended March 31, 1882—Annual Report of the Glasgow Lock Hospital for the Year 1882—Report on the Health, etc., of the Borough of Birmingham for the Quarter ending December 30, 1882—Hahnemann, by R. E. Dudgeon, M.D.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Deutsche Medicinal-Zeitung—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Philadelphia Medical Times—Evening Star, Wolverhampton, January 25—An Ephemeris of Materia Medica, etc.—Boy's Own Paper—Girl's Own Paper—Sunday at Home—Leisure Hour—Friendly Greetings—Archives de Neurologie—Journal de Médecine—Students' Journal and Hospital Gazette—Ciencias Medicas—Sanitarian—American Journal of the Medical Sciences—Liverpool Medico-Chirurgical Journal—Therapeutic Gazette—Ophthalmic Review—New York Medical Journal—Detroit Lancet—National Anti-Compulsory-Vaccination Reporter.

The Paris Night-Service.—Dr. Passant, reporting for the last quarter of 1882, states that the number of night-visits paid was 1830, being 178 more than in the same quarter of 1881. Of these visits 36 per cent. were paid to men, 49 to women, and 15 to children less than three years of age. The mean number of visits per night was 19 1/5, as compared with 17 2/5 of the same quarter in 1881. In 53 instances death had taken place prior to the arrival of the medical practitioner. During the whole year 1882 there were 6891 visits paid—viz., 2472 to men, 3400 to women, and 1015 to children. The annual number during the first year was 3616, and in the seventh year (1882) 6891. The service during 1882 has been conducted by 658 medical practitioners and 185 midwives. The number of visits paid on account of metritis, uterine hæmorrhage, miscarriage, and labour amounted to 336.—*Gaz. des Hop.*, January 18. [The fee for a visit by any of the medical practitioners and midwives who have registered themselves as willing to attend to these night calls on the demand of the police, is ten francs, and the Municipal Council has just ordered that when an accouchement takes place at any of these visits the fee shall be twenty francs.]

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PRESIDENTIAL ADDRESS

DELIVERED BEFORE THE

CLINICAL SOCIETY OF LONDON.

By ANDREW CLARK, M.D., LL.D.,

Senior Physician to the London Hospital; President of the Society.

(*Concluded from page* 117.)

REVIEWING anew the completed transactions of the Society, I am struck with the inadequate representations found therein of that interesting and instructive group of clinical affections which is unconnected, except causally, with sensible structural alterations of the tissues and organs.

The group contains numerous members of divers sorts, and I cannot doubt that every one of them would repay thorough investigation with fresh additions to our knowledge of the origin, the nature, and the relations of disease. Many of them, familiar to experienced practitioners, have no sufficient recognition in medical literature, and a full account of them all would contribute, more than any other account that I can imagine, to a just understanding of the relations of dynamic to static conditions, and of physiological to pathological processes.

Let me make mention of such members of this group of affections as lie nearest my thoughts at this moment.

And first there is the morning agony of middle-aged nervous people, often the herald of melancholia. A man awaking at early dawn is conscious of undefinable malaise and unrest: his mental and moral outlook become dark and gloomy; aching pains arise in the limbs; unable to lie still, he tosses restlessly about his bed; the malaise deepens into distress, and he groans; a cold sweat breaks forth over all his body; and then in a few minutes the attack subsides, and the patient finds himself in his accustomed health and spirits.

And in the second place I will mention the temporary incomplete hemiplegias with aphasia which, closely allied to migraine, occur often in women, and occasionally in men otherwise healthy and strong. A woman neither hysterical nor nervous suddenly fails to see distinctly. The field of vision is invaded by moving, zig-zag lines of light, arranged either in circles or in forms resembling the outlines of a fortification. There are slight ringing noises in the ears, and trifling confusion of thought; numbness follows about the tip of the tongue, on one side of the lips and mouth, in the right thumb, and more rarely in the right leg; the connexion between ideas and their correlated words is interrupted; articulation falters; there is perhaps passing loss of power in the right hand or arm; the breathing and the pulsations of the heart are quickened; the feet and hands become moist and cold; and then, after a period of time varying from ten to thirty minutes, with or without a slight headache, the attack ends with a few deep sighs, and a discharge of limpid urine. Curiously enough, when headache occurs early in attacks of this kind, and is severe, sickness soon follows; disturbances of speech, sensation, and motion seldom arise; and the distinctions which, in its fully developed form, separate this affection from migraine are obliterated.

In the third place, there is the dry, barking cough of boys and girls about the age of puberty. This curious, but not uncommon, affection is characterised chiefly by recurring paroxysms of a dry, guttural cough, which resembles the barking and the howling of a dog. This affection is usually associated with various slight disorders of the nervous system, and with defects of will; it is greatly influenced by the emotions, and sometimes instantaneously cured by sudden surprise or shock. It is occasionally so distressing to others that servants, and even friends, cannot stay in the house in which the patient dwells; it is only in a small degree amenable to treatment; lasts from three or four months to as many years; and ends, in my experience, always in complete recovery.

In the fourth place I would call attention to the cases grouped under the term renal inadequacy—cases in which, without discernible structural alteration of the kidneys, they are nevertheless incapable of producing a urine of sufficient density and of healthy constitution; cases in which, the blood getting charged with excrementitious matters, and nutrition and innervation becoming thereby disordered, the patients suffer in general health, fall immediately into peril from attacks of acute disease, and cannot, with ordinary chances of success or of safety, undergo a common surgical operation.

In the fifth place I will mention the numerous and important cases occurring among young persons in whom, under the strain of prolonged competitive examinations and great excitement of any sort, the urine temporarily falls in density, loses its healthy characters, and becomes albuminous. Of the young men competing for places in the Indian Civil Service Examination, I have ascertained by repeated personal examination that more than a tenth become albuminuric. And, not to weary you further with illustrations, necessarily imperfect, of this group of affections, I will conclude with merely mentioning the glycosuric storms which, without sensibly damaging the body or materially impairing health, come and go throughout a lengthened life; the gouty spasms of the diaphragm, so often mistaken for affections of the heart; and those strange cases of autochthonæmia, in which the blood, when divided into minute streams, is ready to clot on the slightest provocation from the structures around.

Next in importance to the work of the Society are the manner and the circumstances in which that work is done. Under these heads many reflections occur to me as worthy of being submitted to your consideration; but the time at my disposal is so short, and the list of cases for consideration so long, that I must confine myself to the setting forth of a very few of them.

The general meetings of the Society have been well attended, but whilst the junior members have been conspicuous by their presence, the senior members have been conspicuous by their absence. This is much to be regretted for the sake of the work of the Society and the discipline of its members. The seniors themselves suffer in manifold ways from their non-attendance. They miss the stimulus which comes from contact with youthful enthusiasm; they slide into stereotyped habits of thought, expression, and work; they lose their receptivity; they cease to adjust themselves to their ever-varying environments; and thus they become old, and the labour which should be life is transfigured into virtual death. The Society suffers, for it needs the larger experience, the wide views, the sharp insight, the cautious temper, the sober judgment of disciplined age to control, regulate, and carry to their best issues the minuteness of detail, the flow of imagination, the hasty generalisation, the speculative passion, and the dogmatic fury of our fervid youth. The pleas of pressing occupation and of consequent fatigue are doubtless true; but, nevertheless, they must be disallowed. For no good can be got without sacrifice; and the sacrifice of ourselves, even at the cost of suffering, is the only, or at least the chief, occasion of getting the strength which we need for the greater purposes of our lives.

. . . . . .

Of late years there has arisen in the domains of general literature, and of controversial theology, a habit of dealing with the relations of ideas to words, which is calculated to throw into confusion all the higher controversies of the time, and to inflict serious injury upon letters, the advancement of knowledge, and even the moral life of man. Under cover of a particular word, connected by long usage and by common consent with a sufficiently definite idea, a new idea, totally different from the old, is introduced, and is then used as if the one had become merged into the other, and as if there were no doubt or difference between them. For example: by a religious man, most people would understand a person devoutly loyal to his ideal of a Divine Ruler of the Universe, and fervent in his endeavours to die to himself that thereby he might live to God. But in these days all this has been changed: a man who is emotionally interested in anything—in art, or physics, or science—is a religious man. His sanctity is to be measured by his fervour. And morality has just this relation to this religion, that if it interferes with its culture, so much the worse for morality, which is a defect or a disorder that forthwith must be thrust aside. Now, this juggling with words and ideas, this throwing of dust into people's eyes so that controversies which

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cannot be settled may be stifled, this unpardonable sin in literature, is threatening to invade the realms of medicine, to confuse our discussions, and to render hopeless our progress in some departments of knowledge. For instance, the word tubercle is now often so used as to comprehend the most diverse ideas and to give apparent reconciliation to the most conflicting views. One may not object to an author using in his works words in the sense, usual or unusual, in which he has defined them; but one must protest with all one's power against the habit of a man who puts on the clothes of another man, and struts along the common highway pretending to be him.

. . . . . .

A few more words upon a different aspect of the working of our Society, and I will hasten to a conclusion. The cases recorded in our *Transactions* are for the most part admirable. It cannot justly be said of any one of them that it is destitute of interest or of instruction: many are fertile in fresh expedients for treatment, or conclusive in their bearing upon questions still contested or unsettled; and in not a few one finds the spell of original, creative, and far-reaching thoughts. But, however highly we may rate the value of any one of those cases standing by itself, its value for every purpose conceivable in our relation to it would be doubled, standing side by side with a record of the debate which the case had excited. For thus we should secure various views corrective or confirmatory of the position taken up by the narrator of the case; and we should obtain in this way what we can rarely, if ever, obtain in any other way, the ripe experience, judgment, and wisdom of practical and successful men. For the literary and practical faculties are seldom combined in one person; nay, in the course of time there often arises a sort of antagonism between them. The man who can observe, collect, classify, reason, invent, apply, is often, through the direction of nature or the force of circumstances, deficient in the qualifications necessary in one who is to speak and write with ease. His habit of accumulating and using knowledge for practical purposes weakens the power of methodical exposition, so that from his improving treasury we get fewer gifts, and the habit of continuous literary effort is not only neglected but shunned. And yet these are the very men whose knowledge is in an especial manner worth the getting; these are the men whose halting words, straight from the watching and questioning of nature, are oftentimes more precious than eloquent speeches: these are the men whose experiences, worked into a few clear ideas, packed into a few awkward sentences, and spoken in so many minutes, will sometimes bring to a conclusive close the discussions of many days. And when you cannot induce such men to write you may tempt them successfully to speak, and the temptation will not be made more difficult, nor the responsibility in speaking less, by the knowledge that their words will be preserved in that storehouse of facts, experiments, and reflections which the Society will give to the generations that follow after this.

And as of like, although not equal, importance, I shall venture to ask the Council to permit the publication in the *Transactions* of the reply made by the author of a paper to the criticisms which it has elicited. After reading in one of our journals the record of some interesting and important debate in which various, and perhaps contradictory, views have been advanced, we are told that "the author having replied, the Society adjourned." But what the author exactly said, how he dealt with the facts, cases, and criticisms adverse to his views, what he admitted or what he refuted, whether the case collapsed or succeeded, we are not informed. And, thus deprived of the most important witness, we decide the case according to prepossessions which neither necessarily nor usually influence us aright.

And now that our work awaits us let us turn to it with justly attempered minds. For surely the burden of it is not mere occupation or interest, not mere success or failure, not mere profit or loss, not mere distinctions for ourselves, nor even honour for the profession to which we belong. The true and serious burden of our work, as we smoothly say so often, and entirely realise so seldom, is the prevention of disease, the relief of suffering, and the prolongation of life. And this is the burden of it, not in a loose and general sense, but in a solemn and particular sense; it is the burden of it as it affects not merely many persons, but one person —one with whom we have to deal as if he were the sole object of interest and importance in the world, as if all the momentous possibilities of life and death, of the preservation and destruction of the family-life, and of all the good or evil which might issue out of recovery or of death, were centred in him, and depending upon us.

And important as our work thus is to the life and welfare of the individual and the family, it is not less important to the life and welfare of the State and the world. For this work, as it is sound or unsound, successful or unsuccessful, affects for good or evil the members of the population and its physical constitution—the supply of labour and the sources of wealth, the education of the young and the direction of their energies, the moral conditions of society and the objects of political organisations, the development of the race and the fulfilment of its destinies. Such reflections, common as they are, serve to remind us of what our familiarity with them makes us forget—the momentous and far-reaching influences of our work, and of the solemn responsibilities which lie upon us in undertaking and discharging it. Such reflections may further help us to cherish the spirit of self-sacrifice in active endeavour to overcome our ignorance of disease, till at last, with fulness more or less, knowing and foreseeing, preventing or controlling, stilling pain or curing disease, repulsing death, and renewing the conditions of continuing life, we may justify the boast of our father Hippocrates, and to men, in their extremities of need, give help like gods.

I cannot close these desultory and imperfect remarks without adverting to the honour which you have conferred upon me in electing me to the presidential chair. It is an honour which, although unanticipated and unsought, is not unvalued. I regard it, indeed, as the highest honour which I or any physician could receive. For titular honours may be got by Royal favour, or the influence of a great Minister, or may fall upon one through accidents of position and of service. But this honour no favour, influence, or accident can purchase. It is a spontaneous gift of the profession, and the recipient of the honour must be free from reproach, and at least credited with some sort of merit. I do not deceive myself with the thought that I am sufficiently worthy of this great honour; nor do I forget that there are others before me worthier of it than I. But I am not here to-night to quarrel with your judgment. Humbly and gratefully accepting it, I shall strive to justify it by endeavouring, in singleness of heart and fervour of purpose, to co-operate with you in the divine work which you are doing for the relief of suffering, the advancement of knowledge, and the higher discipline of ourselves for the better service of both.

THE STONE TESTIMONIAL.—It is understood that a bill of exchange for £5, sent through Professor Flower by Dr. George Bennett, F.R.S., F.R.C.S., of Sydney, New South Wales, and another for ten guineas, sent by Dr. Thomas Cawley, F.R.C.S. Ed., of Adelaide, South Australia, have been received by the Honorary Secretary to the Fund, Mr. James Shuter, F.R.C.S.

SYNTHESIS OF URIC ACID.—An important discovery in physiological chemistry has recently been made in the chemical laboratory of Prof. E. Ludwig, of Vienna, by Dr. Horbaczeoski. Prof. Ludwig announced it to the Society of Physicians, November 3. Dr. Horbaczeoski heated urea and glycocol very quickly up to 230° C., and then allowed the two substances to fuse until evolution of gas ceased. A brown mass resulted, from which uric acid was separated by a very complicated process. Uric acid thus obtained presents under the microscope the characteristic whetstone-shaped crystals, and when tested reacts in a perfectly satisfactory manner. This discovery is the first synthesis in physiological chemistry that has ever been made. It will be remembered that Wöhler succeeded in the formation of uric acid from ammonium cyanate. This discovery was not a synthesis in the true meaning of the word, inasmuch as a more complex combination of elements was not built up from simpler combinations. Then again, Dr. Horbaczeoski formed uric acid out of urea and glycocol, two substances found normally in the living human body. While the significance of this discovery is great as an absolute fact in physiological chemistry and biology, it probably will lead to important results in clinical medicine and therapeutics. — *Vienna Correspondent of Phil. Med. News*, December 9.

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ORIGINAL LECTURES.

TWO

CLINICAL LECTURES ON URETHROTOMY.

By T. HOLMES, F.R.C.S.

Lecture I.—Perinæal Section.

You have had occasion lately, gentlemen, to witness two operations for stricture which illustrate unusually well the classes of cases in which the operation of dividing the strictured portion of the urethra with the knife is indicated. Such an operation is rarely necessary, for there are few cases of stricture in which an instrument cannot be passed; and almost all cases which admit the passage of an instrument are susceptible of gradual dilatation. There are, however, a few cases in which, though the instrument can be passed, yet the stricture cannot be dilated, and it is in the treatment of these latter that the ingenuity of surgeons is chiefly exercised.

I propose to speak first of the cases in which no instrument can be passed, and then of those in which, though the stricture is not absolutely impassable, no progress can be made.

The former is, as I said, a small number, and some surgeons, like the late Mr. Syme, would almost question its existence, believing that with dexterity and patience all chronic obstructions will at some time or other permit of the passage of some instrument. The acute cicatrisation which in some cases follows on rupture of the urethra, and which has been known to proceed so far as to entirely obliterate its tube, is of course a different affection. I am disposed to admit this teaching to a very great extent, and to allow that almost every stricture will become passable after prolonged rest in an equable temperature, free purging, assiduous warm bathing, the free action of the skin, avoidance of drink and unwholesome food, and abstinence from sexual intercourse. And in support of this view I notice that Sir H. Thompson, in his recently published "Clinical Lectures on Diseases of the Urinary Organs" (page 28), says that he has only had occasion to perform perinæal section for impermeable stricture three times in his life, and that in two of these cases the stricture was traumatic. We have a much more extended experience of perinæal section at this hospital—whether from accidental causes, or from lack of the necessary dexterity, I will not presume to say. Certain it is that the old operation of perinæal section—meaning by that term the operation of external urethrotomy without a guide passed through the stricture—has been comparatively often performed here, both by myself and my senior and junior colleagues, and on the whole, I think, with very good results. The case on which you saw me operate a short time ago seems to me to illustrate unusually well those in which this operation is indicated, and the manner of performing it. The patient, A. O., a man over forty years of age, has led a wandering and dissipated life in India and Africa, has suffered from many of the disorders of health incident to tropical climates, has had numerous attacks of venereal disease in all its forms, and is in the excitable, nervous condition which follows prolonged dissipation. He has suffered from stricture for years, and has had numerous attacks of retention of urine, sometimes for as long as forty-eight hours. As far as I understand his history, no one has ever succeeded in passing a catheter, though many have tried. Once, it is true, at a hospital in India, under chloroform, an instrument was said to have been passed, and he woke with it tied in; but as it gave rise to much bleeding, gave him great pain, never drew off any urine as far as he saw, and was removed in an hour or two, there can be no reasonable doubt that it was passed down a false passage; and this is the more probable, as there is a large and long false passage leading between the bladder and rectum. The existence of this false passage was one of the great difficulties in the case. The other was the extraordinary tendency to spasm—a tendency which was only very imperfectly obviated by anæsthesia. He took both ether and chloroform very badly, with great jactitation and congestion, and, after all, could not be got so fully under their influence as to altogether suspend the spasm of the walls of the urethra when the instrument came down to the stricture. He was treated with the greatest patience; prolonged rest in bed, and all the other requisites for the treatment of stricture above enumerated were prescribed. A small bougie was frequently passed as far into the stricture as it would go, and after it had remained there for some time the house-surgeon or the patient himself would try to get it in further; but all was of no avail, and it became necessary to choose between perinæal section and the abandonment of the case. The patient had now been in hospital over two months, and repeated attempts had been made to pass the catheter under anæsthesia. Of course all varieties and sizes of catheters and bougies had been tried. Now, it was true that the patient had not suffered from total retention since his admission, but he made water with great difficulty and in a very small stream, and had occasional attacks of cystitis. In one of these attacks he had consulted a surgeon at the Cape, who not being able to pass a catheter, and hearing that he was coming to England, gave him a letter to the gentleman who sent him here. It seemed certain that further delay would only expose him to more suffering and to the risk of further disease of the urinary organs. Accordingly, on May 25, the operation of perinæal section was performed. An attempt was made to pass Mr. Wheelhouse's staff, in the hope that by that means the mouth of the stricture could be brought into view; but this was found impossible. Though the patient was as fully under the influence of chloroform as it was found possible to bring him, the point of the staff was arrested a considerable distance in front of the stricture. Accordingly all guides were dispensed with. A free and deep incision was made in the central line of the perinæum, and the finger placed on the subpubic ligament. Then, the urethra having been opened behind the stricture, a female catheter was passed into the bladder to serve as a guide. A large catheter was passed as far as it would go. The strictured portion of the urethra was then freely incised until the catheter passed into the wound. Mr. Wheelhouse's gorget was then passed into the bladder, and a large gum catheter introduced and tied in. No unfavourable symptoms followed. The gum catheter was kept in position for about a week, and was then changed under anæsthesia. This, however, was very troublesome, for the false passage was still unclosed, and it was found difficult to pass a gum catheter without breaking up the wound and introducing a director into the bladder, though a silver catheter would pass with little trouble. Accordingly, on June 19 the use of the permanent catheter was given up, and a silver catheter (No. 10) is now passed from time to time with ether, as the patient's extreme nervousness renders him unable at present to submit to instrumentation without anæsthetics. The wound is rapidly closing; the patient passes water freely, and very little comes by the wound. At the present date (July 5) the case is going on well, but the patient cannot tolerate an attempt at catheterisation without an anæsthetic. The false passage appears still open, at least from the urethra, for the point of the catheter constantly hitches in some obstacle. This being surmounted, it passes readily and without obstruction into the bladder. In August he was discharged from hospital quite recovered.

So far for the outlines of this very difficult case.

A few points require further comment. As to the necessity for perinæal section, I need not add anything to what I have just said. Years of trial by various persons had proved, not indeed the impossibility, but the great improbability of cure by any milder measure. Then what operation to select? That of simply opening the urethra behind the stricture seems to be in vogue at Guy's Hospital, where it goes by Mr. Cock's name, though it seems to have been practised and recommended by Mr. Simon some years before Mr. Cock's paper appeared.(a) This is, in fact, the first step of the operation I performed, and, as you might have seen, it is a very easy and rapid process. But I do not think it a very satisfactory one. I do not see that we complicate matters much by the subsequent division of the strictured urethra, while we thus give the patient a good chance of regaining natural micturition and emission; and surely this is worth some risk, even if there be risk. I have known men to regain perfectly natural functions after perinæal section, and to remain for

(a) See the third edition of my "Principles and Practice of Surgery," page 806; *Medical Times and Gazette*, April, 1852.

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years in a perfectly natural state. Thus I met by accident some time since a man on whom I had performed perinæal section for stricture several years before, and who assured me that he was in perfect health, passing a catheter occasionally as a precaution, but with no apparent need of it. And we often see the same thing even after complete rupture of the urethra. The opening of the urethra behind the stricture is not usually difficult. I show you here a dissection (made for me by my dresser, Mr. Edgelow) of the pubic arch with the prostate and urethra. You will see the subpubic ligament, and will observe that if the left index-finger is rested on the sharp edge of the ligament, and the knife inserted just below it, it will almost infallibly open the urethra, and the dilated condition of the urethra behind the stricture which generally exists, renders this still more certain. In fact, with a little practice, the surgeon may make tolerably sure of opening the urethra behind the stricture, and, having done so, there is no great difficulty in passing a catheter from the meatus through the wound into the bladder.

But is that catheter passed along the track of the urethra? Usually, I think it is. There are, it is true, cases of severe and extensive stricture in which the surgeon may quit the course of the urethra altogether, and make a false passage alongside it, leading by the side of the natural urethra. Such a case I once myself dissected, but they are, I think, purely exceptional. The error could only occur if the obstruction occupied a large extent of the canal, and that is in itself unusual. However, it must be admitted that the operation is liable to this uncertainty in the most complicated forms of stricture. But I think we are entitled to say that this is not sufficient to form a radical objection to the proceeding. All operations for obstinate stricture are dangerous and uncertain, for the patients are generally broken in health by a life of debauchery; but in cases such as that which I have brought before you, I think the old operation of perinæal section (*la boutonnière*) is, on the whole, preferable to its modern modifications.

What the value of Mr. Wheelhouse's suggestion for its performance may be, my present experience does not enable me to judge. In this case the peculiarities of the case rendered it impossible to pass the staff. In the only other case in which I tried it, the soft parts in the perinæum were so thickened and indurated that I could not bring the urethra into view.

The after-treatment of the case is, I think, best managed by the prolonged retention of an open gum catheter—i.e., a catheter furnished with an india-rubber tube going into a vessel at the foot of the bed—by which arrangement the urine is diverted from the wound. In ordinary cases there will be found no difficulty in changing this catheter every four or five days (under ether or laughing-gas if the man is very sensitive to pain); and when the wound is healed or fairly advanced towards healing, the patient may be allowed to get up, and the catheter passed as often as is found necessary. He must then be taught to pass the catheter himself, and warned never to omit this precaution for more than a week so long as he lives. Very possibly the precaution may in some cases be superfluous; but the passage of a soft instrument gives little trouble and can do no harm.

I repeat that in the most obstinate and difficult cases of stricture (and few could be more obstinate and difficult than this case) there is a fair chance of complete restoration to health by this operation, though the operation is a dangerous one and not always easy, the after-treatment protracted and painful, and the prognosis in the class of patients on whom we usually operate always uncertain.

I will speak next time of the subject of Internal Urethrotomy.

PRESENTATION.—A very gratifying and handsome testimonial was recently presented to Dr. Thomas H. S. Pullin, who has been in practice at Sidmouth, in Devonshire, for upwards of thirty-two years, and has also filled the position of health officer. The proposal to make a subscription for this object was so popular that the committee of management were enabled not only to present Dr. Pullin with a valuable microscope and a purse of one hundred guineas, but, in addition, to present to Mrs. Pullin a silver tea-urn and a silver and glass casket.

ORIGINAL COMMUNICATIONS.

PRACTICAL NOTES ON
THE ORDINARY DISEASES OF INDIA,
ESPECIALLY THOSE PREVALENT IN BENGAL.

By NORMAN CHEVERS, C.I.E., M.D.

(*Continued from page 87.*)

ENDEMIC MALARIOUS REMITTENT OF THE PLAINS.

EXAMINATION of the recent statistics of Indian Fevers given by Sir Joseph Fayrer and others, proves that (1) the mortality from True Enteric Fever in that country is by no means extremely large; but that (2) the death-rate from Malarious Remittent among the civil population, although it has not been precisely defined, is probably enormous.

(1.) Sir Joseph Fayrer shows that, in 1879 (when a great fever epidemic swept over India), the British army, stationed in that country, had 387 fever deaths out of a strength of 57,810. These deaths cannot all have resulted from Enteric Fever. The same authority gives a table in which the Enteric Fever cases treated in the Calcutta Medical College Hospital in the ten years 1871-80 appear to have been 3, 5, 9, 5, 6, 6, 1, 0, 2, 0. Dr. Vandyke Carter mentions, in his recent work on Spirillum Fever in Bombay, page 438, that in seventy-four autopsies of native patients dying from "remittent fever" during 1877-78, intestinal lesions like those of Typhoid were found four times. He evidently considers that these four were probably cases of Enteric Fever. To form an idea of the maximum severity with which Enteric Fever may attack a community, we must await the completion of the returns from our army in Egypt, and from the still impested city of Paris.

(2.) We have already seen(a) that the direct mortality from Intermittent Fever in Bengal is small, the percentage being to strength 0·24, and to admissions 0·76. Further, when it is borne in mind that Relapsing Fever does not occur frequently in India, we may form some idea of the destructiveness of Malarious Remittent from Sir Joseph Fayrer's report that, in 1879, the registered deaths from Fever in India were 3,564,035, out of a total mortality of 4,975,042, in a population of 187,105,833.

Malarious Remittent is prevalent, endemically, throughout extensive regions in the vast plains of India, but its reign is not so almost universal as that of Intermittent is. The Remittent varies considerably in type in different localities; and history shows that, in the same locality, the prevalence, type, and destructiveness of the endemic fever have great fluctuations and marked changes. Every physician who has both worked long and read much in India has probably asked himself, "Are these fevers which come before me the diseases of which my predecessors have left record?" And everyone of large Indian experience must have remarked great alterations in the character of fevers within his own time. These changes in type often depend mainly upon season and food-supply, and upon inundation and drought, upon the presence of irrigation canals and railway lines, and also upon other less explicable modifying influences. With regard to food, it is always to be borne in mind that, apart from the visible destructiveness of great famines, the mass of people—the two hundred and fifty odd millions—are ill-lodged, and are more or less everywhere restricted to food so poor in nutritive elements that they are the subjects of life-long starvation.

Paludal Remittent has its greatest prevalence after the Rains, in the dry and cold season, when tanks and water-courses dry up, when the leaves fall and deciduous vegetation rots, and when the ill-clad native poor suffer from cold, which, next to malaria, is their greatest climatic evil. In some years, and occasionally during a course of years, a local Remittent appears on so large a scale, and assumes so deadly a character, that even medical men are led to imagine that it has become epidemic. It is clear that the Endemic Cholera of Bengal does, at rare intervals, become epidemic. The question is, of course, open to discussion; but my own opinion, formed upon long and careful observation, is that

(a) Page 68, and Fayrer, page 81.

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Paludal Remittent, however wide the extent of its ravages may be, is never truly Epidemic. Thus it was observed that the Burdwan Fever spread remarkably northward of Calcutta, involving localities which had been of late years considered fairly exempt from destructive Remittent. It had not, when I left India, extended to Calcutta. We used to expect it there; but, if it had appeared amongst us, I should have said that its spread had gained a new increase, but should have denied that it was epidemic.

Considering that medical officers serving in India are nearly always liable to change of station, and that the type of fever differs greatly in various localities, and in the same locality at various times, the young officer ought always, upon taking up a new post, to become a learner, by making full inquiry of brother officers and by reading, especially by studying the reports of his predecessors in his office books, etc. It is noticeable that one great characteristic marks the writing of Indian physicians, past and present—this is, *fidelity of description*,—nearly every author doing what every writer on fever should endeavour to do, *i.e.*, stating what his fields of observation were, and describing accurately the fevers which then prevailed in those particular localities. On this ground I would advise the young Indian practitioner to read all works on the diseases of that country; but on no account to fail to master the contents of those which describe the maladies of his own locality—Morehead and Moore for Western India; Annesley, Geddes, Maclean, Waring, and Francis Day for Madras; Kenneth Mackinnon for the North-Western Provinces; James Johnson, Twining, and Ranald Martin for Bengal Proper in old times, and Fayrer and Ewart for the diseases of that province in the present day.(b)

Multitudes of cases of Remittent Fever in India are not seen by medical men in their early stages, and, when the disease is seen at its first onset, it is treated so promptly by quinine that it has usually no opportunity of developing itself sufficiently to display its full character before them. The cities and large civil stations in the present day mostly enjoy a considerable immunity from severe Remittent, by reason of their tolerably good sanitary arrangements; and, when native cases are brought in for treatment, they generally come from remote districts, whence they have only been removed as a forlorn hope when the disease has become very far advanced. Indeed, the majority of native cases are brought in moribund, worn out almost equally by the gravity of the disease, by want of medicine and proper nourishment, and by the fatigue of the journey. Medical officers see most of this disease in native and European regiments, especially when on field service in malarious localities; in officers who have been brought in, immediately upon being attacked, while on district duty near the stations, and in European tea-planters; and, not very unfrequently, in their own families and persons.

The questions—How far are Intermittents and Remittents allied in etiology? and, Is one of these types of fever convertible into the other? are, although very interesting, of no great practical importance, except to those who consider that Remittent Fever is either Typhus, Enteric, or Relapsing Fever. My own opinion, founded upon much observation and thought, is that they are somewhat cognate but perfectly distinct maladies, caused by different kinds, degrees, or forces of malaria, not always prevailing in the same district, and generally appearing at different seasons of the year—the Intermittent being a disease of swamps and marshes, the typical Remittent a malady of jungles and terais. In many parts of India, as at Chittagong, where swamp and jungle meet, where marsh extends nearly to the base of thickly-wooded hills, the distinction, of course, becomes rather confused. I believe, almost to certainty, that Intermittents and Remittents are not degrees or developments of the same malady, or the results of one and the same cause. This question ought to be sifted by those who are engaged in investigating the habits of the *Bacillus malariæ* in and out of the human body.

I have often speculated upon the probable issue of an entirely neglected case of severe Intermittent. What would be its course and development? How and when would the patient die? To me this point is not clear;—even the most ignorant native practitioners have tolerably efficient remedies for Intermittent, and the poorest cooly is seldom wholly unattended to in this disease. It is possible that, if the disease were left to its own course for many days in a very malarious district, the intermissions would daily become shorter (we always notice this when Intermittent is unchecked), and we should, at length, have a very grave fever very like Remittent, but probably not identical with it—rather what old authors termed a "typhoid" or typhus-like condition. I have already mentioned the opinion of a brother officer of large experience in the North-Western Provinces, that, if sweating be checked in Intermittent, the case is likely to assume the Remittent type. Upon this point I cannot speak from experience, except that I have never seen such an occurrence in Bengal. In the paroxysm, the native of that part of India always wraps himself completely in his blanket, head and all, as closely as a corpse in its winding-sheet, so that he is not likely to be chilled; and the European is usually well protected against draughts. Jungle or terai fever stands absolutely apart from Intermittent Fever; and a leading characteristic of the Remittent of Bengal, as I saw it, was that the fever was Remittent from first to last. We used to hear, from writers of good authority, of Remittents which began and ended as Intermittents. But here it is to be borne in mind (1) that Remittents vary much in type, and (2) that the unusual prevalence of Intermittent has generally been noticed as a precursor of severe Indian epidemics and endemics, as of Relapsing and True Enteric Fever; and that these are liable to have their types considerably masked and modified by evidences of paludal influence. My friend Mr. Scriven, who first observed and described True Enteric Fever in India, and who does not hold with the idea that Remittent Fever is either Typhus or Enteric Fever, notices that "persons weakened by malarious fever are particularly liable to typhoid" (True Enteric). "Intermittent also often supervenes during convalescence from typhoid. Enlarged spleen is common to both diseases."(c) Thousands in Lower Bengal have their systems saturated to the very uttermost with the poison of Intermittent, but never become the subjects of Remittent. On the other hand, Intermittent is no safeguard against Remittent. When a denizen of the marsh ventures into the jungle, he may get Remittent, and his disease, carefully observed, will probably be found to have some resemblance to Intermittent. I repeat, Remittent Fever is not, in my opinion, modified or aggravated Intermittent.

While the duration of those fevers, the course of which is not arrested by treatment, such as Typhus, True Enteric, and Relapsing, has been clearly ascertained, it is more difficult to fix the natural limit of Remittent, which nearly everyone, in all times, has essayed to cut short and "cure." Dr. Eyre, however, gives(d) a table from which he inferred that the average duration of Remittent is seven days, and that it extends occasionally, but rarely, to fourteen. This, he adds, agrees with what is stated by Dr. J. Browne in the "Cyclopædia of Practical Medicine." "Remittent Fevers in warm

(b) Between the years 1842 and 1844 the Medical Board of Madras compiled from their records and published a series of Topographical Reports upon the stations of that Presidency. The three volumes which lie before me as I write form a noble monument of judgment and accuracy. The medical history and health statistics of each station are given briefly, but with sufficient fulness. I often wished and argued that, after this manner, a manual should be prepared for every military and civil station in British India as a guide to each local medical officer and as a basis for his reports. Indeed, I attempted something of the kind in my work on "The Means of Preserving the Health of European Soldiers in India." It is clear that these manuals should contain the fullest possible details, and should be frequently revised as new facts come in. As regards Fevers, they should contain a sufficiently full geographical and geological account of each district by officers of the Geological Survey; a clear exposition of the habits, mode of cultivating the land, and food of the people; a history of all recorded epidemics and endemics; a minute description and localisation of the prevailing fevers in all their types, their statistics, therapeutics, etc. The Government of India did, at one time, encourage the preparation of such district manuals by local medical officers. The result was the publication of about half a dozen singularly valuable works, such as those on Dacca, by Dr. Taylor; on Upper Scinde, by Dr. Kinloch Kirk; on the Valley of the Indus, by Dr. Percival Lord; on Calcutta, by Drs. Duncan Stewart and Strong; on Oudh, by Dr. Donald Butter, etc.; but the Bengal series was never completed. Many valuable Topographical Reports of Stations and Districts in the three Presidencies of India, such as those published in the *Bombay Medical and Physical Transactions* for 1857-58, have appeared during the last forty years in the medical periodicals of that country. The first compilation of a full series of these manuals, by a few selected medical officers of each presidency under a director, would cost the Government a good deal of money; but, assuredly, this outlay would be speedily repaid with interest in the improved health and efficiency of officers and men and of the native millions inhabiting the districts. A like plan might, with very great advantage, be adopted in the United Kingdom, in all our colonies, and throughout Europe and America.

(c) "Transactions of the International Medical Congress," vol. ii., p. 687.
(d) *Indian Annals of Medical Science*, No. 8, page 589.

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climates continue till about the seventh day; but, in other cases, till the fourteenth. In temperate climates forty or fifty days or more."

Judging by many neglected cases which have been brought to me from distant country places, I think that the course of Remittent Fever, when unchecked by treatment, to a fatal termination, ranges from three days, in the most destructive types, to about eighteen days, according to the strength of the patient, his food, lodging, and other surroundings.

When recovery takes place in neglected cases, it is always slow and difficult, nearly as in English Typhus.

The general course of Malarious Remittent in the plains of Bengal is that it is ushered in by chill followed by high fever, in which, unlike Enteric Fever, the temperature reaches its maximum in a few hours.

A remission of varying duration, from hours to minutes, in which, in cases of the mildest type and at the commencement of the attack, the temperature is lowered, the head-symptoms abate, and the skin becomes more or less moist, is to be anticipated generally towards morning. But, in grave types of the disease and in its advanced stages, where its course has gone on unchecked by treatment, the remission becomes almost daily less and less distinct, and sometimes is scarcely recognisable by means of the thermometer. There is severe headache, which, if the case be neglected, is followed by coma. There is less frequently delirium. The tongue, teeth, and lips become covered by sordes. The bowels are generally constipated at first, until, if their accumulated contents are not early removed by aperients, intestinal irritation and diarrhœa set in. Old writers speak much of dysentery as a sequel of Remittent; but it is to be doubted whether these were not cases of True Enteric Fever. As I have already stated, much of our earliest information regarding Indian Remittents was given by ships' surgeons, from Clark to James Johnson, whose men were generally scorbutic. As I have also mentioned, the taint of land-scurvy is a very widely-spread evil in India, especially among the ill-fed poor; but many in good circumstances are, to a greater or less degree, thus affected. This is a point which requires rigid investigation in every case of severe fever. Every young Indian physician ought to study Twining's description of the Congestive Remittent which, in his time, prevailed during the cold season in Bengal. It is evidently full of sound and careful observation. In receiving and treating the corresponding cases, which crowded my wards every cold season in Calcutta, I do not think I ever saw the precise types of disease which prevailed in Twining's time; but, almost in every case, there were points which brought the name of "Twining" before me. Among the starved natives, pinched with cold, I especially used to notice the head complication, and the dried-up skin upon which one could write with one's finger-nail. I saw far less of bilious vomiting and purging and of serious abdominal congestion than Twining did. The discoloration of surface from blood disintegration—not that which accompanies Relapsing Fever—was rarely noticed, but was a marked characteristic of the cases of Peealee Remittent, alluded to at page 522, vol. ii. of 1882. Dr. Partridge, an officer of large experience in Assam, cited by Fayrer, says that jaundice is no uncommon accompaniment of Remittent in that locality, either as the result of mechanical obstruction of the ducts, or of arrested function. In my experience, there was more of coma than of muttering delirium. In the hot season, "ardency" and delirium occurred but rarely in Europeans, and were easily commanded. Of course, cases of Remittent vary much in intensity and in amenability to treatment, but the Bengal Remittent, with which I am familiar, was generally a fever of great severity. I know little or nothing of the mild Remittents spoken of by my predecessors in India.

In some cold seasons, parotid swelling, always confined to one side, with deep suppuration, was common among poorly-fed natives late in the course of Remittent Fever. I never saw other glands similarly affected.

(To be continued.)

FORMULA IN PERTUSSIS.—Dr. Dujardin-Beaumetz prescribes the following:—Bromides of potash and of ammonia āā 2 grammes, bromide of soda 4, water 60, and syrup of chloral 30 grammes. A dessert- or tablespoonful, according to the age of the child, is given night and morning in a glass of milk to which the yelk of an egg has been added.—*Gaz. des Hop.*, February 1.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

PSOAS ABSCESS RESULTING FROM INJURY (?)—OPENED ANTISEPTICALLY—CURED.

(Under the care of Mr. BECK.)

[For these notes we are indebted to Mr. C. R. ELGOOD, House-Surgeon.]

ALBERT J. C., aged five, was admitted in the Children's Ward on December 6, 1882.

Past History.—Three weeks ago patient came home from school, and said that he had fallen over a form and hurt his stomach. Was sick and complained of headache for next few days. On fourth day he complained of pain in groin, aggravated on movement of thigh. Poultices were applied for three days. Up to this time patient was able to get about, though mother noticed that he began to limp and walk on toes, and complain of pain on walking. Never complained of pain in knee or back. Mother thinks he has lost a good deal of flesh during the last three weeks, and has been gradually getting worse till his admission to the hospital. Patient has always been a healthy boy; has always been well clothed and fed. No history of any former injury.

Family History.—Evidence of phthisis in family. Grandmother and three brothers died of it, and another brother is now in the Consumption Hospital at Hampstead.

Present State.—December 7.—Patient is a pale, anæmic child; dark-brown eyes, long eyelashes, rather tubercular aspect, very restless and fretful, anxious expression. Complains of great pain in left groin, screaming when touched. Tongue dry, coated with thick creamy fur. Temperature at 11 a.m., 103·4°. Limb flexed and adducted; any attempt at extension produces pain. Hip disease suspected, but on further examination it is found that left leg can be crossed over right without pain if the thigh is adducted. There is thickening about left trochanter, and a well-defined swelling above middle of Poupart's ligament in left groin. No tenderness along back, and no trace of spinal deformity.

11th.—Examined by Mr. Beck to-day under chloroform. He found the thickening about trochanter to be more apparent than real. Hip-joint freely movable in every direction. No grating or other sign of disease present. Swelling above Poupart's ligament distinctly fluctuating.

Operation.—Mr. Beck then made an incision inch and a half long, half inch above Poupart's ligament, extending from about its middle point outwards towards anterior superior iliac spine. Dividing the muscles, he inserted a pair of sinus forceps into the abscess, evacuating a quantity of sanious pus. On inserting finger, the cavity was found to extend upwards in direction of spine, and probe passed for some distance in same direction. It extended inwards to the brim of the pelvis, but not beyond. No diseased bone was felt. Drainage-tube was inserted, and wound dressed with Listerian dressing, antiseptic precautions being observed throughout.

After operation child very restless, screaming with pain. Tinct. opii ♏iv. administered with little effect. At twelve o'clock child still in pain. Tinct. opii a drop every hour ordered, till patient fell asleep at 6 a.m.

12th.—Patient easier; tongue still much furred; temperature at 11 a.m., 100° Fahr. Dressing removed; drain-tube taken out, freed from clot, and reinserted. Hamilton's splint applied, and limb brought down to proper position. This caused very little pain.

Wound dressed on the 14th, 16th, and 18th. Drainage good; discharge perfectly sweet. Temperature on the 18th normal.

21st.—Wound dressed. Drain-tube, which was blocked by clot, removed, cleaned, shortened a little, and reinserted. Temperature slightly elevated. Discharge continues sweet. Splint removed. Patient seems better; is more lively; has less pain.

Patient now dressed every other morning, and tube shortened until 28th, when it was removed; and on January 1,

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1883, on removing the dressing, no sinus could be detected. Antiseptics accordingly discontinued, and wound dressed with boracic acid ointment.

January 4.—Wound quite healed.

6th.—Patient discharged, in perfect health.

Remarks (by Mr. Beck).—This seems to have been a genuine case of an acute abscess forming beneath the fascia of the psoas and iliacus as the result of a strain, with possibly some injury to the muscle. The reasons for believing this are—the evident irritation of the psoas muscle, as shown by the marked flexion and adduction, and extreme pain on any attempted abduction or extension of the thigh; the situation in which the abscess pointed, immediately over the line of the psoas muscle and the inner part of the iliacus at Poupart's ligament; and, lastly, that the finger, in the cavity of the abscess, passed outwards into the iliac fossa, but nowhere above the crest of the ilium, inwards to the brim of the pelvis, and upwards as far as could be reached by a narrow process along the line of the psoas. It pointed more internally than is common with abscesses in the iliac fossa, superficial to the iliac fascia; it was certainly not connected in any way with the bowel or the kidney; and its origin in an iliac lymphatic gland seems improbable from the distance to which it extended along the psoas muscle. The resemblance to hip disease was caused by the excessive pain produced by the slightest attempt to extend the limb, but that affection was readily excluded by the fact that if the flexion was a little exaggerated, rotation of the femur outwards to a sufficient extent to put the round ligament fully on the stretch caused no pain. Its acute history, and its healing completely in seventeen days, were sufficient evidence of the absence of any disease of the vertebræ.

THE SOLAR PLEXUS IN TYPHOID FEVER.—Dr. Leven, of the Rothschild Hospital, draws attention to the fact that, among the numerous cases of typhoid which he saw during the late epidemic, there were very few attended with abdominal symptoms, and he believes that these are frequently caused not so much by the disease itself as by the faulty practice of administering purgatives which excite the nervous system of the abdomen; and that the pain in the iliac fossa, which has been regarded as characteristic of the disease, is confounded with a hyperæsthetic condition of the abdominal parietes induced by the irritation of the right nervous ganglion produced by the same treatment. When diarrhœa is produced by purgatives given during the febrile condition, the nervous ganglion of the great sympathetic, placed at four centimetres distance from the umbilicus, becomes irritated, and tenderness is felt on pressure there. Whenever diarrhœa exists it should be arrested by means of bismuth, as its only effect is to aggravate the adynamia and exhaust the strength.—*Gas. des Hop.*, January 30.

INCONTINENCE OF URINE.—Dr. Ribes recommends the following pills in the dose of one per diem, gradually increased in number, for incontinence of urine in children:—Alcoholic extract of nux vomica 5 centigrammes, Ethiop's mineral 5 grammes—into thirty pills.

A CONVENIENT AND DELICATE TEST FOR ALBUMEN.—Pour a few drops of urine gently down the inside of a glass vessel containing acidulated water at the boiling point. If albumen be present a more or less dense cloud will form just at the dividing line between the fluid tested and the clear water above. As the contrast in opacity is between the clear water and the milky albuminous cloud, the test is very delicate, one-twentieth of 1 per cent. of albumen making a very perceptible clouding. It has all the advantages of the ordinary heat and acid test and Heller's nitric acid test. It is even better than the latter in a cloudy fluid as in urine, with urates in excess, because the clear water above makes a perfect medium in which to detect the faintest cloud, while the layer of coagulated albumen in Heller's test may be entirely obscured by the opacities in the fluid itself. If no test-tube or nitric acid is at hand, pour boiling water into a common tumbler, and let it stand a moment to insure the heating of the bottom of the tumbler. Empty, refill, acidulate with vinegar, and proceed as before. While this is a modification of the heat and acid test it has the advantage of being applicable under all possible circumstances, whether special apparatus is at hand or not.—*Dr. Abbot in New York Med. Record*, December 23.

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THE MEDICAL TIMES AND GAZETTE *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, FEBRUARY 10, 1883.

THE PRESIDENTIAL ADDRESS AT THE CLINICAL SOCIETY.

WE do not venture to speak further on Dr. Andrew Clark's wise remarks on the management of cases and on the great importance of close, careful, and often minute attention in directing the diet of patients: there is so much to be said, from several points of view, on the subject of diet, that we should be led to give up all our available space to it. We would, however, commend what Dr. Clark says on this matter to the serious attention of our readers. We invite attention especially to his observations on the inadequacy and vagueness of the directions often, very often, given about diet. As he says, the term "a light and nourishing diet" admits of the widest diversity of interpretation, and may, with a full intention of strictly and fully obeying the doctor's orders, be carried into action in a way injurious to the patient, and falling far short, or being almost the opposite, of what the medical man intended. Dr. Clark directs attention to the absence almost from the Society's *Transactions*, or at any rate of the inadequate notice of, a very interesting and instructive "group of clinical affections unconnected except causally with sensible alterations of the tissues and organs." These affections, some of which he sketches in a most admirable and telling way, are, he observes, familiar to the experienced practitioner, but no sufficient recognition of them can be found in medical literature; and he holds—and we are in entire accord with him—that a full account of them would contribute more than any other account to conducing to a full understanding of the relation of dynamic to static conditions, and of physiological to pathological processes. Among these clinical affections he mentions, first, "the morning agony of middle-aged, nervous people," perhaps not seldom the commencement or herald of melancholia. Waking at early dawn, a man is conscious of undefinable malaise and unrest, "his mental and moral outlook become dark and gloomy; aching pains arise in the limbs; unable to lie still, he tosses restlessly about his bed; the malaise deepens into distress, and he groans;

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a cold sweat breaks forth over all his body; and then in a few minutes the attack subsides, and the patient finds himself in his accustomed health and spirits." In these few words Dr. Clark sketches with the master's hand a condition that often vexes household peace, clouding it with fear and care, and sorely troubles the young practitioner, who can find no clear picture of it in his books, and never saw it in a hospital.(a) A condition, however, that, according to our experience, when promptly and definitely recognised, generally yields easily to slight medication, with attention to diet and exercise; but also a condition easily magnified and over-treated. A second group of these affections noticed by Dr. Clark includes "the temporary incomplete hemiplegias with aphasia, which are closely allied to migraine, and are met with most frequently in women, though occurring sometimes in men otherwise healthy and strong." The description given of this affection is so graphic, minute, and full, that we cannot resist the temptation of reproducing it in full. "A woman neither hysterical nor nervous suddenly fails to see distinctly. The field of vision is invaded by moving, zig-zag lines of light, arranged either in circles or in forms resembling the outlines of a fortification. There are slight ringing noises in the ears, and trifling confusion of thought; numbness follows about the tip of the tongue, on one side of the lips and mouth, in the right thumb, and more rarely in the right leg: the connexion between ideas and their correlated words is interrupted; articulation falters; there is perhaps passing loss of power in the right hand or arm; the breathing and the pulsations of the heart are quickened; the feet and hands become moist and cold; and then, after a period of time varying from ten to thirty minutes, with or without a slight headache, the attack ends with a few deep sighs, and a discharge of limpid urine. Curiously enough, when headache occurs early in attacks of this kind, and is severe, sickness soon follows; disturbances of speech, sensation, and motion seldom arise; and the distinctions which, in its fully developed form, separate this affection from migraine are obliterated." This condition, and conditions similar to this, may very easily and readily be mistaken for a commencement, or at least a threatening, of very grave disease. Again, Dr. Clark speaks of "the dry, barking cough of boys and girls about the age of puberty." It is characterised by recurring paroxysms of "a dry, guttural cough, which resembles the barking and howling of a dog." It is a very troublesome affection, and Dr. Clark says of it: "It is occasionally so distressing to others that servants, and even friends, cannot stay in the house in which the patient dwells; it is only in a small degree amenable to treatment; lasts from three or four months to as many years; and ends, in my experience, always in complete recovery." The significance of the disorder may be easily recognised when, as is usually the case, the affection is associated with *various disorders of the nervous system*, and with *defects of will*. "It is greatly influenced by the emotions, and sometimes instantaneously cured by sudden surprise or shock."

Some other illustrations of this group of inadequately represented affections are briefly mentioned by Dr. Clark, as the cases included in the term "renal inadequacy," and gouty spasms of the diaphragm; but we will notice here only one more, viz., "the numerous and important cases occurring among young persons in whom, under the strain of prolonged competitive examinations, and great excitement of any sort, the urine temporarily falls in density, loses its healthy characters, and becomes albuminous." Dr. Clark adds, "Of the young men competing for places in the Indian Civil Service Examination, I have ascertained by repeated personal examination that more than one-tenth become albuminuric." It would not be easy to frame a more terrible indictment against the high-pressure education of the day. Examination being, as it is, the one object and aim of education, it can also be said with terrible truth to be the aim and the *end* of life, at least of happy and useful life. We are told, not seldom, that under the present system many of the men who gain appointments in the Civil Service of India go out exhausted, and never show out there the brain-power they exhibited at school and at college. Dr. Clark tells why this is. Youths with sound and strong constitutions may weather the stress and storm of education and examination, or, if hurt, may quickly and fully recover; but the weaker in vital power, and those who have any specially vulnerable point, inherited or induced during their building-up, break down altogether, or are lamed and maimed for life. It must be remembered that Dr. Clark's warning—for such it is—applies, more or less, to the whole educational pressure of the day, and to girls as well as to boys, to young women as well as to young men.

Dr. Clark, when speaking of "the manner and the circumstances in which the work of the Society is done," regretted, as so many other members of the Society have regretted and regret, the very great preponderance of the junior men at the meetings: "whilst the junior members have been conspicuous by their presence, the senior members have been conspicuous by their absence." This state of things causes a lessening of benefit to all. The senior members "suffer in manifold ways from their non-attendance. They miss the stimulus which comes from contact with youthful enthusiasm. They slide into stereotyped habits of thought, expression, and work; they lose their receptivity; they cease to adjust themselves to their ever-varying environments; and thus they become old, and the labour which should be life is transfigured into virtual death. The Society suffers, for it needs the larger experience, the wide views, the sharp insight, the cautious temper, the sober judgment of disciplined age to control, regulate, and carry to their best issues the minuteness of detail, the flow of imagination, the hasty generalisation, the speculative passion, and the dogmatic fury of our fervid youth." All very true, and excellently well expressed, but, we fear, to little purpose. All our societies suffer in the same way, and even Dr. Clark's eloquence will not, it is to be feared, alter it. All the offenders—offenders by omission, not commission—will be ready to agree with Dr. Clark that "no good can be got without sacrifice, and the sacrifice of ourselves, even at the cost of suffering, is the only, or at least the chief, occasion of getting the strength which we need for the greater purposes of our lives"; but how many or how few will attend more frequently at the meetings of the Clinical or of any other medical Society? Here we must cease our comments on Dr. Clark's address. Neither time nor space will allow further notice of it. But we commend the whole of it to our readers. It is rich in valuable teachings and pregnant suggestions; and almost everyone of us may learn to better his life-work by taking to heart Dr. Clark's eloquent peroration on the aims, duties, and importance of our profession.

(a) Some of these "clinical affections" receive notice and consideration, if our memory serves rightly, in Professor Lionel Beale's book "On the Nature and Treatment of Slight Ailments."

NEURO-FIBROMATOSIS.

In the *Berliner Klinische Wochenschrift* for October 16 a remarkable case of congenital multiple subcutaneous tumours is recorded by Dr. Modrzejewski, of Warsaw. The patient was a female labourer, a native of Poland, thirty-seven years old, and came under treatment on account of a large swelling in the left clavicular region. There was no history of a

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similar disease in the family of the patient, of whom both parents and two sisters were dead. As far back as could be remembered, the patient said, her skin had felt uneven, as if strewn with poppy-seeds; these tumours had gradually grown, without causing any more inconvenience than a little itching. Menstruation began at sixteen, but was never regular; occasionally there was profuse epistaxis. A few months before admission to the hospital, a tumour in the left clavicular region began to increase rapidly in size and to be painful. The woman was small, and her skin, in places, of dirty, earthy colour. The whole of the skin was densely crowded with nodules of varying size and form. The greatest number existed on the head, neck, and back, gradually becoming less numerous towards the buttocks. There were not many on the face; the chest, belly, and external genitals were, on the contrary, thickly covered. The upper extremities showed most knots on the arm and forearm, the palm of the hand being almost quite free. The lower extremities were richly beset as low as the knee, the leg had but a few here and there, and there were none on the feet. The tumours numbered 3020, without reckoning the smallest; on the head 600, on the back and nates 800, neck 300, chest 300, arms 110, belly 328, loins and genitals 60, legs 222. The size of the tumours varied greatly. The largest had a long peduncle, and was about equal to the size of two fists (men's); the smallest ranged in size from a pea to a poppy-seed; the medium-sized were relatively numerous and about as big as a walnut. The shape was for the most part rounded; many were half-globular or spherical; the latter, chiefly on the belly and neck, were pedunculated. The surface of the tumours was mostly smooth, in many uneven and bedecked with secondary growths. On many a number of small openings, the size of a poppy-seed, were seen, containing comedones. The smaller prominences were soft, the larger harder, and felt as if they contained a firmer substance in their interior. All the swellings, except the large clavicular one, were movable and painless; on some the veins were dilated. On the hairy part of the scalp, as well as on the back, the numerous bumps pressed against one another, so as to give each a polyhedral form. One, the size of a walnut, was so situate as to make the left external meatus of the ear appear as a narrow three-sided slit. Another, the size of a small hazel-nut, springing from the antihelix, formed a complete valve to the right external meatus auditorius. The hearing was good, however, in both ears. The forehead was almost completely covered, especially about the eyebrows. Both eyelids were coated with small knots. The cheeks and nose were quite free, only in the naso-labial furrows there were a few little nodules; the like may be said of the lower lip. Hanging from the chin was one the size of a chestnut. The right breast, especially the nipple, was covered with many little beads. The tumour in the clavicular region exceeded the size of an adult head, reached from the left clavicle to the upper border of the seventh rib, and from the right edge of the sternum to the inner surface of the left arm; it was uneven, moderately hard, little movable, dipped somewhat in the left axilla, its surface was bestrewn with knots of various sizes. The dirty grey-coloured skin was movable over it. Fluctuation was to be felt in the lower and outer region, where the skin was red, stretched, and had many large veins. On the right side of the belly were three pedunculated masses, each in size about that of a hen's egg. The pudenda showed many small beads. There were no changes on the mucous membranes of the nose, mouth, throat, rectum, or vagina. Palpation revealed some bumps on the median nerve of the right arm, and also on the peroneal nerve near the head of the left fibula. Nothing else of any import was made out on further physical examination. Pulse 80; temperature 100° Fahr. Dr. Elsenberg examined one of the tumours removed from the back during life. The skin was adherent only at one point. The microscope showed the new growth to be a more or less soft fibroma with plenty of fusiform cells with fibrillated ground-substance between them; the smaller areas contained fusiform, stellate, and occasionally round or oval cells with less of the intercellular material. Blood-vessels and sweat-glands also existed. The vascular adventitia, especially of the arteries, was much thickened with cellular material, and passed imperceptibly into the surrounding neoplasm. The epithelium of the glands was not changed. The contents of the sweat-glands was frequently finely granular. The individual knots, of which the tumour was made up, were retained in place and connected with surrounding parts by means of bands of connective tissue which formed a wide-meshed network. The sebaceous glands and their bulbs were generally atrophied. Two weeks after entry into hospital an ulcer formed on the clavicular tumour, and discharged sero-purulent fluid; some days later the patient died. Post-mortem examination showed a few knobs of fibrous section, one (myoma) in the subperitoneal tissue of the jejunum, one (fibroma) in the mucous membrane of the ileum, and one (fibroma) in that of the colon. The supra-orbitals, right facial, cervical part of left vagus, right brachial plexus, sixth cervical pair, left brachial plexus, the branches of both sacral and lumbar plexuses, even to the muscular twigs, were all affected with the new growths. Acute lobular pneumonia, chronic gastritis with dilatation, chronic endometritis with polypi, granular state of vagina, and œdema of brain and meninges, were the only other changes found. The clavicular tumour was a spindle-celled sarcoma, and was connected with the periosteum of the clavicle. The case is one of those to which Virchow has given the name of fibroma molluscum.

The English physician, Dick, had already described such a case in 1837 from an anatomical point of view; the microscopical characters have been worked out by Verneuil, Virchow, Michel, and others. Virchow looked on the growths as originating in the connective tissue of the skin, and regarded the individual tumours as a local elephantiasis. Beale thought there was hypertrophy of the hair-bulbs, whilst others (*e.g.*, Weidl) regarded the neoplasmata as developing from the subcutaneous tissues. Von Recklinghausen has insisted on the intimate relation of this disease (which he styles *neuro-fibromatosis*) with the nerves; nerve-fibres may be discovered in the midst of these tumours, even in the skin, which are as much developed from the connective tissue of the nerve here as are the tumours on large trunks of nerves developed from the endo- and epi-neurium. The actual nerve-tissue is not affected, unless it be later on, when it may become atrophied from surrounding pressure. Dr. Modrzejewski and Dr. Elsenberg give in their full adhesion to von Recklinghausen's views. Forty-three cases are recorded in literature; the first in 1793 by von Tiberius. The present case makes the seventh in which the disease was congenital; five times it was hereditary. The case here depicted is notable as having the largest number of tumours on record.

The statements made so far are taken exclusively from Modrzejewski's excellent account. Our readers will remember our leading article on von Recklinghausen's work in our number for April 15. We have there stated our opinions on the views held by the well-known German pathologist. We may point out at once that if the author, whose case we here detail, imagines the disease to be of nervous origin, or to have any special relation to proper nerve-tissue, we cannot agree with him. The framework which supports neural tissues is no more nervous than is connective tissue in any other part of the body; affection of it may damage the nerves, and so produce disturbances of sensation and the

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like, but that is an epiphenomenon. We should rather regard the connexion of the multiple growths with the nerves in the light of a pathological accident. The name *neuro-fibromatosis* may be a useful anatomical term, but is certainly not, to our minds, of any essentially pathological import, and from a merely descriptive point of view it is defective, for von Recklinghausen himself has not succeeded in tracing axis-cylinders in the midst of all the nodules found in patients suffering from the disease. As we have before remarked, the real pathology of these, as of all multiple tumours, which our ancestors in the macroscopical period were content to regard as a dyscrasia of the blood, is still involved in the greatest obscurity—in an opacity which we doubt whether even this ultra-microscopical age will be able to penetrate.

THE MARINE HOSPITAL SERVICE OF THE UNITED STATES.

The mercantile marine of the United States rivals that of our own country in magnitude. From F. Martin's "Statesman's Year-book of 1880" we learn that, while the British mercantile marine service comprised over 20,000 vessels, with an aggregate tonnage of six millions and a quarter, that of the States numbered over 30,000 vessels, with a tonnage of four millions and a half. The Marine Hospital Service provides at all the principal ports hospitals for seamen, to which are attached medical men appointed by examination, and with a regular system of promotion and pay, as acting or passed assistant-surgeons and surgeons. The expenses are met by a tax or subscription collected monthly from the men who are the probable recipients of the relief, as in the case of benefit societies, though an agitation is on foot for its abolition. A "harbor" or asylum for aged and invalided seamen is in contemplation. The number of men who are yearly admitted into these hospitals, or transferred under certain circumstances to civil hospitals, has risen from 11,000 in 1868 to 32,000 last year. We have before us the Report of the Supervising Surgeon-General of the Marine Hospital Service for the fiscal year 1882. The greater part of the volume consists of administrative and other details, which are of local interest only. There are also elaborate tables of disease among the crews and passengers of the merchant and immigrant vessels, and of operations performed at the hospitals. These are followed by selected cases from the practice of the hospitals, and reports of all fatal cases with autopsies, some of which well deserve a notice. Seventeen cases of rheumatic effusions into joints were treated by aspiration, all with most satisfactory results. The Heatonian method for the permanent cure of hernia was practised in seventeen cases, the previous duration of which had varied from two to twenty-three years, eight of them having been of about five years' standing. Twelve were entirely cured, and two improved; two were failures, and in one—which, however, was really unsuitable for such treatment, the man having albuminuria—an abscess followed the accidental penetration of the tissue of the cord by the irritant injection. The idea of setting up moderate plastic inflammation in the tendinous structures by the injection of an irritant fluid, first suggested by Velpeau, and afterwards by Pancoast, was followed up by Heaton, who preferred a preparation of "white oak" bark, and has been further developed by Warren, of Boston, U.S., who has adopted a new form of syringe, and a more irritating solution. It is urged in its favour that it is more constantly successful and less painful or dangerous than other operations, anæsthetics being really unnecessary. It may also be repeated again and again should the first injection fail to produce the desired result. The Report records an extraordinary instance of small-pox, confluent and asthenic, followed by septic fever, with forty-one abscesses, thirty-nine of which were freely opened and evacuated,—occurring in a scorbutic seaman, admitted into hospital for soft chancre, who had not only been successfully vaccinated in infancy, but again five years before his admission. While in hospital he was again vaccinated, but the maturation of the vaccine vesicles was arrested by the variola developing at the same time. The man recovered, and is reported to have been discharged in good health three months from his admission. Two cases of cerebro-spinal fever, and a number of malarial and hepatic diseases, so frequent in the Southern States, are among the fatal cases the autopsies of which are given. The volume contains a long report on the fearful hardships endured by the crews, mostly coloured men, of the river steamers on the Mississipi. Brutally treated, often killed and thrown overboard by the mates, or by a seaman to whom the officers depute their authority in order to evade the law, the crew have no shelter, except, perhaps, the leeward side of the loading, from bitter winds, and are driven to crouch for warmth beneath the boiler. Alternately roasted and frozen, they soon succumb to pneumonia or rheumatism, and, if they do not desert, die or are hopelessly broken down in a few years.

THE WEEK.

TOPICS OF THE DAY.

At the recent annual meeting of the governors of the Royal Free Hospital, they were able to place a most satisfactory statement of the work and financial position of the charity before its supporters. The report of the Managing Committee showed that the Hospital had been in full working order throughout the year, and that the high average number of in-patients noted in the previous year had not only been maintained, but exceeded: for 1882 they numbered 1629, and the daily average number of patients in the wards was 124; the number of out-patients who received advice and medicine was 20,915. The balance in hand at the end of 1882 amounted to £2389, which was more than sufficient to defray the bills of the Christmas quarter, so that at the close of the year the Hospital was practically free from debt. The total receipts for the past year amounted to £13,794, from various sources, including donations, subscriptions, and legacies; and as the total ordinary expenditure for the same period was only £10,790, the very substantial balance previously mentioned is accounted for. In concluding the report, the Committee expressed their opinion that the principle upon which the Hospital was founded—the free and unrestricted admission of the sick and destitute poor—had taken such a firm hold of the public mind, that no alteration in the way of converting the London hospitals into "pay" hospitals was necessary. The firm support which the Hospital had received since its foundation fifty years ago, left no room for doubt on this point.

If the present misunderstanding which has arisen between the Local Government Board and the Leicester Board of Guardians as to the carrying out of the Compulsory Vaccination Acts culminates, as it is expected it will, in legal proceedings being instituted by the former body, the cause of vaccination will, it is hoped, be strengthened in one of the headquarters of the disaffected. At the request of the Local Government Board the Leicester Guardians recently set forth their reasons for not enforcing the Acts. They stated that they "not only object to the enforcing of the payment of fines by distress," but they "object to any proceedings whatever for enforcing vaccination." The law, however, casts upon them the duty of causing proceedings to be taken for

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non-compliance with the Vaccination Acts, and they have up to the present time, though reluctantly, complied with it. The Board consider the Compulsory Vaccination Acts in themselves inconsistent and tyrannous, inasmuch as they do not provide for carrying out the vaccination of the child when the parent objects, but leave the child unvaccinated, and proceed to punish the parent by fine or imprisonment for exercising his parental right of protecting his child from that which he believes to be a dangerous and useless operation." The Guardians further contend that the present administration of the Vaccination Acts is entirely against their spirit, and altogether inconsistent with the recent declaration in Parliament of the late President of the Local Government Board; and they consider that the repeal of the compulsory clauses of the Acts is the only true solution of the difficulty. Certainly the Leicester Guardians express their opinions freely and plainly: they are, in regard to vaccination at least, very decided Home Rulers. The position they have taken up is largely owing to the pitiable weakness shown by the late President of the Local Government Board.

The following instructions have just been issued to their officers by the Marine Department of the Board of Trade: —"*Dietary Scales.*—The attention of the Board of Trade having been called to the increase of scurvy on board British ships since 1873, a report on the whole subject has been recently prepared and forwarded to the local Marine Boards for their observations. The conclusions arrived at in this report were as follows:— 1. That scurvy has been on the increase in British ships since 1873. 2. That lime-juice, of itself, will not prevent scurvy, and that too much reliance is placed on it, to the neglect of varied food scales. 3. That lime-juice, in connexion with fish or preserved meats and vegetables, may prevent scurvy. 4. That the dietary scale of ships should, therefore, include a fair proportion of fresh and preserved meats, as distinguished from salted meats. 5. That more fresh vegetables should be carried, notably raw potatoes. No satisfactory reason is given why fresh potatoes cannot be carried on board British ships; the allegation that they will not keep good on board ship is clearly disproved by the fact that they do keep good on board United States ships, and will keep good for a fair time anywhere else. 6. That it is not at present desirable to insert a statutory scale of diet in the articles of agreement with crews serving on long voyages, though it may possibly be necessary hereafter, unless the shipowners themselves move in the matter. The replies received from the local Marine Boards have confirmed these views, especially as regards the articles of diet referred to therein, and superintendents are therefore requested to take every opportunity of urging upon owners of vessels sailing on long voyages the necessity of supplying their crews with fresh potatoes, molasses, and a larger supply of fresh or preserved meats, in lieu of salt beef and pork."

Last week's meeting of the City Commission of Sewers having been the last sitting during the existence of the present Commission, the chairman (Mr. Felton) briefly recapitulated the leading features of the past year's work. Among the many subjects they had had to deal with, not the least was that of the electric light: a subject of great magnitude, and one involving large expense. The City authorities were not desirous of binding themselves to the electric lighting companies, as they had done to the gas companies; but in the case of a subject so far from fully worked out, they could not wisely take the matter completely into their own hands. With the compromise they had effected, however, he trusted that by that time next year they would see the City illuminated with the electric light. Mr. Felton denied that large sums of money had been taken, as had been stated, from the rates to bring before the Royal Commission evidence in regard to the pollution of the river Thames, and declared that the expense was being borne by the Corporation. It was satisfactory to hear from him, in respect of the Artisans' and Labourers' Dwellings Scheme, that the Golden-lane site had been sold, and it is hoped that the proceeds will very shortly be used to erect artisans' dwellings in Petticoat-square. The plans had been sent to the Home Office, and the Under Secretary, Lord Rosebery, has had the details of the scheme laid before him.

The monthly return of the Registrar-General for Scotland for December last, shows that during the period in question there were registered in the eight principal towns of North Britain the births of 3444 children and the deaths of 3001 persons. Allowing for increase of population the latter number is 85 above the average for December during the last ten years. A comparison of the deaths registered shows that the mortality was at the annual rate of 23 per 1000 persons in Edinburgh, 24 in Leith, 25 in Aberdeen, 28 in Greenock, 29 in Perth, 30 in Paisley, and 33 in Glasgow and Dundee. Of the 3001 deaths recorded, 1175, or 39·1 per cent., were those of children under five years of age; the numbers varied from 26 per cent. in Perth to 44 per cent. in Glasgow. The miasmatic order of the zymotic class of diseases proved fatal to 513 persons, and constituted 17·1 per cent. of the whole mortality. This rate was, however, exceeded in Glasgow, where 4·1 per cent. of the deaths were attributed to scarlet fever, and 6·5 per cent. to whooping-cough; whooping-cough was, in fact, the most fatal epidemic of the month, having caused 153 deaths, or 5·1 per cent. of the whole mortality. The deaths from inflammatory affections of the respiratory organs (not including consumption, whooping-cough, or croup) amounted to 864, or 28·8 per cent. Those from consumption alone numbered 257, or 8·6 per cent. One male and ten females were aged ninety years and upwards, the oldest of whom were a crofter aged ninety-six and a widow aged ninety-six.

Dr. Kebbell, the Medical Officer of Health for Hove, Brighton, has just issued his annual report for the past year. The death-rate during that period was only 13·6 per 1000, and the birth-rate 23·5; the zymotic death-rate was 3·6 per 1000. At the close of his report, Dr. Kebbell remarks that it must be a source of congratulation to the authorities to find that the town has passed through another year of prosperity as regards the public health. A death-rate of only 13·6 per 1000—about the average of the last eight years—is, he says, as far as his information goes, unexampled in any town of the same size in the United Kingdom. During the year there were only two deaths from typhoid fever, one of which was a very doubtful case. As typhoid fever is peculiarly the disease of bad drainage, the exemption of the district from this complaint is the best proof that can be given of the soundness of the system of drainage which has been adopted, and is still being carried out. The district, Dr. Kebbell adds, is quite free from epidemic disorders, and its general health is very satisfactory.

At the annual meeting of the governors and subscribers of Queen Charlotte's Lying-in Hospital, it was stated that the institution has just completed the 130th year of its existence, having, during that period, provided medical aid for upwards of 100,000 poor women. During the past year 692 in-patients were attended to, and 780 cases were looked after as out-patients.

The Royal Commission on Metropolitan Sewage Discharge have held several meetings in No. 9 Committee-room, House of Commons, since we last reported, and on each occasion further evidence was given on the part of complainants.

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THE METROPOLITAN ASYLUMS BOARD.

VERY little business of public importance was transacted at the last meeting of the Managers of the Metropolitan Asylums Board. A complaint was brought forward regarding the conveyance to the Homerton Asylum of a child suffering from fever, chargeable to the City of London Union. The Asylum authorities reported that the child was brought in the City of London Union ambulance by two intoxicated women, and that no care had been taken with the patient; and the obvious conclusion was drawn that this ill-conditioned mode of conveying fever patients adopted by the City of London Union was fraught with danger to the public. The Local Government Board had called upon the City Poor-law authorities to answer the complaint, and the reply was that the coachman of the ambulance had declared that the vehicle did not stop at any public-houses on the way, and it was also stated that the women were not intoxicated when they started. The reports from the fever asylums showed that during the past fortnight 82 patients were admitted, 17 died, and 91 were discharged, leaving 453 under treatment, viz., 329 scarlet fever cases, 1 typhus, 113 enteric, and 10 cases of a febrile character not clearly defined. These figures give a diminution of 32 cases upon the numbers recorded a fortnight ago. The small-pox returns showed that 35 patients were admitted, 6 had died, and 21 had been discharged, leaving 97 under treatment, or an increase of 3 since the returns of the previous fortnight were rendered.

ARMY MEDICAL SERVICE.

THE following list shows the marks gained by Surgeons on Probation in the Medical Department of the British Army at the close of the Netley Examination in February, 1883. The order of position of these gentlemen is not affected by marks they have gained at the Netley Examination. The first-named gentleman gained the Montefiore Medal and a prize in Pathology.

	Netley marks.		Netley marks.
1. W. G. Macpherson	2591	9. J. R. Stuart . .	1868
2. R. J. Shaw Simpson	2897	10. Th. Ricketts-Morse	1974
3. F. W. Reid . . .	2220	11. W. B. C. Deeble .	2030
4. E. V. A. Phipps .	2425	12. J. M. Prendergast	1488
5. V. E. Hunter . .	1820	13. R. P. Bond . . .	2049
6. A. Baird	2130	14. G. T. H. Thomas.	2045
7. T. O'H. Hamilton.	2147	15. G. M. H. Colman.	1793
8. D. Semple . . .	2260		

DIABETES INSIPIDUS OF NERVOUS ORIGIN.

AN instance of the connexion between diabetes insipidus and disturbance of the central nervous system, recently recorded by Flatten, is of much importance not only to the pathologist, but to the physiologist, as it confirms certain previous observations respecting the localisation of the urinary centres or nervous tracts (*Archiv für Psychiatrie*, XIII. 3, S. 671). The case was of traumatic origin. A man, aged twenty-two, sustained a severe injury to the left side of the neck and the occipital region, with temporary loss of consciousness, variable diplopia, and impairment of hearing on the right side. Almost immediately after the accident, polydipsia and polyuria set in; and later on boils made their appearance. When seen by Flatten, the man was found to be suffering from complete paralysis of the left external rectus, and partial paralysis of the right external rectus. Hearing was lost at the external meatus of the left side, whilst sounds were conducted through the structures of the head. There was neither sugar nor albumen in the urine, which amounted to twelve litres (423 ounces) per diem. Iodide of potassium was exhibited internally, and mercurial ointment rubbed into the neck, whereupon the polyuria decidedly diminished. Flatten's diagnosis of the locality of the lesion was that it was situated close under the nucleus of the left sixth nerve, which it destroyed, whilst it extended across the middle line and affected the nucleus of the right sixth nerve; but confessedly this diagnosis did not account for the peculiar disturbance of hearing. It is a fact of the greatest possible interest that the present case is the third instance on record of the association of traumatic polyuria with paralysis of the sixth cranial nerve.

OBSTETRICAL SOCIETY OF LONDON.

THE following is the list of the officers and Council of this Society for 1883, elected at the annual meeting held on Wednesday, February 7:—*Honorary President:* Arthur Farre, M.D., F.R.S. *President:* *Henry Gervis, M.D. *Vice-Presidents:* John Brunton, M.D., *Frederick Henry Daly, M.D., Clement Godson, M.D., Jonathan Hutchinson, F.R.S., John Thorburn, M.D. (Manchester), *J. Lucas Worship (Sevenoaks). *Treasurer:* John Baptiste Potter, M.D. *Honorary Secretaries:* Alfred Lewis Galabin, M.A., M.D., George Ernest Herman, M.B. *Honorary Librarian:* Francis Henry Champneys, M.A., M.B. *Other Members of Council:* Henry Charles Andrews, M.D., George Paddock Bate, M.D., Henry Bennet, M.D. (Weybridge), Peter Lodowick Burchell, M.B., T. Edmonstoune Charles, M.D. (Cannes), *Charles James Cullingworth (Manchester), *Alban Doran, *Sir Joseph Fayrer, M.D., Edward Malins, M.D. (Birmingham), *Gustavus C. P. Murray, M.D., *William S. Playfair, M.D., Walter Rigden, *George Roper, M.D., William Stephenson, M.D. (Aberdeen), William Heath Strange, M.D., John Knowsley Thornton, M.B., C.M., *John Wallace, M.D. (Liverpool), George Eugene Yarrow, M.D. Those gentlemen to whose names an asterisk is prefixed were not on the Council or did not fill the same office last year.

DUBLIN HOSPITAL SUNDAY FUND, 1882.

THE annual meeting of the friends and supporters of this movement took place on Wednesday, January 31. In the unavoidable absence of the Patron, the Earl of Meath, the chair was taken by the Viscount Powerscourt, K.P. Lord Brabazon, one of the honorary secretaries, read the report, which showed that since 1874 a sum of upwards of £35,860 has been contributed through the Hospital Sunday Fund in aid of the work of the Dublin hospitals. The total amount to the credit of the Fund for the year 1882 was £4450 5s., including a balance from the previous year of £236 8s. 9d., and £19 19s. 5d. interest allowed by the bankers. The working expenses for the year amounted to £251 0s. 6d., being 5·98 per cent. on the total collected. The Committee having ascertained that a sum of about £4200 was available for distribution, determined to distribute the sum of £3900 amongst the participating institutions upon the same principles as those followed in former years. The report further states:—"In addition to this sum the Committee deemed it advisable to distribute a further sum of £132 16s. to those hospitals which had complied with the recommendations of the Council with regard to their nursing arrangements. It will be remembered that the Council for 1880 gave the Committee of Distribution authority to 'take into consideration the efficiency of the nursing arrangements in the participating institutions, and modify the grants accordingly.' The Committees of Distribution for the years 1880 and 1881, believing that a sufficient time had not elapsed since special attention was drawn to this matter by the Committees on Nursing of 1878 and of 1879, did not exercise this power. The Committee now, however, believe that sufficient time has elapsed to enable the authorities of the Dublin hospitals

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to take such steps to remedy the defects in their nursing systems, and they have therefore, out of the balance to the credit of the Fund available after the division of £3900, increased by 5 per cent. the awards to those hospitals which have complied with the recommendations of the Council with regard to nursing arrangements." The result of the distribution for 1882 is as follows:—Sir Patrick Dun's Hospital, *£437 12s. 2d.; City of Dublin Hospital, £518 15s. 6d.; Dr. Steevens's Hospital, *£101 5s. 11d.; Meath Hospital, £361 15s. 6d.; Mercer's Hospital, £169 18s. 10d.; Whitworth (Drumcondra) Hospital, £88 0s. 7d.; Coombe (Lying-in) Hospital, *£334 9s. 2d.; Rotunda (Lying-in) Hospital, *£140 8s.; St. Mark's (Ophthalmic) Hospital, *£184 16s. 11d.; Convalescent Home, *£187 8s. 5d.; National Eye and Ear Infirmary, *£91 4s. 5d.; Cork-street (Fever) Hospital, *£145 4s. 7d.; Adelaide Hospital, *£800 17s. 4d.; Monkstown Hospital, *£239 13s. 11d.; Orthopædic (Usher's Island) Hospital, £105 4s. 11d.; National Orthopædic and Children's Hospital, *£125 19s. 8d.; total, £4032 16s. (Those amounts marked with an asterisk include 5 per cent. on award for improvement in nursing arrangements.)

BRITISH MEDICAL BENEVOLENT FUND.

A concert will shortly be given by the Strolling Players' Amateur Orchestral Society in aid of this Fund, at St. Andrew's Hall, Newman-street, Oxford-street. Members of the profession and their friends are earnestly invited to give their support. Tickets, 5s. and 2s. 6d. each, may be obtained of the Treasurer, Dr. Broadbent, or of either of the Hon. Secretaries—Mr. George Field, 31, Lower Seymour-street; or Mr. Edward East, 18, Clifton-gardens, W.

SPINA BIFIDA.

The Clinical Society of London have appointed a sub-committee to inquire into the results of the treatments of spina bifida by injection; and this sub-committee, composed of Messrs. Howard Marsh, A. Pearce Gould, H. H. Clutton, and Robert William Parker, have decided, in order to obtain materials on which to base the report, to issue a circular to such members of the profession as are supposed to have special opportunities for seeing these cases, and to appeal, through the medical press, to the profession generally for their aid and co-operation. Their circular runs as follows:—"Having been appointed by the Clinical Society of London to inquire into the results of the treatment of spina bifida by injection, we beg to ask your aid in obtaining information on the subject. With this view, we trust you may be willing to furnish us with:—1. Reports of any cases you may have treated by this method. 2. Descriptions of any specimens of this deformity you may possess. 3. Recent preparations, or any examples in still-born infants, which we may be allowed to dissect (such specimens will be carefully returned to you, if you desire it; or, if agreeable to you, presented to the Museum of the Royal College of Surgeons in your name). We shall also be very glad, should the occasion offer, if you would afford us the opportunity of examining any living examples of this deformity. Kindly address letters to Mr. R. W. Parker, 8, Old Cavendish-street, W.; and forward specimens, under cover, to Mr. F. S. Eve, Museum, Royal College of Surgeons, Lincoln's-inn-fields, W.C." We are sure the appeal need only be made generally known to secure for the sub-committee all the experience and information at present in the hands of practitioners in all parts of the country. The value of a report on such a subject must obviously depend on the number of cases examined and treated. As regards successful cases, it will be very desirable to diagnose (if possible) the variety to which the tumour belongs. The sub-committee are, and we think wisely, attempting to discover the exact histological structure of this deformity, about which much obscurity at present exists, and without which knowledge it will be impossible to lay down any precise rules for treatment. It is proposed, we see, to send the specimens to the Museum of the College of Surgeons. This will secure their careful dissection, as well as their preservation in the most generally accessible museum in London. We wish the sub-committee every success in their work.

DENTAL LEGISLATION IN FRANCE.

A somewhat novel society has been founded in Paris by no less notable personages than MM. Victor Hugo, Clémenceau, Barodet, Henri Rochefort, and other Republican senators and deputies, under the title of "Ligue de l'Intérêt Public Société Protectrice des Citoyens contre les Abus." The energies of the association are at present being directed towards the establishment of a system of dental inspection in all the primary schools of Paris; and a petition has been laid before the Municipal Council in furtherance of this object. The memorialists feelingly call attention to the fact that the teeth of boys in *lycées* are regularly looked after at the cost of the State—"that is, at the expense of the working classes," and they consider that the pupils in poorer schools are entitled to the same privilege. It is proposed, therefore, to adopt a system which is said to be working with the happiest results at Cherbourg, and at Verviers in Belgium. School boys and girls are to pay four visits a year to official dentists, who will become responsible for the good condition of their teeth, and perform whatever extractions may be considered necessary, gratis. The visits are to be compulsory; and by a thoughtful arrangement, which is sure to please the young people, they are to take place on Sundays, so as not to interfere with lessons. Parents who allow a child to miss one of the quarterly inspections on the insufficient grounds that there is nothing the matter with its teeth, will be punished by finding its name erased from the dentist's list for six months. On a repetition of the offence the child will be cut off from the benefits of free dentistry for ever. A powerful committee has been appointed to assist the passage of this novel measure through the Municipal Council.

NAPPER TESTIMONIAL FUND.

We learn that the presentation of the testimonial to Mr. Napper will take place to-day (Saturday, February 10) at 4 p.m. Mr. John Eric Erichsen, F.R.S., will take the chair.

THE ETIOLOGY OF FIBRINOUS POLYPUS OF THE UTERUS.

In a recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie*, Dr. Ludwig Joseph, of Landeck, relates a case of fibrinous polypus of the uterus, quite exceptional in its origin, and of much interest for several reasons. A fibrinous polypus, as our readers are aware, is essentially a blood-clot, which has adhered to some part of the uterine wall, has consequently been retained in utero, and has undergone the changes which blood-clots in the living body usually do undergo—decolourisation, shrinking, and hardening. The typical history of these cases is that a young woman goes from six to twelve weeks without menstruating, and then begins to lose blood copiously. When the uterus is thoroughly examined, a fibrinous polypus is found, removed, and the hæmorrhage ceases. Kiwisch, because he found no trace of fœtal membranes in polypi of this kind, taught that they occur quite independently of pregnancy. This view was controverted by Scanzoni and C. Braun, who believed that they always occurred as a sequel of abortion or labour. One case has been described by Rokitansky in which post-mortem examination

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showed a body like a fibrinous polypus, except that it was not adherent, in a uterus which presented no sign of pregnancy. Dr. Joseph's patient was a widow aged fifty-five, who had ceased to menstruate at the age of forty. For nine months before coming to him she had suffered from uterine hæmorrhage. The uterus was retroverted and flexed, enlarged, and fixed. Under palliative treatment the hæmorrhage improved, and four weeks after treatment (by rest and mineral acids) a retort-shaped solid mass was passed from the uterus. It measured about three inches and a quarter long by one inch and a half in thickness, and consisted of laminated, partly decolourised fibrin, embedded in which was a very vascular myomatous tumour, the size of a hazel-nut. Dr. Joseph's theory of the case is, that the myoma caused hæmorrhage: that the flexion offered an almost insurmountable obstacle to the outflow of blood, which was therefore retained, and underwent the usual changes. He does not explain how it was that the flexion, which would not allow fluid blood to pass, yet allowed this solid mass to escape. The interest of the case is in the fact that it shows that the fibrinous uterine polypus is not invariably connected with a previous pregnancy.

INDIAN MEDICAL SERVICE.

APPENDED is a list of Surgeons on Probation in Her Majesty's Indian Medical Service who were successful at both the London and Netley Examinations in February, 1883. The final positions of these gentlemen are determined by the marks gained in London added to those gained at Netley, and the combined numbers are accordingly shown in the list which follows. Mr. Leahy gained the Herbert Prize and the Montefiore Second Prize; Mr. Webb the Martin Memorial Gold Medal and a prize in Pathology; and Mr. Weir gained the Parkes Memorial Bronze Medal.

	Combined marks.		Combined marks.
1. A. W. D. Leahy .	5798	5. J. Crimmin . . .	4637
2. W. W. Webb . .	5420	6. R. E. S. Davis . .	4592
3. R. R. Weir . . .	5418	7. H. K. Fuller. . .	4563
4. W. H. Burke . .	4924	8. W. H. Neilson . .	4505

THE PARIS WEEKLY RETURN.

THE number of deaths for the fourth week of 1883, terminating January 25, was 1112 (614 males and 498 females), and among these there were from typhoid fever 56, smallpox 14, measles 11, scarlatina 2, pertussis 7, diphtheria and croup 42, erysipelas 8, and puerperal infections 6. There were also 41 deaths from acute and tubercular meningitis, 216 from phthisis, 41 from acute bronchitis, 79 from pneumonia, 50 from infantile athrepsia (20 of the infants having been wholly or partially suckled), and 25 violent deaths (19 males and 6 females). The number of deaths registered is slightly below the mean of the four preceding weeks. Typhoid fever has furnished 56 deaths instead of 68, and measles 11 in place of 14; but the admissions for typhoid fever have slightly increased. The births for the week amounted to 1258, viz., 636 males (485 legitimate and 151 illegitimate) and 622 females (457 legitimate and 165 illegitimate): 98 infants were born dead or died within twenty-four hours, viz., 61 males (44 legitimate and 17 illegitimate) and 37 females (16 legitimate and 21 illegitimate).

VERTIGO IN TABES DORSALIS.

IN the *Revue de Médecine* for January will be found an interesting and valuable paper on the vertiginous symptoms which occur in locomotor ataxy. Although various authors have mentioned deafness, or even vertigo, as being present in individual cases, yet, so far as we are aware, no systematic study of these symptoms has hitherto been recorded. Out of twenty-four well-marked cases of locomotor ataxy, at La Salpêtrière, vertigo was present in seventeen, and a methodical investigation of the acuteness of hearing and of the condition of the membrana tympani and Eustachian tube was, as far as possible, carried out in these cases. The result was interesting: deafness, when present, was associated either with thickening or perforation of the membrana tympani or obstruction of the Eustachian tube, and in no single instance was there any evidence that the auditory nerve was at fault. After pointing out that such affections of the ear as those above-mentioned are matters of everyday occurrence without there being any co-existent vertigo, the authors observe that the explanation of this symptom must be sought for elsewhere. The hypothesis they put forward is to the following effect. The auditory nerve must be considered, functionally, to be a double nerve, composed on the one hand and chiefly of fibres which regulate the hearing of sounds, and on the other hand of fibres which preside over the sense of space and come from the semicircular canals. There is, they say, no reason why they should not admit that these last fibres alone, or their nuclei in the medulla oblongata, or their commencement in the cerebellum, may be the seat of lesions which determine vertigo without leading to any loss of functional activity of the auditory nerve. That the auditory nerve is composed of two distinct nerves is an anatomical fact that has been for some time recognised in this country as well as on the Continent. The explanation of vertigo in locomotor ataxy, which the authors of this paper have based upon this anatomical fact, seems to us to be in all probability the correct one, and we fully expect that it will receive confirmation at the hands of any who investigate the matter for themselves.

THE WEST KENT COMBINED SANITARY DISTRICT.

WE understand that Dr. C. O. Baylis, of Tunbridge Wells, has been compelled, owing to ill-health, to resign his appointment as Medical Officer of Health for the Combined Sanitary District of West Kent. An influential meeting was recently held in Tunbridge, at which a resolution was passed expressive of regret at his resignation, and at which various suggestions were made as to the appointment of his successor.

DEATH OF PRUNER BEY.

THE *Lo Sperimentale* for November notices the recent death at Pisa of a man of great distinction some forty years since. Francis Pruner was born in 1808, at Pfreimdt, in Bavaria, and, early left an orphan, had to struggle with great difficulties before he was able to obtain a degree at the University of Monaco. Repairing then to Paris, he made the acquaintance of Pariset, Secretary to the Academy of Medicine, by whose encouragement he obtained the appointment of, first, Professor of Anatomy, and then Director of the Military Medical School in Egypt. He came to Europe in 1846, in order to publish his celebrated work on Diseases of the East, which remains still a great authority; and on his return was made Bey. Eventually his health broke down, and he was obliged to leave Egypt, and in 1861 finally established himself at Paris, where he became one of the founders of the Société d'Anthropologie. The publications of that Society contain several of his memoirs, as well as his controversies with Paul Broca. He published works upon the Contagion of the Plague, the Medical Topography of Cairo, the Races of Man in Egypt, etc. After the Franco-German war he retired to Pisa, where he passed a tranquil life amidst a large circle of distinguished friends, and employing himself in classical and Oriental studies to the last. By his will he left a considerable sum to the University of Monaco, in order to assist those students who might be impeded by the

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difficulties which attended the commencement of his own career.

THE MEDICAL UNION SOCIETY.

The Medical Union Society has, as doubtless most of our readers are aware, lately been established for the purpose of affording a means of intercommunion and mutual co-operation among the students of the metropolitan medical schools. The actual active formation of the Society was celebrated on the 31st of last month by a *conversasione* held in the Holborn Town Hall. Mr. Henry Power presided on the occasion, and some of the senior, and many of the junior, members of the staffs of our hospitals and schools were present. The students mustered largely, and a great many ladies graced the scene. Mr. Hulke briefly spoke of the objects of the Union; and insisted on the fact that it consisted wholly of students; its President would be a student, and the committee of management was representative, each hospital appointing one member. An address was then delivered to the students by Dr. B. W. Richardson; and this was followed by a concert, vocal and instrumental, by professional and amateur performers. A number of instruments were exhibited by Messrs. Arnold, Baker, and Watson; Mr. Lombardi, whose name will be remembered by many of the members of the late International Medical Congress, sent a magnificent collection of portraits, landscapes, and architectural photographs of unusual beauty; and several microscopical societies provided a liberal supply of instruments and preparations. One of these we cannot refrain from singling out for special notice—the "chromatoscope," as it is called by its inventor, Mr. Hardy, of Clapton—an ingenious combination of three coloured glasses (blue, red, and green) with an ordinary spot lens, giving nearly all the effects of the polariser with objects incapable of polarisation: the internal structure of some aquatic larvæ being thus clearly displayed. A full description of it will appear shortly in the *Proceedings of the Royal Society*. The event of the evening was, however, the eloquent and thoughtful address of Dr. Richardson. He began by contrasting the limited knowledge of forty years ago—limited in its extent, and limited to a few—with the present wide diffusion of scientific teaching, and the intense activity and keen competition of to-day. He next touched on the programme of the Medical Union Society, which is intended to provide the students of the London medical schools the social and educational advantages enjoyed by the undergraduates of Oxford and Cambridge in the unions of their respective universities, to be at once a club and a debating society, furnished with a general library, and affording opportunities for social intercourse and for the furtherance of objects affecting their interests as a class. On each of these points he had something good to say. He begged them to keep the presidency faithfully to themselves, and not to be induced to give it to an outsider, however eminent. The library he hoped would not be merely medical, or confined to modern works; and he insisted on the value of the highest and the widest culture and catholicity of taste. On eloquence—the power of speaking clearly, elegantly, and effectively—he dwelt long, urging his hearers to avoid the dangerous temptation of indulging prematurely in debate, which never made an orator, but had ruined many who had given early promise of oratorical powers. Dividing orators into four classes, according to the mode in which they prepare their speeches, he advised the study and imitation of the best speakers of the day. He then touched more lightly on the relations of medical men to one another and to the public, deprecated undue enthusiasm or confidence in new modes of treatment, and, as usual, insisted on the paramount importance of preventive medicine. But here we must say he fell into the error he had just condemned in asserting that when "*alcohol is, as it surely will be, thrown entirely out of use*," pathology will almost be a thing of the past; and "materia medica a ghost," when men are wise and call for drugs reluctantly. Nor do we fear or hope that through the diffusion of sound physiological teaching "the general public will get ahead of us and undermine our curative skill altogether by leaving us nothing to cure"! If ever man needed to be warned against enthusiasm and Utopian dreaming, it is Dr. Richardson himself.

THE TUBERCLE BACILLUS IN THE URINE.

The first recorded observation of the tubercle bacillus in the urine of a living man has just been announced by Professor Rosenstein of Leiden, in the *Centralblatt* for February 3. The bacillus had indeed already been discovered in the products of the pelvis of the kidney, but the observation was made post-mortem, and was therefore of comparatively less value than the detection of the organism in urine freshly passed. The case in point was that of a man aged thirty-seven years, with scrofulous disease of both testes, and abundant albuminuria, the urine being muddy and presenting a few flocculi, as large as the head of a pin, floating through it. On standing it deposited a considerable sediment, which consisted chiefly of pus with a few red corpuscles. For the purpose of careful examination, the urine was passed into a solution of thymol, and allowed to stand for twenty-four hours. The fluid portion was then removed, and a drop of the sediment was treated like sputum which is being examined for bacilli, according to Ehrlich's method (see *Medical Times and Gazette*, 1882, vol. i., page 559). With a high power of the microscope it was discovered that abundant masses of the tubercle-bacillus were present in the flocculi just described. Professor Rosenstein recommends the use of methyl blue in the process of preparation, to prevent confusion of the tubercle bacillus with other organisms present even in fresh urine.

MANCHESTER MEDICAL SOCIETY—MICROSCOPICAL SECTION.

The annual meeting of the Microscopical Section of the Manchester Medical Society was held on the 23rd ult. at the Owens College, when the following were elected officers for the ensuing year:—*President:* Dr. J. Dreschfeld. *Vice-President:* Dr. D. J. Leech. *Treasurer:* Dr. H. Ashby. *Secretary:* Mr. A. H. Young. *Committee:* Mr. J. Broadbent, Dr. Dixon Mann, Dr. J. S. Bury, Dr. A. H. Griffith, Dr. H. Tomkins, and Mr. A. W. Stocks.

AN ANTI-VIVISECTION FAILURE AT MANCHESTER.

A large anti-vivisection meeting was recently held in the Association Hall, Peter-street, Manchester, presided over by Mr. J. B. McKerrow. The audience numbered between 800 and 900 persons, and the proceedings were principally remarkable from the fact that three resolutions in succession, moved to condemn the practice of vivisection, were put to the meeting and lost. For this result the cause of common sense is greatly indebted to Professor A. Gamgee, of Owens College, Manchester, who, at some personal inconvenience to himself, attended the meeting. In a speech, occupying nearly three-quarters of an hour, the Professor laid before the meeting such a temperate, but at the same time clear, view of the practice of vivisection as at present conducted by physiologists in this country, that he carried the great majority of his hearers with him, with the result we have already mentioned. It would be greatly to the advantage of the community if other able members of the profession, fully acquainted with the subject, could more often be found to follow the example

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set by Professor Gamgee and a few other medical speakers. When they have publicly met the anti-vivisection agitators they have generally beaten them; and in this way it might be possible, in time, to educate the public sufficiently to enable them to consider subjects of this nature from a practical and common-sense point of view.

THE ROYAL UNIVERSITY OF IRELAND.

On Wednesday, January 31, the Senate of this University enacted that—"The certificate or certificates of hospital attendance required from candidates for the degree of M.B. must show that the student has, during a period of three months of his hospital attendance, attended either a fever hospital of repute, or the fever wards of a general hospital." The Senate also ordered that the certificates of personal attendance on fever cases, similarly required from medical candidates, must show that at least ten fever cases have been so attended. At a meeting of the University held subsequently the following degrees were conferred by the Vice-Chancellor of the University:—M.D.: J. G. Deacon, W. A. P. Martin. M.Ch.: J. G. Deacon.

THE METROPOLITAN WATER-SUPPLY FOR DECEMBER, 1882.

The lesson to be learned from a consideration of the report of the Metropolitan Water Examiners for the month of December last would appear to be that it is in the power of our water companies to do much towards rendering the supplies furnished by them wholesome, even when the raw material on which they have to work is of the most indifferent quality. It will be remembered that the November report recorded that the state of the water at the intakes, throughout the greater part of that month, was bad, and that Dr. Frankland condemned the supplies furnished by most of the companies after filtration. The summary of Colonel Bolton's remarks on the state of the water at the different intakes in the Thames and the Lea during December last, previous to filtration, shows that it was bad in quality during the whole of the month. The Thames especially was in a state of flood for the whole of the period, and was much polluted from the effluent waters bringing down from the land large quantities of marl and clay, as well as decayed vegetation and other impurities, which stained the water and rendered it exceedingly turbid. But, unlike last month, Dr. Frankland reports that the Thames water supplied by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies, during December last, showed in every case, except that of the Chelsea Company, a marked improvement in quality since the preceding month. The water of the Chelsea and Lambeth Companies was slightly turbid, owing to imperfect filtration, and the Lambeth Company's water also contained moving organisms. The water drawn from the Lea by the New River and East London Companies exhibited a deterioration upon the quality of last month's samples, but the New River Company's supply was, notwithstanding, better than any of the Thames waters. Both these waters were efficiently filtered before delivery.

THE BACILLUS OF GLANDERS.

In the *Wiener Med. Woch.*, No. 1, 1883, there is an abstract of some observations on the pathology of glanders, which have led to the discovery of the bacterium of this disease. The investigation, undertaken by what corresponds to our Local Government Board, consisted in experimental and microscopical research. In sections of the diseased tissues (lungs, spleen, liver, and nose of a horse), stained with a concentrated watery solution of methylen blue, cleared up with a dilute solution of acetic acid, and finally washed in alcohol, fine rods were to be seen here and there, which were about the same size as those of the *Bacillus tuberculosis*. Other forms of bacteria were not present in the specific products of glanders. In order to ascertain whether these bacteria were causally related to the disease in question, cultivation experiments were undertaken. To this end a series of perfectly clean glasses, containing sterilised blood-serum from the horse or sheep, were inoculated with some of the material of the specific products of glanders taken from the lungs and spleen of a horse. On the third day after the inoculation of the sterilised fluids, numerous small brilliant globules were found in the majority of the glasses, scattered about on the surface of the serum. The globules, on investigation after staining on cover-slips, turned out to be countless bacilli of the same sort as those detected in the tissues above mentioned. The bacilli, the result of artificial cultivation, were inoculated on rabbits, mice, and guinea-pigs. In some rabbits merely local manifestations with swelling of the lymphatic glands were observed; in others all the features of typical glanders appeared. White mice were unaffected by the experimental vaccination; but small grey-yellow nodules were discovered in the liver and spleen of field mice eight days after inoculation. Three or four days after the vaccination on guinea-pigs an ulcer with an indurated base invariably appeared at the site inoculated, and later on the corresponding lymphatic glands became enlarged. In many guinea-pigs the affection stopped at this point, but in some (when the amount of stuff injected was greater) an acute nodular swelling of the testes or ovaries or vulva set in, and signs of a spread of the disease to the skin and nasal mucous membrane were observed later still. In some, again, instead of this chronic course, an acute wide-spread infection suddenly set in, and caused rapid death. In such cases innumerable submiliary nodules were found disseminated throughout the spleen and lungs, and resembled the products of acute tuberculosis, but the bacilli contained in these miliary nodules did not behave like the bacilli of tubercle. Cultivations and inoculations from the organs of a guinea-pig dead of the rapid form of the disease gave similar results to those obtained from the organs of the horse. Two horses inoculated with some material from the pure cultivations of the bacilli died with the symptoms and showed the post-mortem appearances of glanders. Dr. Struck, the head of the Medical Department of the Local Government Board in Berlin, has thus presented us with a complete series of positive experiments, all tending to support the notion that the bacilli are really causally connected with the disease called glanders. This demonstration can only be held to be second in point of completeness to those made on *Bacillus anthracis*.

A well-attended meeting of Cambridge graduat[es] held at the house of Sir George Burrows on Frida[y] when it was decided to form a Cambridge Medical Gradu[ates] Club.

According to the report of the Harvard University the last academic year, the number of special students the University continues to increase; and the Faculty finally admitted them to all the privileges of undergradua except that of obtaining a degree. It is satisfactory to [learn] that the President states that the increased attention gi[ven] to physical exercise and athletic sports during the last f[ive]-and-twenty years has been, on the whole, of great adv[an]tage to the University, the average physique of the stud[ents] having much improved. It is still more satisfactory to l[earn] that the students prominent in athletic sports take [a] rank in their classes also.

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The annual meeting of the governors of the London Fever Hospital will be held at the Freemasons' Tavern on Friday, the 9th inst., at 5 p.m.

The Hunterian Oration of the Royal College of Surgeons will be delivered by the President, Mr. Spencer Wells, on Wenesday next, the 14th inst., at 3 p.m. The Oration will be given in the Theatre of the College, and members of the profession will be admitted on presentation of their visiting cards.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE BY MEDICAL MEN.

(From a Correspondent.)

An impartial survey of the agitation in Liverpool, in reference to the question of compulsory notification of infectious disease by medical men, may be interesting in view of future legislation upon the subject.

The dual system of notification was advised by the Medical Officer of Health for that city, and powers were to be asked for from Parliament, similar to those possessed by several other towns. The medical profession, led by Dr. Wm. Carter (Medical Officer of Health for West Derby), rose almost *en masse* to oppose compulsory notification by medical men, and formed themselves into an Anti-notification Association, the members of which were to be the opponents of compulsory notification throughout Great Britain. When the Liverpool Health Committee saw that the opposition was so unanimous and formidable they inquired more thoroughly into the question, and sought information both by letters and by deputations from those towns where the Acts were already in force.

The letters were sent to provosts, mayors, and chairmen of local boards, and the replies were almost without exception in favour of compulsory notification by medical practitioners. But as these replies were from municipal authorities, whose statements might be suspected to be *ex parte* ones, deputations, composed of members unfavourable as well as favourable to notification, were sent to Blackburn, Bolton, Edinburgh, Greenock, Huddersfield, Leicester, Nottingham, and Warrington, and the result was the publication of 1075 questions and answers, that filled a report of 260 pages. Opponents and supporters of notification alike refer to this report to prove the correctness of their views, and it is very difficult for an impartial reader to estimate the value of the evidence either for or against. It seems plain, however, that the results of notification have not been so strikingly beneficial in "stamping out disease" as its supporters would lead us to imagine, nor that the evil effects of compulsory notification upon medical practice and upon concealment of disease have been so great as its opponents foretold.

At a meeting of the medical practitioners of Liverpool it was almost unanimously resolved to recommend—"1. To obtain from every dispensary and district medical officer early notification of cases of infectious disease, in the same manner as is now done from recently appointed medical officers of district schools, and parochial medical officers; a fee of 2s. 6d. being paid for each certificate so forwarded. 2. To give every other medical man the option of making early notification on similar terms. 3. To make Section 90 of the Public Health Act applicable to Liverpool—a proceeding which would impose the duty of early notification on the tenants-in-chief of every sublet house in the city below a certain rental, and which would give the sanitary authority the power, which they do not now possess, of compulsory removal to hospital in cases which would seem to require it. 4. To demand that school board authorities shall require from every child, who shall have been more than two days absent from school, a certificate to the effect that neither he nor any member of the family with which he resides is affected by any infectious disease."

These clauses did not meet with much encouragement from the Council, and, after carrying some of the recommendations originally proposed, the question was postponed in October last, and will probably be brought forward again early in the present year. Meanwhile, fever is raging in the city, and the question of prevention of infectious disease is engaging the attention of all thoughtful men. A careful consideration of the whole question seems to point to the conclusion that medical men do not object to compulsory notification *per se*, but that they object to what may follow when once compulsory notification has been obtained. The proceedings of the health authorities have not always been calculated to allay these fears, as two well-authenticated examples will show. A child, whose case was notified to a health officer, is left by its medical attendant in a convalescent condition, with instructions to the mother to keep the child warm, and by no means allow it out of the house. He is called in haste a few days after, and finds the child "œdematous and convulsed" through being turned out of the house until *disinfection by the health officers could be carried out!* This was a parish case. Another child in private practice dies from scarlet fever, and at the time of its death another child has taken the fever, and is in the same house and in the same room. Two days after the burial of the first child the health officers disinfect the house, and depart, apparently well satisfied that they have stamped out scarlatina in that place!

In both cases the slightest communication with the medical attendant would have prevented such blunders. Disinfection must always be directed by intelligence, and not by routine, else it will often be as dangerous or absurd as it was in the two cases cited. There are no other persons so well calculated to carry out disinfection intelligently, and in a manner suitable to each case, as the medical attendants. They have up to the present time been almost the only workers in preventive medicine, and the appointment of medical officers of health was made to combine and direct the efforts in this direction of the medical men. The medical officers of health must have early notification and power to separate the infected from the non-infected. The separation can be most easily made by the trusted medical attendant, and the medical officer of health ought merely to be the authority to support the medical attendant where authority may be required. No jealousy then would mar the working of the health officers; publicity would sufficiently punish the medical attendant who abused his power; and infectious disease would be restrained in a way that would astonish those who are at present discouraged because notification, without the support of the medical profession, does not stamp out epidemics.

Ventilation, drainage, cleanliness, and sobriety are useful in their places, but no man in his senses would depend on these alone. Separation is the only means of prevention of infection according to the present state of our knowledge. A central authority must enforce this separation where patients refuse, and the medical officer of health is this central authority. Medical men must notify to this central authority, so that an estimate may always be made of the prevalence of infectious disease, and combined action taken to prevent its spread. The medical attendants are the persons to be combined, and except they are so combined in aim with the medical officer of health, his office will be a thankless and useless one, no matter how stringent are the laws concerning compulsory notification.

A Needle Forty-six Years in the Body.—Mrs. W., in 1830, swallowed a large needle with a broken point, which for two weeks afterwards caused considerable irritation and bloody vomiting. About twenty years afterwards she was seized suddenly with lancinating pain in her left hip, which confined her to bed for several weeks, and the same joint was the seat of a similar attack twice, at intervals of one or two years. In 1874 she was attacked by exquisite pain in the left shoulder and arm, which was supposed to be rheumatic, but resisted all treatment. It disappeared after some months of itself, but recurred in 1876, with swelling in the posterior surface of the arm, just above the elbow. While rubbing this part with a liniment, her hand became wounded by what turned out to be the blunted point of a needle, which required considerable force to withdraw it by means of a forceps. The needle was blackened and had lost its smoothness, and was found to be one of an ancient pattern which had long ceased to be manufactured. All pain ceased, and the patient at eighty now enjoys a vigorous life.—*Dr. C. J. Walton, Louisville Med. News*, January 13.

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FROM ABROAD.

Clinical Observations on Albuminuria.

Dr. Arthur Meigs read a paper thus entitled at the Philadelphia College of Physicians (*Philadelphia Medical Reporter*, November 25), founded on the observation of sixty-two cases in private practice, involving between 1600 and 1700 examinations of the urine. He was enabled to follow a number of these cases for a considerable time, so as to be able to deduce some facts in relation to diagnosis and prognosis which he thinks deserving of notice.

"That which has most impressed me is the impossibility of making a prognosis, with any degree of exactitude, in most cases of Bright's disease. Of course, in the plainer ones, the decision is easy. If asked an opinion in a case with a large or even a moderate amount of albumen, with increasing heart-failure and evident decline of strength and vitality, with headaches and the peculiar white complexion of the disease, it is easy to prophesy that such a person will not live long, and the prophecy, nine times in ten, comes true. If called, however, to decide the question of the future for a young man of thirty-two or thirty-three, previously well, but for some weeks complaining of headaches, malaise, and boils, and then examination of the urine shows a slight amount of albumen, granular and hyaline casts, and abundance of rather small oxalates, the question of the future is not so easily decided. I have seen such cases go on pretty well for a few months, then suddenly have convulsions, and die in a few days. Again, persons presenting identical symptoms, after being sick a few weeks or months, entirely recover. To my mind it is impossible, in the present state of our knowledge, to anticipate the future, and the patient should always have the benefit of the doubt, and be shown the brighter rather than the darker side of the picture."

After referring to cases in which albumen and tube-casts, and all the other signs, were found more than eight years ago in persons who are yet alive, Dr. Meigs expresses his dissent from the views of Beale and Basham as to the conclusiveness of microscopic examination in this disease, and continues:—

"A very common symptom, and one on which there is not much stress laid in the majority of books, is dyspnœa. Whenever a patient is found suffering with this, and particularly if there is great nervousness and loss of self-control, and anxiety, with no other fully sufficient cause for its existence, suspicion of renal disease should be assumed, and the urine examined, even if there are no other symptoms whatever pointing towards a lesion of the kidney. These attacks of dyspnœa frequently come on with great suddenness in persons who have not considered themselves sick, and such attacks are often quite rapidly fatal. This condition has been described as 'renal asthma,' but I believe it much more common than is usually supposed. Another symptom which I have frequently noticed, and have never heard described, is coryza, which is of such a character that it gives rise to very much greater distress than any ordinary cold in the head; with this there is not much discharge from the nose, but the patient complains that he can get little or no air except through the mouth, this being accompanied with excessive oppression, much more than the condition would seem to warrant. This symptom was first called to my attention by my father, Dr. T. Forsyth Meigs, about nine years ago."

Dr. Meigs refers to three cases as exemplifying the occasional suddenness of the onset of the disease, or at all events of its discovery, while its nature in other instances is well known. The existence of oxaluria, or of the lithic acid diathesis is a prolific source of mischief to the kidney, these conditions occurring especially in large eaters, living an inert life and taking but little exercise. Such persons are common among the rich in large cities; and tube-casts will seldom fail to be found in those who have passed gravel for any length of time, and this commonly before albumen is found. If attacks of gravel occur often, they are apt to be followed at last by Bright's disease, directly caused, probably, by the mechanical irritation of the lining membrane of the tubercles of the kidney by the sharp edges of the minute calculi passing through them. Dr. Meigs believes that deaths from kidney disease are on the increase, and attributes this to the altered mode of modern life leading to a larger number of deaths from degenerative processes, and fewer by acute disorders. Exposure to atmospheric influences is more guarded against, and we are more self-indulgent. People take too little exercise, while they indulge in too much rich food and drink. In the course of years the excretory organs degenerate, the continuously working kidney, "the common sewer of the body," first giving way. Persons who are naturally robust, and gifted with a large appetite, become more inert as years go on, give up their active exercise, and the eating going on, they become fat and sluggish; and on loss of health taking place, an examination shows that degeneration is commencing in the kidney.

"The drift of my paper has been to try to establish that we should in all ordinary cases of albuminuria be very guarded in our prognosis, except when it is self-evident that the case must be rapidly fatal. I have now under observation fifteen persons (seventeen, if I count two who have albuminuria alternating or parallel with diabetes mellitus) who have been suffering with this complaint for a greater or less length of time. With three of them the disease began nearly nine years ago, and they either have it now, or have entirely recovered from it, after more than two years' continual duration. Yet in regard to no one of them do I feel able, even in my own mind, to guess, much less to formulate an opinion, as to how much longer they may live. There are absolutely no data, if such cases are considered in the light of the experience of the sixty-two I shall mention, upon which to found a positive prognosis.

"Another observation I have made is in regard to the death of very old people. We are all agreed, I presume, that when a very old person dies, and we report the death as one from old age, it is because we are unable to put the finger upon the exact part of the old and worn-out machinery that at last refuses to work and thereby causes all the rest of the mechanism to stop. This direct cause will, if sought for, frequently be found in the kidney. To examine the urine is not always a thing that strikes us, particularly when absolutely no symptoms appear to point towards disease of the kidney. I have seen a number of instances in which old people seemed to be fading out, as they often do, yet have felt entirely unable to explain to myself any direct cause for that failure, until the urine was examined, when there was found albumen with granular and hyaline casts, and sometimes a few blood corpuscles. A careful inquiry would perhaps reveal the fact that the amount of urine passed was very small. All this, without any other symptom to point towards kidney disease, at the same time the failure of the patient being very gentle and gradual; or else, as not infrequently has happened, senile delirium existed, either violent or mild in type, and followed at last by death."

After furnishing an analysis of his sixty-two cases, Dr. Meigs terminates his paper with the following recapitulation:—1. That in no ordinary, uncomplicated case of Bright's disease should a prognosis of speedy death, or even of incurable disease, be given. 2. That dyspnœa, usually taking the form of renal asthma, is much more common than is usually supposed, and when properly appreciated is a valuable and diagnostic sign of the disease; also that severe coryza is a complication or accompaniment, and has a diagnostic value. 3. That Bright's disease as a cause of death is on the increase. 4. That it is a very common cause of the deaths of old people, probably being the direct cause in many deaths reported as of old age. 5. That the passage of gravel, even when microscopic in size, but particularly if large enough to give rise to nephritic colic, is a prolific cause of the disease. 6. That the occurrence of tube-casts in the urine, without, or in advance of, the presence of albumen, is very common; and, *vice versâ*, persons may die of Bright's disease, and the most careful examination fail to show any tube-casts, although there may be albumen constantly present in the urine. 7. That the abuse of alcohol is certainly a cause of kidney disease, as proved by the case related, in which it has again and again caused hæmorrhage from the kidney with the temporary presence of albumen and tube-casts in the urine, and disappearing again with the cessation of its consumption.

The Library of the Royal College of Surgeons will be closed on the 13th, 14th, and 15th inst.

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REVIEWS.

A Dictionary of Medicine, including General Pathology, General Therapeutics, Hygiene, and the Diseases peculiar to Women and Children. By various Writers. Edited by RICHARD QUAIN, M.D., F.R.S. London: Longmans, Green, and Co. 1882. 8vo, pp. 1816.

[SECOND NOTICE.]

ANY detailed criticism of a work having the extent of that now before us must necessarily be very selective, and we may therefore say at the outset that after reading many of the leading and a considerable number of the minor articles, we have little but praise to give both to the clear and able writing and the careful editing of the work. Taking, first, Diseases of the Heart and Lungs, we notice a greater subdivision of those of the heart, not, we think, to their advantage. Had Dr. Green's able article on Inflammation of the Lungs been broken up into one on croupous pneumonia, one on broncho-pneumonia, and a third on interstitial pneumonia, written by different hands, we should certainly not have had the valuable contribution to this subject furnished by the single article. The separation of Cardiac Dilatation from Cardiac Hypertrophy, and their discussion by the different hands of Dr. Bristowe and Dr. Wardell, seems to us an error which lessens the value of both articles. The two conditions are probably always associated, frequently in the same person at the same time, or, if not, at different times. The Valvular Diseases of the Heart are discussed by Dr. B. Foster in an able and systematic article. We can cordially recommend the perusal of Dr. Bruce's article on Endocarditis, in connexion with which we may refer to that on Acute Rheumatism, a most orderly and practical account of the disease, manifestly written from carefully systematised experience, and including an excellent summary of the treatment. Dr. Bruce mentions cerebral disturbance as occurring in acute rheumatism, but does not comment on the fact that in the great majority of cases delirium is a sign, not of cerebral, but of cardiac mischief. We cannot agree with this writer that rheumatic arthritis is a result of successive attacks of acute rheumatism. No doubt, as Dr. Bruce rightly points out, rheumatic arthritis very frequently commences with a feverish attack accompanying redness and swelling of certain joints, but in such cases many of the clinical features of acute rheumatism are absent; and, on the other hand, we know of cases where numerous attacks of acute rheumatism have occurred without the slightest trace of deformity in any of the joints affected. In Dr. Quain's account of Angina Pectoris we have a full statement of the innervation of the heart, and probably as definite an indication of the track of influences concerned as was possible in the state of our knowledge. Dr. Lauder Brunton's results do not seem to us to have been so well incorporated in the article as they might have been. As might be expected from one of the leading English authorities on the subject, Fatty Degeneration of the Heart receives clear and thorough treatment by Dr. Quain; as also do Atrophy and Aneurism of the Heart. We must confess to having some difficulty in apprehending the exact anatomical or pathological difference between the diseases described by Dr. Bruce as Congestion of the Heart with increase of connective tissue, and that described by Dr. Quain as Connective Tissue Hypertrophy of the Heart. Even the line between these and the third disease described by Dr. Bruce under the head of Fibroid Disease of the Heart does not seem very definite. Dr. Peacock stands alone as an authority on Congenital Malformation and Displacement of the Heart, and his articles on these subjects have an added interest as probably the last of his painstaking and conscientious work. Aneurism, generally, is treated by Mr. Holmes; while the late Dr. Hayden, of Dublin, gives a detailed account of the symptoms and treatment of Thoracic and Abdominal Aneurism. Dr. Bruce's excellent clinical article on Displacements of the Heart is concerned with both heart and lung disease, and furnishes valuable indications for the diagnosis of both.

Under the head of Diseases of the Lungs the most important articles are undoubtedly that by Dr. Green on Inflammation of the Lungs, and that by Dr. C. T. Williams on Phthisis. Dr. Green's article, the result of combined clinical and pathological observation, sums up in the most clear and orderly terms what is known on the subject. His section on chronic or interstitial pneumonia seems to us the weak part of the article. We are persuaded that pleurisy is a much more frequent cause of this disease than Dr. Green supposes, and Dr. Green himself practically admits this when he states, towards the end of the article, that "the pleura of the affected lung, except in the earliest stages of the disease, is much thickened and adherent." Then again he speaks of the "pulmonary consolidation of phthisis" as opposed to the consolidation of chronic pneumonia, and objects to the use of the term fibroid phthisis. Now, we submit that, according to what both Dr. Green and Dr. Williams say, the "consolidation of phthisis" is, even excluding this disease, a term that includes not one but several pathological processes. The essential feature of the disease under discussion is the destruction of lung-tissue by the deposition of a fibroid material which itself to a greater or less extent undergoes metamorphosis and disintegration. The term Fibroid Phthisis, as suggested by Dr. Andrew Clark, to whose prolonged and careful observations we largely owe our knowledge of the disease, is, we hold, less ambiguous than Chronic Pneumonia, involves no theory, and expresses more thoroughly the essential nature of the disease. Dr. Williams, in his article on Phthisis, includes acute tuberculosis, which we think had better have been described under a separate head. It is a general disease, not confined to the lungs or having even its most important manifestations there, and it is misleading to describe it under the head of Phthisis. The whole article is a most excellent one, and more especially the account of the treatment of phthisis, with the principles involved in it. Dr. Gee writes on Tubercle and on Scrofula, his articles being so well up to date as to notice Koch's discoveries in the former, and Mr. Treves' recent monograph on the latter subject.

The articles by Dr. A. T. H. Waters on Bronchitis and Emphysema, and that by Dr. Clifford Allbutt on Diseases of the Pleura, as also the articles by Dr. Symes Thompson on Collapse, Compression, and Gangrene of the Lung, are in every way worthy of their writers. We would strongly recommend the perusal of Dr. Douglas Powell's short but extremely able article on Hypertrophy of the Lungs. The process is one but little understood, and an intelligent comprehension of it is almost the only corrective for the *laisses faire* treatment of phthisis and chronic lung-disease into which we are all liable to fall. We need not say that his article on Physical Examination is most clear and complete. Dr. Quain's article on Diseases of the Bronchial Glands, and Sir Risdon Bennett's on Malignant Disease of the Lung and on Diseases of the Mediastinum, do much towards the elucidation of these difficult diseases.

The Diseases of the Abdominal Organs are naturally parcelled out among a large number of contributors. Dr. F. T. Roberts, besides writing a general introduction to them, contributes an excellent article on Diseases of the Peritoneum. Dr. Wickham Legg, Mr. W. Johnson Smith, and the late Dr. Stephen Ward divide the Diseases of the Liver among them, while Dr. Macpherson discusses Inflammation and Abscess of the Liver. Each of these writers speaks with the authority of wide personal experience of hepatic diseases. Dr. Murchison's name attached to the article on Jaundice recalls his recent death. Dr. Aitken, of Netley, writes with special authority regarding Diseases of the Spleen, and his introductory sketch of its physiology will be welcome to most readers. "Out of sight, out of mind," is a proverb specially true of the Pancreas. Probably ninety-nine out of every hundred physicians scarcely give it a thought from one year's end to the next. Dr. F. T. Roberts's article on it will repay perusal as a practical summary of what is possible in the way of diagnosis and treatment. Diseases of the Kidney are treated in a most detailed and systematic fashion by Dr. Grainger Stewart. Under the rather objectionable but convenient heading of Surgical Kidney, Mr. Marcus Beck describes clearly and well the renal affections resulting from disease in the lower part of the urinary tract. The article on Morbid Conditions of the Urine is written by Dr. Lauder Brunton. Like all his work, it is complete in detail and rich in practical suggestion, the physiology, clinical import, and treatment of the various states being fully discussed. The late Dr. Silver's articles on Diabetes and Addison's Disease show his usual clear, incisive style, and must on perusal deepen

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the regret for his early death of those who knew him. Dr. Allchin writes on Diseases of the Intestines, many of his articles showing most careful clinical observation. Dr. S. Fenwick has the special article on Diseases of the Stomach, and gives in it much valuable information as to the treatment of these affections. Mr. Durham's article on Intestinal Obstruction recalls to us the fact that the diagnosis of this condition and its cause rests primarily with the physician, and as physicians we should see that there is no truth in the reproach cast at us by surgeons that our defective and lagging diagnosis is the drag on the advance of abdominal surgery. Constipation, Diarrhœa, and Diseases of the Colon are discussed by Dr. Oliver, of Harrogate, and the practitioner can confidently refer to these articles, and to Dr. Pavy's article on Diet for a rational treatment of diseases of the digestive tract. The articles on Diseases of the Bladder and Urethra are from the pens of Sir Henry Thompson and Mr. Berkeley Hill, and are worthy of their reputations. Diseases of Women and Children receive full justice, in proof of which we need only mention that they are dealt with by such men as Barnes, Matthews Duncan, Spencer Wells, Braxton Hicks, and Playfair; Drs. A. R. Simpson, Madden, Herman, and Godson; Dr. Eustace Smith, and others.

On the whole, "Quain's Dictionary" is a most valuable addition to medical literature, and cannot fail to be highly appreciated by the profession at large. We heartily congratulate the editor and sub-editors on such a full and finished result of their long and arduous labours.

The Transactions of the Ophthalmological Society of the United Kingdom. Vol. II. London: J. E. Adlard. 1882.

The present volume is considerably larger than its predecessor—a fact which, we take it, indicates that this young Society is flourishing. The increase in size is mainly due to the space taken up (nearly eighty pages) by the papers and discussion on "Sclerotomy," to which two of the meetings of the Society were devoted. The writers on this subject are Mr. Higgens, Mr. Spencer Watson, Mr. J. B. Story, Mr. Swanzy, and Mr. E. Nettleship; and as they have recorded the cases upon which their papers were based, these are likely to be of permanent value. The debate which followed was opened by the late Mr. George Critchett, and nearly every ophthalmic surgeon of note in the metropolis took part in it, as well as many provincial surgeons. It would be difficult at present to estimate the exact value of sclerotomy, but this much is certain, that, in consequence of this debate, the operation will hold a better recognised position amongst ophthalmic surgeons than it has hitherto done. Amongst other papers in the volume which strike us as being especially worthy of notice is one by Dr. Brailey on the "Tests of Vision best adapted for service at Sea." It will be in the recollection of most of our readers, doubtless, that the Ophthalmological Section of the International Medical Congress devoted a good deal of attention to this subject, and drew up a series of resolutions relating to it which Dr. Brailey has reprinted after his paper. We fear that not much good has resulted as yet, but we hope that Dr. Brailey will continue his laudable efforts. We would also notice especially a paper on "The Movements of the Eyelids in association with the Movements of the Eyes," by Mr. W. Lang and Dr. W. A. FitzGerald, in which they controvert the opinions put forth by Dr. Gowers some three years previously, and to which Dr. Gowers' very able reply has been appended. Many cases and papers of great interest, to which we have not space to allude, will be found in the volume. We cannot, however, agree with the contributor who writes on miners' nystagmus, and attributes that condition to a state of minor epilepsy. It appears to us that the author's theory does not derive any support whatever from the cases he has himself reported. In conclusion, we may say that there is ample evidence in the volume before us that this Society is doing some really good work.

The Transactions of the Medico-Chirurgical Society of Edinburgh. Vol. I. Edinburgh: Oliver and Boyd. 1882.

The amount of work done by this now ancient Society during the past session appears to have been considerable, and extends over the whole range of medicine, using the word in its widest sense. Many of the papers have already been alluded to in one way or another in the pages of this journal, and we shall content ourselves, therefore, with a very brief glance at them. Professor Fraser's case of diabetic coma with lipæmia, seems to us a most valuable contribution to our knowledge of a subject which until recently was so obscure. The observation of fat in the blood during life is, of course, most important, and the thoroughness of the post-mortem examination adds greatly to its value. Of the other papers, Professor Chiene's paper on Cranial Injuries shows that he, at any rate, is fully capable of availing himself of the most recent advances in cerebral topography on behalf of his patients. Professor Balfour's papers on the Cardiac Hæmic Murmurs, and Dr. Batty Tuke's paper on the Anatomy of the Pia Mater, cannot be allowed to pass unnoticed. A paper by Mr. Francis Cadell, on the Treatment of Syphilis does not commend itself to us in the same way: it consists of a series of assertions that syphilis does not require specific treatment, and that mercury does harm rather than good; and that its manifestations should be treated on general principles, though Mr. Cadell admits that he has some faith in iodide of potassium in the treatment of gummata. We think that such opinions as these do far more harm by deterring people from using mercury than is at all likely nowadays to be caused by its over-administration. A great number of pathological specimens were brought before the Society, and not a few living specimens. We think that before the Society publishes the next volume it would be well for the Council to consider whether the discussions on the papers are worth reporting in the *Transactions*; also, whether it is necessary to reprint a summary of every communication to the Society in the President's annual address. When there were no *Transactions* there was perhaps some reason for the President's going over, *seriatim*, the work of the previous session, but now there can be no longer any necessity for this. Finally, we would point out to the Council that if the Society's *Transactions* are to be of value, in future they must follow the custom of the London societies, and claim all papers read at their meetings as the exclusive property of the Society. We mention this because we have already noticed some of the communications during the present session published *in extenso* in the *Edinburgh Medical Journal*, or elsewhere.

GENERAL CORRESPONDENCE.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

Letter from Dr. H. D. Littlejohn.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your journal of the 20th ult. there appeared a reference to a correspondence between the Hon. Secretary of the Lancashire and Cheshire Branch and myself regarding a statement made by me in a letter to the *Glasgow Herald* on this subject, and also copy of a resolution passed by the "Medical Institution of Liverpool," condemning me for having made that statement.

I have since that date also received from the Secretary of the "Irish Medical Association" copy of a resolution by its Council, expressed in similar terms.

The passage in my letter to the *Herald* to which exception has been taken was in these words—"To-day we have the medical profession there protesting against loss of fees were any of their patients, however badly housed, removed to hospital, so as no longer to be a source of danger to the community. Dublin, too, follows suit, and the profession there protests as loudly, and this after the awful revelations of a special Commission."

The letter containing this remark was dated December 9. It bears to have been in answer to a leading article in the *Herald* upon my previous letter to it, which was dated November 28. In that letter I had said—"The bugbear, however, that is always urged is that notification necessarily implies removal of the patients to an hospital, and the consequent loss of fees to the medical attendant. This was unblushingly pled with regard to Liverpool and to Ireland generally at the meetings lately held at Worcester and Nottingham."

I submit, therefore, that the sentence in my letter of December which has been complained of, clearly refers to the

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statement contained in my previous letter, and must be held as based entirely upon what I allege to have been said at the Worcester and Nottingham meetings with regard to Liverpool and Ireland. I think I am entitled to the benefit of the assumption that all who considered themselves interested in the matter had perused both letters. At the same time, I frankly admit that I erred in referring in my letter of December 9 to the "medical profession" protesting against loss of fees, without then repeating the foundation for the statement. It certainly did not occur to me that anyone could suppose that such a statement could be intended or held to apply to the medical profession anywhere as a body, but I readily express my regret for having used these words, and beg leave to withdraw them.

The question remains whether I was justified in stating that the loss of fees had been put forward at Worcester and Nottingham, in the interest of Liverpool and Ireland, as an argument against compulsory notification. On that point I can only say that this statement was founded on my own recollection of what I had heard said by Drs. Fitzpatrick and Whittle, of Liverpool, and Dr. Jacob, of Dublin. I cannot suppose that any of these gentlemen would dispute that this was one of the arguments adduced by them on the occasions referred to; and, although I can well conceive that they had no express authority to do so, it was, I submit, not unnatural for me to assume that their remarks were to be taken as typical of the views of at least a section of the profession in their own localities.

One of the gentlemen named—Dr. Jacob—also wrote to me repudiating the motives which he regarded my letter to the *Herald* as attributing to the profession in Dublin, and asking me to state my authority for the observations in my letter of December 9. In the reply which I sent to that gentleman some time ago I referred him to the following passage in a leading article in the *Medical Press and Circular* (of January 10, page 34), of which he is himself the editor:—"Let us not pretend to more virtue for medical men than for other classes of practitioners of similar social standing; and let us, therefore, not forget that a very numerous section of our profession will certainly not, if they can help it, do anything which will interfere with their own interests in practice. With such practitioners 'business is business.' If the notification fee is half-a-crown they will notify for the purpose of earning it; but if it pays them sixpence more to pretend not to recognise a case of infectious disease they certainly will be very slow to find out what, in reality, is wrong with the patient. If they are earning daily fees by attendance on a case in private, they will scarcely be expected to put an end to their own profits by reporting the case, and thus causing it to be taken off to hospital."

I do not quote this passage with the view of justifying an allegation that the "medical profession" of Liverpool or Dublin or any other city would be actuated by such motives, and I regret exceedingly that any corporate body should have supposed me capable of charging the profession with opposition to a public movement on selfish grounds. But I trust I have shown that, in representing my views on this important question, I was entitled to refer to this among many other arguments which had been advanced in opposition,—although I repeat that I regret having done so in terms liable to misconstruction.

I may add that I have referred my correspondents in Liverpool and Dublin to this letter.

I am, &c., HENRY D. LITTLEJOHN, M.D.

Edinburgh, February 5.

GERMAN CONGRESS FOR INTERNAL MEDICINE.

LETTER FROM DR. H. WEBER.

[To the Editor of the Medical Times and Gazette.]

SIR,—The Committee of the "German Congress for Internal Medicine" desire me to ask you to make known that the next meeting of the Congress will be held at Wiesbaden, from April 20 to 22, and that the participation of English members of the profession will be welcome. The Committee consists of Professors Gerhardt, Leyden, Liebermeister, and Seitz, and the subjects proposed are:—

First Day.—Tuberculosis: Influence of the Discovery of the Tubercle-Bacilli on the Pathology, Diagnosis, and Treatment of the Disease (Drs. Rühle and Lichtheim).

Second Day.—Diphtheria: its Parasitic Nature, Relation of the Local Process to the General Infection, Contagiousness, Treatment, and Prophylaxis (Drs. Gerhardt and Klebs).

Third Day.—On the Abortive Treatment of Infectious Diseases (Drs. Binz and Rossbach).

In addition, Professors Seitz, Leube, Mosler, and Seiffert have already announced other communications.

You will much oblige me, Sir, by directing attention to this matter.

I am, &c.,

London, February 6. HERMANN WEBER.

REPORTS OF SOCIETIES.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 5.

Mr. FREDERICK LAWRENCE in the Chair.

COLLOID CANCER OF PERITONEUM.

DR. THOROWGOOD exhibited a patient believed to be suffering from malignant disease of the abdomen. On examination, the abdomen was much distended. Slight evidence of localised fluctuation could be detected in the flanks, and he said that when in St. Mary's Hospital last August (the patient was admitted to the West London Hospital on December 13, 1882) he was tapped by order of Dr. Handfield Jones in the left flank, from which serous fluid was drawn. He is now losing flesh, has a quiet pulse, clean tongue, does not vomit, heart and lungs act normally, and he appears healthy. On feeling the abdomen a hard mass is found below ensiform cartilage, about two inches by two inches in size; doubtful if this mass moves much in respiration; below this comes a zone of resonance; then across the abdomen can be traced, at level of umbilicus, a chain of hard, tender, irregular masses. Liver-dulness somewhat increased upwards. Twenty years ago the patient came home from India, invalided for dysentery, and ten years ago he had slight coughing-up of blood. With these exceptions his health has been good, and he has been able to walk four or five miles easily until quite recently. Present illness commenced with enlargement of abdomen five weeks before his admission into St. Mary's Hospital, on August 21, 1882. The liver did not then extend below margin of ribs. Paracentesis abdominis was performed, and after that liver-dulness extended eight fingers' breadth upwards in right chest. No lumps were felt in the abdomen at this time, but a hard mass was felt, and recorded, below the xiphoid cartilage, which was believed to be the left lobe of the liver. The urine contained lithates, but no albumen. The case was set down as cirrhosis with ascites; and on November 2 the patient left St. Mary's. He says that while in that hospital he had a dose given him which brought away three yards of tapeworm, but not the head of the parasite. Before tapping, his abdomen measured thirty-eight inches and a half at level of umbilicus; present measurement thirty-four inches. The question of interest is, What is the nature of the disease? When he left St. Mary's, Dr. Handfield Jones wrote the exhibitor that he considered absence of pain and presence of ascites was against cancer, and in favour of cirrhosis. But, he added, "he may have both maladies." My own belief, added Dr. Thorowgood, from the first has been that the disease is colloid cancer. The age of the patient favours such a belief. Dr. Thorowgood referred to a case of colloid cancer reported by Dr. Ord (*Pathological Transactions*, vol. xxxii.), and said that, as to his patient, he was informed on the best authority that no lumps were found in the man's abdomen when he was in St. Mary's three months ago. Of the existence of the masses now, he said, anyone present can easily convince himself, so that they have grown, and are growing, rapidly, after the manner of colloid cancer. The part invaded, apparently the peritoneum and omentum, is a part especially affected by colloidal cancer. Dr. Ord's case showed how collections of fluid may form in various parts of the abdomen in common with colloid; and thus it appears to be with this patient, for his flanks are to some extent resonant, and yet by a little manipulation we get sense of fluctuation at certain points. At present the functions of the stomach and intestines are not much affected, but the patient loses flesh rapidly, and

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the prognosis is, in my opinion, anything but favourable. In treatment we have endeavoured by means of saline purgatives to relieve congestion and oppression, and at night we give him extract of conium to relieve pain.

Dr. SCHACHT mentioned a case where a mass could be felt on deep palpation in the hypogastric region, which was diagnosed as malignant, and proved at post-mortem a mass of encephaloid cancer.

Dr. THUDICHUM asked for a definition of "colloid cancer." He knew what "colloid" meant, and he knew what "cancer" meant; but he did not understand the combination of terms. As the case under notice was of long standing, it was very interesting and important, but he was not clear as to the possibility of diagnosing abdominal cancer in the living human being. Then, as to treatment, he could not understand why extract of conium was administered, as so little was known of its influence. He questioned whether it contained any alkaloid, and, indeed, whether it had any effect whatever. It was not chemically definable. He felt curious as to its effect in the remarkable case under notice.

Dr. POPE said that he knew a case of an old man who had large masses in the abdomen, swelling on both sides, and much obstruction in breathing. There was also localised fluid easily felt in the flank. It turned out to be sarcoma, originating in slow and chronic kidney disorder.

Dr. DANIEL, referring to the disputed use of extract of conium, said that he preferred morphia as a sedative, because it was more certain in its operation.

Dr. ALLDEN OWLES did not regard the comparative absence of pain as weighing much against the symptoms of cancer in the case, as, in his experience, severe pain was far from being an invariable concomitant of abdominal cancer.

Dr. THOROWGOOD, in reply, said that it was, of course, possible to have abdominal cancer without pain. This might be a case of sarcoma, but the locality indicated that it was a colloidal form of cancer. He regarded extract of conium as a useful sedative, although it was not clear what was its effective principle, and although its mode of action was obscure. The science of therapeutics was ahead of that of chemistry, and not unfrequently they had to be content with observing the effect of an agent of whose action they were uncertain.

POST-HEMIPLEGIC HEMICHOREA.

Mr. PERCY POTTER showed a case of post-hemiplegic hemichorea with hemianæsthesia, in which there were some peculiar clinical features. The patient, aged thirty-two, had been a soldier; had always enjoyed good health previously to the present affection. He never had rheumatic fever or syphilis, nor was there history of injury to the head. The family history was good, except that mother had temporary chorea. Eighteen months ago, whilst playing a wind instrument under the tropical sun of India, he became suddenly unconscious. The patient could not say how long this lasted, but when he came round there was right hemiplegia without aphasia. This improved to some extent, but the muscles of the legs became atrophied, and the flexors of the foot tonically contracted, assuming, as in paralytic club-foot, the form of talipes equinus. Having returned to England, he was operated upon for this contraction, tenotomy of the tendo-Achillis being performed at Netley Hospital three months after the onset of hemiplegia. This did not influence the deformity. Three weeks ago the patient was frightened by a mastiff dog, which knocked him down. Two days after there appeared chorea of the affected side. There was now well-marked right hemiplegia, including the face, without aphasia; the vision of the right eye was defective; the senses of smell, hearing, taste (as tested by aloes and colocynth) were blunted. There was complete anæsthesia of the right side of the face and leg; less complete of arm, trunk, and thigh. The symptoms of chorea consisted of sudden and unexpected jerks of the right arm and thigh and right side of face. The muscular movements were quite uncontrollable. Tendon-reflex and ankle-clonus increased. No cardiac bruit; urine normal. Professor Charcot describes three cases of this disease, all occurring in the female sex. He found that the lesions in the encephalon were in similar situations, namely, (*a*) posterior part of the optic thalamus, (*b*) posterior portion of the nucleus caudatus, (*c*) back portion of the corona radiata—these lesions consisting of cicatrices, probably hæmorrhagic. Apoplexy was very rare in men so young, but there was very little doubt as to the apoplectic nature of these phenomena.

Dr. SCHACHT made some remarks on the disease, and Dr. THUDICHUM thanked Mr. Potter for exhibiting this interesting case. In reply to these, and inquiries by Drs. James Thompson, J. Frankish, Ralph Richardson, B. Daniel, Pope, and Bennett,

Mr. POTTER said there was no doubt that apoplexy was caused by exposure to a hot sun. The chorea was unquestionably due to fright. It was difficult to ascertain if there was reflex action, as the moment he attempted to touch the limb the man winced. On one occasion, however, when the man's attention was diverted he observed that the tendon reflex was exaggerated. He had not been able to observe the patient during sleep.

RECURRENT FIBROID.

Dr. JAMES THOMPSON showed a tumour removed from a woman, aged thirty-six, after its fifth recurrence. Its situation was in the median line at the border of the hair in the forehead. The size was that of a goose's egg, springing from a base only three-quarters of an inch in diameter. The original tumour was removed in 1869. At least four surgeons had operated. Both caustics and the knife had been used. Dr. Thompson operated with Richardson's scissors, and applied the actual cautery to the root.

A committee was appointed to report upon the character of the tumour.

CALCULUS IN URETER.

Dr. THOMPSON also exhibited a calculus believed to have been formed in the ureter, and read the following notes:—W. D., aged forty-five, market dealer, plethoric, free liver, suffered for years from lithiasis, and passed several small stones. Applied while suffering from severe pain in left loin and down thigh. The diagnosis was a stone passing through ureter. After driving in a cart some distance he obtained sudden relief. A few hours after, two stones were passed with the urine, one with a facet on one end, the other with a facet on each end, about one-sixteenth of an inch long, and cylindrical. Two days after a third was passed about three-quarters of an inch long, of the same shape, and with a facet at one end which fitted that already passed. Two months after the patient had a similar attack, which terminated fatally in two days, with symptoms of acute peritonitis, possibly caused by a similar condition of the other ureter. No post-mortem was obtained.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, JANUARY 19.

Dr. TRIPE, President, in the Chair.

EPIDEMIC OF DIARRHŒA AT CLAPTON.

Dr. TRIPE read an account of an outbreak of diarrhœa and sickness, attended with more or less depression and pain, which, on November 4, and to a less extent on the remaining days of the week, attacked several hundred persons residing in the high-lying streets of Clapton Common and Stamford Hill. The suddenness of the outbreak pointed to some general cause, at the same time strictly local. In the Clapton Common district scarcely a house escaped. The hypothesis of a milk infection was out of the question, for the persons affected were supplied from many different dairies. Dr. Tripe therefore looked to the water, and found that in many houses the water-drinkers were attacked, while those who drank water only as tea (*i.e.* boiled) escaped. There were several cases of visitors from a distance suffering after drinking the water; others at the same tables, who took wine, remaining well. Dr. Tripe immediately communicated with the engineer of the East London Waterworks, and had the Clapton main cleared out on the 7th; and a few more cases occurring on the following day, the main was again scoured on the 10th. The pollution, whatever it was, must have been limited to the highest end of the main, for the lower districts were free from illness, although receiving their supply from the same main. The outbreak at Stamford Hill was explained by the presence of

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a cross main between the two areas. There was no suspicion of the entrance of sewage, sewer-gas, or coal-gas into the main, nor did subsequent analysis lend any support to such a suggestion. The only peculiarity that Dr. Tripe could detect was that the main in question terminated in a dead-end without provision for ventilation, where organisms might be developed and contaminate the water in the immediate vicinity. Dr. Tripe detected in the water a quantity of mycelium and small organisms, and a sample was sent for analysis to Mr. Wigner, who reported that it did not differ in chemical composition from that commonly supplied by the East London Company, nor was any sewage fungus developed in it on standing; but that it contained much vegetable *débris*, mycelium, etc., with various organisms, animal and vegetable. To this fact Dr. Tripe was therefore compelled to attribute its deleterious effects, supposing that by some sudden pressure or disturbance the water at the dead-end became mixed with the remainder, the contaminated water being at the same time conducted by the cross main to a part of the district of Stamford Hill.

In the discussion that followed, Dr. T. Stevenson mentioned a case in which a family was affected by drinking water from the dead-end of a main.

THE CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, JANUARY 5.

Professor Humphry, M.D., F.R.S., President, in the chair.

Report on the Communicability of Phthisis.

On the suggestion of the President, inquiry had been made by post-cards of all the members of the Society as to the above question, and Mr. Sheild read a short analysis of the replies received from them to the following questions:—"Have you known any instances of phthisis being communicated from one person to another?" If none such cases had been observed the answer was merely "No." In the event of instances of the kind having come under observation, the names of the persons concerned, and their relationship, the dates of their disease and the result, and the hereditary predisposition, were to be noted by the observer. Out of sixty inquiries but thirty-eight replies were forthcoming, and thirty-four of these were in the negative. The reader drew some conclusions from the negative and affirmative replies, especially pointing out the importance of keeping short notes of cases, and of not trusting to memory alone for past circumstances. On the whole the experience of the medical men in the neighbourhood went to prove that cases of communicability were not by any means common, but the question could only be answered satisfactorily by long, patient, laborious, and trustworthy observation.

In the discussion which followed, Dr. Paget remarked that he had no certain experiences to record. He referred to the old view that a general impurity of the air was productive of phthisis, and quoted Dr. Guy's report on the effect of bad air on printers. Dr. Guy investigated the conditions under which 320 printers worked, and divided them into three categories, viz.—(1) those who had less than 500 cubic feet of air to work in, (2) those who had more than 600, and (3) those who had less than 600 and more than 500. He found that of the first class 12½ per cent. had hæmoptysis and bronchitis; and in the second, 4 per cent. had hæmoptysis and 2 per cent. bronchitis; and he concluded that impurity of the air was more concerned as a cause than infection. Dr. Paget also alluded to the diminution of phthisis which had followed the enlargement and improved sanitation of the barracks in England, as shown by the Army Sanitation Report, and inclined to the view that there was no specific agency in operation such as the bacillus.

Dr. Armistead observed that there had been a great decrease of phthisis since cottages had been kept in a more healthy condition and sanitary matters attended to in the district under his supervision, embracing unions with a total population of 80,000. In the decenniad of 1851 to 1860 the total number of deaths from phthisis had been 2328 or 14·5 per cent. of all deaths; while from 1861 to 1870 the total was 1989 and the percentage 12·7, and from 1871 to 1880 the total fell to 1461, being 10·2 per cent. The decrease in deaths from phthisis alone had reduced the average death-rate of the district 1 per 1000 per annum.

Mr. Laurence Humphry, M.B., referred to the statistics of Brompton Hospital for thirty-six years, with regard to the resident officials, compiled by Dr. T. Williams, from which it appeared that of 4 resident medical officers, one of whom had served twenty-five years, none had any lung disease; of 6 matrons none were consumptive; of 150 resident clinical assistants, 8 became consumptive, and 5 died, but in only 1 was the disease developed during residence. Since 1867, of 101 nurses only 1 died from phthisis, and that after leaving the hospital. Before 1867, 6 died, 3 of these of phthisis, but only 1 became so whilst resident, and she had a consumptive sister, and married a consumptive patient from the hospital; she died thirteen years after joining the hospital, but was not there the whole time. Of 32 gallery maids since 1867, none developed phthisis whilst at the hospital; of 20 house porters, 5 died, but none of consumption. Non-residents: Of 9 secretaries, 3 were threatened with lung disease, but recovered; of 23 dispensers, 7 died, 3 of phthisis, 1 while at hospital; of 4 chaplains, 3 died, none of phthisis; of 29 physicians and assistant-physicians, 8 died, none of phthisis. At the Chest Hospital, Victoria-park, there had been 5 resident medical officers during about the last fifteen years, all alive and well; 2 matrons, neither consumptive. There were two clinical assistants appointed every three months, none known to have developed lung disease at the hospital. One nurse out of fifty or sixty in the last few years became consumptive while at the hospital, and died after a year's illness. Mr. Humphry thought that if there were evidence of phthisis being an infectious disease, it would appear in the greatest degree in consumptive hospitals. He did not think that the above statistics warranted the conclusion that phthisis was infectious in the ordinary sense of the term.

Dr. Latham expressed an opinion antagonistic to the theory of infection, and said if the theory were correct there ought to be more cases in support of it.

Thrombosis of Abdominal Aorta and Cœliac Axis.

Mr. Marmaduke Sheild showed a specimen of thrombosis of the abdominal aorta and cœliac axis. It was taken from the body of a woman, aged thirty-six, married, the mother of four children. She was admitted into Addenbrooke's Hospital on November 1, 1882, suffering from well-marked gangrene of the right foot and leg; the left foot was also in a state of incipient gangrene. No pulse could be felt below the bifurcation of the aorta on either side, and the gangrene tended to the dry variety. The heart-sounds were normal but irregular; the pulse, weak, quick, and intermittent. A distinct bruit was to be heard just above the umbilicus, but there was no evidence of aneurismal dilatation. The history of the case was shortly as follows:—At the age of seventeen she had rheumatic fever, and ever since had been a martyr to "rheumatic" pains. Her last confinement was nearly five months ago; she got over it well, and was soon up and about. There was no history of syphilis; this was ascertained with some care. She had been in bed for fourteen days prior to admission, with severe "crampy" pains in the body and legs, when suddenly waking up one morning (October 29), she found both her legs and feet quite numb and extremely painful. This marked the onset of the gangrene, which extended until her admission on November 1. She remained in the hospital six days, and died of asthenia, the gangrene having progressed on both sides. The arch of the aorta, the cardiac valves and endocardium, seemed to the touch and eye quite normal. On the thoracic aorta was a raised wheel-like patch of disease about the size of a large bean. It felt fibrous, and in some parts distinctly calcareous, and adherent to it was a pinkish-coloured, stratified, tongue-shaped fibrinous clot. The cœliac axis was firmly blocked by a stratified, fibrinous, adherent clot, which could be traced into the divisions of the main trunk, and projected some little way into the calibre of the aorta itself. The aortic tube at the origin of the cœliac axis, and also above and below that point, presented other patches of a fibro-calcareous nature. These were very superficial, implicating the endothelial lining itself. Both common iliacs and their bifurcations were blocked with a firm ante-mortem clot similar in character to that in the cœliac axis, only perhaps of more recent date. The clot projected up the aortic tube, and quite blocked the lower part of it. The vessels of the brain were healthy; the spleen was the seat of some old embolic mischief, as evidenced by the white, wedge-shaped patches at its surface. The other

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viscera showed nothing noteworthy. The principal point of interest in the case was the peculiar condition of the aorta. The patches of disease differed from atheroma in their superficial nature; they occurred in a young subject, and the aortic arch—the part usually most affected by the atheromatous process—was here free from disease. Evidently, however, the lining membrane of the artery over the diseased parts had become abnormal, and the blood, which must have had a preternatural tendency to coagulate, had deposited a fibrinous clot upon it. Probably this was the starting-point of embolic processes, which led to the blocking of the cœliac axis, the great iliacs, and finally of the aorta itself. The slight visceral disturbance which followed the occlusion of the trunk of the cœliac axis was worthy of note. Although cases of complete blocking of the aorta were recorded, both in the *Transactions of the Pathological Society* and also by the late Sir James Simpson, yet, in no cases was the origin of the clots referred to a condition of things like the present. The starting-point of the mischief in most of the related cases was a diseased cardiac valve, or aortic arch, the seat of rheumatic or puerperal inflammation.

Professor HUMPHRY remarked on the rarity of the case, and pointed out that while atheroma affected the elastic coat of the artery, in this case the calcareous deposit was in the inner coat.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.—FRIDAY, JAN. 19.

WILLIAM MOORE, M.D., President, in the Chair.

CASES OF EMPYEMA, WITH NOTES ON ANTISEPTIC FLUIDS AND DRAINAGE-TUBES.

DR. RICHARD A. HAYES first read a paper on a case of empyema treated by the radical method, with notes on some antiseptic methods employed. After some observations, pointing out especially the great danger of producing general anæsthesia in cases of intended operation on large fluid effusions in the thoracic cavities, he mentioned the particulars of the case. A man aged twenty-two was the subject of right empyema of eighteen months' standing, with severe hectic and wasting. On his admission to Steevens' Hospital, the pus was thrice removed by aspiration, and the cavity washed out with carbolic solution, without effecting a cure. An intercostal incision was then made, and a large canula introduced, the pus draining away into pads of oakum placed over the opening, and the cavity washed out daily with antiseptic solution by means of an elastic catheter. The case progressed favourably with the exception of a few complicating circumstances, and the patient was ultimately discharged and went to the country, a sinus only remaining unhealed. During the treatment of the case the following washes were used:—1 per cent. oil of eucalyptus; gr. ij. to ℥j., or less than ½ per cent., carbolic acid; 2 per cent. boracic acid; and 2 per cent. salicylic acid. A careful record of the morning and evening temperatures having been kept, the results obtained from the use of the different antiseptics were as follows:—Oil of eucalyptus (1 per cent.), morning temperature 98·8° Fahr., evening temperature 100·4° Fahr.; salicylic acid (1 per cent.), morning temperature 98·3° Fahr., evening temperature 99·5° Fahr.; boracic acid (2 per cent.), morning temperature 98·2° Fahr., evening temperature 99·4° Fahr.; carbolic acid (½ per cent.), morning temperature 97·8° Fahr., evening temperature 98·7° Fahr. The foregoing temperatures are averages, the periods of observation being carefully selected so as to be free from complicating influences which might affect the fever's course. During the entire of the later stages of the case, carbolic acid wash was used, and the temperatures were uniformly identical with the result of observations in the early stages. The results, therefore, show a marked advantage, as regards the hectic, obtained by the use of an exceedingly dilute solution of carbolic acid. That the carbolic acid had this distinct effect was proved by a trial irrigation of pure water, an even temperature of 100° Fahr. following its use.

Dr. PURSER then described a case of left empyema. The patient was a ship's steward, aged thirty. The disease was at first latent, but after nine months he was admitted into hospital, when he was tapped, and subsequently a drainage-tube inserted. His condition continued satisfactory for some months, when severe fever supervened, at first of a hectic character, but soon becoming continuous. Death ensued about three weeks from the commencement of the febrile symptoms. The compressed lung was found to contain air, and to have maintained its vesicular structure unimpaired. The cavity of the left pleura was much diminished. There were three wedge-shaped embolic patches in the spleen, which were softened and purulent. There were no other evidences of pyæmia. Dr. Purser directed attention to (1) the prolonged latency of the disease, and to the slight distress, notwithstanding the compression of the lung, and the displacement of the heart, which beat in the right axilla; (2) the advantages and disadvantages of different kinds of drainage-tubes in facilitating discharge and preventing putrefaction; (3) the aseptic fever in the sense of Volkmann and Genzmer, from which the patient suffered at intervals, as contrasted with the septic fever from which he died; and (4) the apparently slight injury done to the lung by the prolonged compression from the effusion.

Dr. FINNY corroborated Dr. Purser's statement as to the entire absence of fœtidity of the discharge during the time the patient was under his care, as well as at the post-mortem examination. Three weeks before death (the initial period of the fever) much pain was complained of in the left hypochondrium, and marked the occurrence of the embolic infarctions of the spleen. Fœtidity of the pus was not induced by the use of a simple rubber tube unprotected by any antiseptic; and it was a question for consideration if a period did not arise in the course of such cases when antiseptics might with safety be dispensed with.

Several other members joined in the discussion.

SURGICAL SECTION.—FRIDAY, JAN. 11.

Mr. JOHN K. BARTON, President R.C.S., in the Chair.

ANÆSTHETICS IN CERTAIN SURGICAL OPERATIONS.

Dr. FITZGIBBON read a paper advocating the use of anæsthetics in surgical operations upon the mouth, anus, and rectum, and especially in operations for the removal of internal hæmorrhoids. The anæsthetic he recommended was bichloride of methylene, which he had largely used in the foregoing operations, employing Junker's inhaler.

Mr. HAMILTON pointed out that rectal surgery had for many years past undergone great modification. He alluded to a paper of his, published several years ago, recognising the advantage of anæsthetics in the treatment of hæmorrhoids. Anæsthetics were, he considered, more adapted to the rational and scientific treatment of rectal diseases than to any other department of surgery. Indeed, he did not think that any conscientious surgeon would operate without anæsthetics, which had the advantage, in addition, of overcoming the repugnance that many persons had to such physical examination.

Mr. THOMSON observed that from the time he was a student in the Richmond Hospital almost all rectal operations had been performed under the influence of anæsthetics, except in cases where there was some special contra-indication. His experience of ether as an anæsthetic was so favourable that he did not see any reason to substitute bichloride of methylene for it, especially as it was not so safe as ether.

Mr. ORMSBY distinctly preferred ether, and pointed out that statistics were against the use of bichloride of methylene and chloroform. He doubted the propriety of advocating the use of anæsthetics in all cases requiring rectal operations.

Mr. PRATT stated that his experience of bichloride of methylene was very favourable. Its action was much more rapid than that of ether, and the required quantity used much less, especially in protracted operations.

The VICE-PRESIDENT (Mr. WHEELER) endorsed all that Dr. FitzGibbon had said in reference to the advantages derived from the use of bichloride of methylene. He thought that the length of time patients remained intoxicated after the use of ether was a disadvantage which was got rid of by the use of bichloride of methylene, and that there was less liability to sickness after the latter. In cleft-palate operations, especially in very young children, the use of anæsthetics was indicated.

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Dr. FITZGIBBON replied, emphasising the alleged advantages of bichloride of methylene over ether and chloroform, particularly in operations about the rectum and the mouth.

TREPHINING IN MASTOID AND TYMPANIC DISEASE.

The VICE-PRESIDENT (Mr. WHEELER) read a paper on trephining in mastoid and tympanic disease. He related the causes of purulent discharges from the ear, and urged the necessity for early trephining in diseases of the osseous structures, if not yielding to other treatment within a reasonable time. He recorded the last two cases he operated on—the first that of an old man seventy years of age (who was present); and the second that of a patient aged forty-one, who suffered from acute inflammation of the mastoid process. Both made good recoveries. Statistics which he quoted showed that nearly all the cases left to nature or expectant treatment died. Having enumerated the various channels through which purulent discharge found its way to the cranium, he advocated trephining in that situation where the mastoid cells and tympanum would be opened and the dura mater exposed—namely, anterior to a line which divides the mastoid process vertically, that would avoid the lateral sinus and the lower border of the temporal lobe on a level with the external auditory meatus.

Mr. BENSON inquired what treatment previous to operation had been adopted by Mr. Wheeler, mentioning that Mr. Pollock and other authorities did not despair of effecting cures in such cases, even when there was caries of the mastoid cells. He also asked Mr. Wheeler to state on what grounds he had arrived at the conclusion he did, which was now proved to be accurate.

Mr. DOYLE mentioned cases of mastoid disease that had been successfully treated by making an incision in the mastoid process.

Dr. HENRY KENNEDY stated that, in his experience, such cases as had been detailed were not permanently benefited by incising the mastoid process.

Mr. THOMSON asked whether Mr. Wheeler had adopted any other treatment than what he had stated in his paper, and also whether, in all cases of otorrhœa with tenderness over the mastoid process, he would at once recommend trephining.

Dr. BENNETT pointed out that Mr. Wheeler had described his treatment only in cases in which, while there was otorrhœa, there was manifestly disease in the neighbourhood of the mastoid process, capable of being detected. There were a number of cases where the bone was diseased, and where the disease was entirely remote from the mastoid process.

Mr. WHEELER, in reply, said that the previous treatment, in the case of the younger patient alluded to by Mr. Benson, was simply syringing the ear. There was evidently disease of the bone. He had not stated that they were to trephine without adopting other means, but he had mentioned that if the disease lasted any length of time he would trephine, even in the absence of osseous disease. He alluded to the statistics of the operation, which showed that trephining was not, comparatively speaking, a serious operation. He had seen one where excellent results had been obtained by incising the mastoid process, but in these there was no disease of the cells. Dr. Bennett had asked if he would trephine in all cases, and, if there was a piece of bone diseased at the apex of the petrous portion of the temporal bone, whether there would be any possibility of doing good. He (Mr. Wheeler) doubted if diseased bone could be thus diagnosed; but if the person had cerebral symptoms, and discharge from the ear, he would be induced to trephine. The operation was not done often enough.

The Section adjourned.

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—At the Spring Commencements, held according to custom on Shrove Tuesday, February 6, the following degrees in Medicine and Surgery were conferred :—

Baccalaurei in Chirurgid.—Samuel Alfredus Alcorn, Johannes Armstrong, Eugenius Cormack, Daniel Crowe, Joseph Patricius Finegan; Carolus St. Stephen Ricardus Nason.

Baccalaurei in Medicinâ.—Samuel Alfredus Alcorn, Gulielmus Samuel Boles, Joseph Patricius Finegan, Carolus Wolfe Hamilton.

Magister in Chirurgid.—Carolus St. Stephen Ricardus Nason.

Doctor in Medicinâ.—Carolus St. Stephen Ricardus Nason.

Licentiatus in Medicinâ.—Carolus Joseph Fagan.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 1 :—

Dodd, Anthony, Newcastle-on-Tyne.
Lane, Frederick Herbert, Rochester-square, N.W.
Rodman, George Hook, Selhurst-road, South Norwood.
Williams, Arthur John, Wallingford, Oxon.

The following gentleman also on the same day passed his Primary Professional Examination :—

Ley, Herbert, St. Bartholomew's Hospital.

APPOINTMENTS.

MELLER, CHARLES BOOTH, M.R.C.S.—House-Surgeon and Registrar to the London Temperance Hospital.

BIRTHS.

CUTHBERT.—On February 4, at Walsham-le-Willows, Suffolk, the wife of W. Wood Cuthbert, M.R.C.S., of a daughter.

EVANS.—On February 1, the wife of Lewis Evans, L.R.C.P., 11, Crescent-place, Clapham-common, of a son.

HINE.—On January 24, at Eppingdale, Leytonstone-road, the wife of A. Leonard Hine, L.R.C.P., M.R.C.S., L.S.A., of a son.

SMITH.—On January 24, at Philadelphia, United States, the wife of W. Thurlow Tyler Smith, M.D., of a daughter.

MARRIAGES.

GWYNN—STEWART.—On February 3, at Westminster, R. H. Gwynn, L.R.C.P., M.R.C.S., of St. George's Lodge, Catford, S.E., to Jeanie, daughter of Alexander Stewart, F.R.C.S., Grosvenor-mansions, S.W., late of Beckenham.

McEWEN—BANKS.—On January 30, at Conway, Allan Calveley McEwen, L.R.C.P., L.R.C.S., of 26, Nicholas-street, Chester, to Lucy Esther, only daughter of W. L. Banks, J.P., of Bronllys Castle, Breconshire.

RUSSELL—WOOD.—On February 1, at Ifield, Kent, William, younger son of G. T. Russell, M.D., F.R.C.S., of Gravesend, to Jane, eldest daughter of John Wood, of Westfield, near Gravesend.

RYAN—TAGLIAFERRO.—On February 1, at Bayswater, William Leeson Ryan, second son of Dr. Michael Ryan, M.D., F.R.C.S., of Dignan, § Brittany, to Mary, daughter of the late Chevalier James Tagliaferro, C.M.G., of Malta.

SMYTH—ABBOTT.—On February 1, at Ormesby St. Margaret, Norfolk, Francis Sydney Smith, Esq., of Brockley Hill, Kent, youngest son of Dr. Spencer Smith, formerly of Great Yarmouth, to Fanny Elizabeth, only surviving child of the late Stephen Abbott, Esq., formerly of Castle Acre, Norfolk.

TONGE-SMITH—DALTON.—On January 25, at Notting Hill, W., Winckworth Tonge-Smith, M.D., of 129, Ladbroke-grove, to Olivia Lelia, third daughter of the late Gustavus Tuite Dalton, Esq., of Fenner, county Meath.

VON RÖNN—DE FABECK.—On February 6, at Lee, Henry John, son of the late Hermann Sebastian von Rönn, of Ladbroke Lodge, Ladbroke-square, to Caroline Maria, eldest daughter of Surgeon-Major W. F. De Fabeck, of Moulmein, British Burmah.

DEATHS.

FAIR, GEORGE, M.D., etc., at Sao Pedro, on October 14, 1882.

FAIR, TINA, wife of George Fair, M.D., etc., of Buenos Ayres, at Sao Pedro, on the Purus River, Brazil, on September 11, 1882.

FOAKER, FLORENCE GEORGIANA MARGARET, eldest daughter of Surgeon-Major Foaker, at 60, Elm-park-road, Chelsea, on February 1, aged 23.

JOHNSTON, WILLIAM WOODS, M.D., late of Java, and of Prince's-square, London, at Tunbridge Wells, on February 2.

KENDALL, ANNE JANE, wife of Surgeon-General Henry Kendall, M.D., Army Medical Department, at Renfrew, Bexley Heath, Kent, on February 3.

NORTON, Rev. ROBERT, M.D., at Ivy Lodge, St. Mary's-terrace, W., on January 31.

SMITH, GEORGE STEVENSON, L.R.C.S., Surgeon to H.B.M. Agency and Consulate-General, at Bangkok, Siam, on January 19, aged 43.

TOULMIN, FREDERICK JUSTUS, F.R.C.S., formerly of Clapton, Middlesex, at 36, Thurloe-square, S.W., on February 4, in his 85th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BRADFORD FRIENDLY SOCIETIES' MEDICAL AID ASSOCIATION.—Assistant Medical Officer and Dispenser. Salary £120 per annum. Candidates must be duly qualified. Applications, stating age, whether married or single, together with recent testimonials, to be sent to the Secretary, D. J. Sloane, 80, Arcadia-street, Manningham, Bradford, Yorks, on or before February 15.

HOLBORN UNION.—Assistant Medical Officer and Dispenser. (*For particulars see Advertisement.*)

KENT AND CANTERBURY HOSPITAL.—Assistant House-Physician. (*For particulars see Advertisement.*)

MIDDLESEX COUNTY LUNATIC ASYLUM, HANWELL.—Assistant Medical Officer. (*For particulars see Advertisement.*)

RUNCORN UNION.—Medical Officer. (*For particulars see Advertisement.*)

WOLVERHAMPTON FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary £225 per annum. Unfurnished house, gas and firing, etc., provided. Candidates must be duly qualified, and be Fellows of one of the Colleges of Surgeons of the United Kingdom. Applications, stating age and qualifications, with not more than three testimonials of recent date, to be sent to Mr. J. H. Williams, 71, Newbridge, Wolverhampton, on or before February 13.

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UNION AND PAROCHIAL MEDICAL SERVICE.

APPOINTMENTS.

Dunmow Union.—Basil Ronald, L.R.C.S. Edin., L.R.C.P. Edin., to the Bardfield District.

Greenwich Union.—Frederick Fisher, M.R.C.S. Eng., L.S.A., to the North Deptford District.

Kington Union.—Daniel Wilson, M.D., M.C. Ire., to the Pembridge District.

Thingoe Union.—George F. Henry, L.R.C.P. Edin., L.R.C.S. Edin., to the Third District.

AUSTRIAN MEDICAL SERVICE.—A French paper states that the Hungarian medical students who have been attending the lectures at the Paris Faculty for four years have been suddenly recalled with a view to their being employed as assistant-surgeons in the Austrian army.

OBITUARY.

PROFESSOR CHARLES EMANUEL SÉDILLOT.

THIS distinguished surgeon died at the end of last month, after a prolonged illness, in the seventy-ninth year of his age, having been born in Paris in 1804. The son of a celebrated Orientalist, he belonged to a family which had produced two physicians of great repute in their day. Sédillot's own life was one of laborious activity, during which he produced an enormous number of memoirs and essays, most of which he republished in 1863 under the title of "Contributions à la Chirurgie." His work, too, on "Infection Purulente et la Pyohémie," published as long ago as 1849, was one of the first on a subject which of late years has attracted so much attention. His "Traité de Médecine Opératoire," of the merits of which very opposite opinions have been expressed, was based almost entirely on his own clinical experience, and went through several editions between 1839 and 1870. Appointed a Professor at Val-de-Grâce at an early period, he was transferred to the Military School at Strasburg, of which he became eventually Director, holding also the Professorship of Clinical Surgery in the Faculty of that city. Here he continued to reside, obtaining a large consultation practice, until the events of 1870-71 induced him to return to Paris, after thirty-one years of absence. A member of the Academies of Sciences and Medicine, Fellow of the Societies of Biology and Surgery, Army Medical Inspector, and Director of the Strasburg Medical School—Sédillot obtained, without ever soliciting them, all the honours a medical *savant* could aspire to.

WALTER OTTLEY, M.B., B.S. LOND., F.R.C.S. ENG.

THE subject of this notice was born at Pau, in the South of France, on January 7, 1850. He was sent to Cheltenham College to be educated in 1863, being placed in the Classical Department. He was successful in his studies, and in 1867 he passed the Matriculation Examination of the London University, whereupon he left Cheltenham and entered as a medical student at University College. There he diligently pursued his studies, and kept himself among the foremost men of his year, some of whom are now attached to the staff of the Hospital and College. In 1872 he became a Member of the Royal College of Surgeons, and in the same year he took his degree of Bachelor of Medicine of London, carrying off the Gold Medals in Medicine and Forensic Medicine, in the Honours Examination. In 1874 he became a Licentiate of the Society of Apothecaries. In 1876 he graduated Bachelor of Surgery, with honours, and in 1877 took the Fellowship of the College of Surgeons. He held many appointments, among which may be mentioned the House-Physiciancy of University College Hospital, the House-Surgeoncy of the Nottingham General Hospital, and the Resident Surgeoncy of the Birmingham General Hospital. After his return to London he was elected Demonstrator of Anatomy at the Westminster School, which he resigned on being appointed one of the senior Demonstrators at his *Alma Mater*, University College. He also held the Assistant-Surgeoncy at the West London Hospital for a while. At the time of his death he was Surgeon to the Kensington Dispensary. From the foregoing list of appointments, it may be judged what a large practical experience of his profession he added to the theoretical knowledge which his numerous qualifications showed him to possess. His knowledge and his reading, however, extended far beyond his own profession, for he was well read in general literature, and had a keen enjoyment of art of every kind. He found time in the intervals of professional work to study comparative anatomy, and he contributed to the *Proceedings of the Zoological Society* original papers "On the Eye-Muscles of Mammals" and on the "Carotid Arteries in Bucorous."

To a singularly equable temperament he added great charm of manner; his disposition was retiring almost to a fault, so that a stranger to him might have been pardoned had he failed, at first sight, to appraise his attainments at their true value. On his return to London he had some thoughts of taking up pure practice, and to this end he devoted two or three years of special work. He finally, however, decided on general practice, and established himself at Notting Hill, where he was residing, and slowly but surely winning his way in the goodwill of his patients, when death suddenly and unexpectedly cut short his career, within a fortnight of his father's death at the age of eighty. He will be lamented by his family for his own sake; and be regretted by all those friends and patients whose privilege it was to know him intimately.

APPOINTMENTS FOR THE WEEK.

February 10. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Mr. R. Bosworth Smith, "On the Siege and Capture of Delhi."

12. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture V.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. C. Theodore Williams will reopen the adjourned discussion on "The Association of Bacilli and Tuberculosis."

13. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY (Ballot, 8 p.m.), 8½ p.m. Mr. Christopher Heath, "On Aneurism of the External Carotid Artery; Ligature of the Common Carotid." Mr. Howard Marsh, "On Ligature of the Carotid and Right Subclavian Arteries for Aneurism of the Aorta." Mr. Henry Morris, "On Aneurism of the Arch of the Aorta involving the Innominate Artery; with Remarks on the Distal Ligature."

ANTHROPOLOGICAL INSTITUTE (4, St. Martin's-place, W.C.), 8 p.m. Mr. A. R. Colquhoun, "On the Aboriginal and other Tribes of the Yünnan and the Shan Country."

14. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Mr. Spencer Wells will deliver the Hunterian Oration.

HUNTERIAN SOCIETY (Royal Institution), 7½ p.m. Annual General Meeting for the Election of Officers. At 8 p.m., the Annual Oration will be delivered in the Theatre of the London Institution, by Mr. E. G. Gilbert."

ROYAL MICROSCOPICAL SOCIETY, 8 p.m. Annual Meeting.

15. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

HARVEIAN SOCIETY, 8½ p.m. Discussion on the Report of a Committee of the Society, appointed for the purpose of inquiring into the Mortality referable to Alcohol; to be opened by Dr. Morton.

16. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture VI.

ROYAL COLLEGE OF PHYSICIANS, 5 p.m. Dr. J. M. Duncan, "On Sterility in Woman." (Gulstonian Lectures—I.)

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VITAL STATISTICS OF LONDON.

Week ending Saturday, February 3, 1883.

BIRTHS.

Births of Boys, 1375; Girls, 1375; Total, 2750.
Corrected weekly average in the 10 years 1873-82, 2645·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	822	821	1643
Weekly average of the ten years 1873-82, corrected to increased population ...	1003·1	1009·1	2012·2
Deaths of people aged 80 and upwards ...	...	...	88

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	4	7	3	6	1	2	...	6
North ...	905947	...	7	7	9	11	1	7	1	3
Central ...	282238	...	5	3	1	...	...	...	...	1
East	692738	...	4	15	1	7	...	3	...	3
South	1265927	5	8	13	6	11	1	3	...	6
Total	3816483	5	28	45	20	35	3	15	1	19

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·400 in.
Mean temperature	40·3°
Highest point of thermometer	52·1°
Lowest point of thermometer	29·2°
Mean dew-point temperature	36·7°
General direction of wind	Variable.
Whole amount of rain in the week	0·83 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Feb. 3, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Feb. 3.	Deaths Registered during the week ending Feb. 3.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2750	1643	21·7	52·1	29·2	40·3	4·61	0·83	2·11
Brighton	111262	58	40	18·8	50·2	31·3	40·5	4·72	0·64	1·63
Portsmouth ...	131478	77	45	17·9	...	...	...	...	...	...
Norwich	89612	65	38	22·1	...	...	...	...	...	...
Plymouth	74977	57	34	23·7	53·0	29·4	42·1	5·62	1·62	4·11
Bristol	212779	142	76	18·6	54·5	28·4	40·7	4·83	1·51	3·84
Wolverhampton ...	77557	58	35	23·6	52·8	26·8	37·6	3·12	1·01	2·57
Birmingham ...	414846	318	195	24·5	...	...	...	...	...	...
Leicester	129483	87	50	20·1	52·5	27·2	38·4	3·55	0·85	2·16
Nottingham ...	199349	172	76	19·9	53·7	26·5	39·2	4·00	0·78	1·98
Derby	85574	66	32	19·5	...	...	...	...	...	...
Birkenhead ...	88700	80	41	24·1	...	...	...	...	...	...
Liverpool	566753	371	336	30·9	...	...	...	...	...	...
Bolton	107862	81	51	24·7	51·9	24·7	36·3	2·39	2·55	6·48
Manchester ...	339252	246	214	32·9	...	...	...	...	...	...
Salford	190465	144	80	21·9	...	...	...	...	...	...
Oldham	119071	88	70	30·7	...	...	...	...	...	...
Blackburn	108460	103	72	34·6	...	...	...	...	...	...
Preston	98564	80	48	25·4	...	...	...	...	...	...
Huddersfield ...	84701	50	38	23·4	...	...	...	...	...	...
Halifax	75591	56	43	29·7	...	...	...	...	...	...
Bradford	204807	120	80	20·4	51·7	27·8	37·1	2·84	1·25	3·17
Leeds	321611	229	158	25·6	54·0	27·0	38·7	3·72	1·71	4·34
Sheffield	295497	217	146	25·8	51·0	25·7	38·3	3·50	1·35	3·43
Hull	176296	113	86	25·5	50·0	24·0	37·1	2·84	0·65	1·65
Sunderland ...	121117	115	82	35·3	57·0	30·0	39·9	4·39	0·73	1·85
Newcastle	149464	131	68	23·7	...	...	...	...	...	...
Cardiff	90033	64	33	19·1	...	...	...	...	...	...
For 28 towns ...	8620975	6138	3910	23·7	57·0	24·0	38·9	3·83	1·19	3·02
Edinburgh	235946	112	87	19·2	51·1	25·9	36·1	2·28	1·25	3·17
Glasgow	515589	370	296	30·0	53·0	26·0	37·0	2·78	1·89	4·80
Dublin	349883	205	228	34·0	53·8	23·3	37·4	3·00	1·26	3·20

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·40 in. The highest reading was 29·96 in. at noon on Sunday, and the lowest 29·28 in. on Wednesday afternoon.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

The Teetotal Speech at Blackpool.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The accompanying advertisement was cut from to-day's *Standard*; and I forward it to you, thinking it may amuse some of your readers to note the inconsistent conduct of a certain noble lord who was rather "down on the doctors" at Blackpool lately. I enclose my card.

January 31. I am, &c., In Vino Veritas.

"The Vine Club.—Patrons: The Lord Ashley; the Lord Robert Brudenell-Bruce; General Sir Henry De Bathe, Bart.; the Earl of Ellesmere; Vice-Admiral H.S.H. Prince Leiningen, G.C.B.; Colonel Sir Robert Loyd-Lindsay, V.C., K.C.B., M.P.; General Lord Wolseley of Cairo, G.C.B., G.C.M.G. Committee are nominated by the Patrons. The Club is started on a double basis:—1. As a non-political society of gentlemen. 2. To enable its members to obtain for their own home consumption wines, spirits, and liqueurs at the actual wholesale cost price. This last is an entirely new feature, the advantage of which must be apparent to every wine consumer. For rules, application for membership, &c., apply to Charles A. Pritchard, Secretary (*pro tem.*). Temporary Offices: 20, Regent-street, Waterloo-place, London, W."

"Steam and Steam-Draft Kettles."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you be so obliging as to republish Mr. Napier's letter to your journal, which was written immediately after he returned from the meeting of the Medico-Chirurgical Society where Mr. Parker exhibited his machine, and almost entirely in consequence of what then occurred. I shall not venture further on your space at present, but I shall arrange the various models which I used when making experiments on the steam-jet, and present them to the Parkes Museum, so that the scientific principle on which the "steam-draft inhaler" is constructed may be clearly understood; and from which it will be seen that Mr. Parker has copied my invention without understanding the principle. I am, &c.,

6, Savile-row, W., February 7. Robert Lee.

"Steam and Steam-Draft Inhaler.

"Sir,—There seems to be a rage just now for instruments capable of supplying steam, or steam and air combined, for inhalation or other purposes; and I have been amused with noticing to what an extent your columns, and those of your contemporaries, have of late been occupied with descriptions and illustrations of various machines designed for this end. Having carefully examined each as it appeared, I am, I believe, justified in stating that, with hardly an exception, these *quasi* discoveries are merely modifications, or, in some cases, direct piracies of the invention of Dr. R. J. Lee, whose valuable instrument was introduced to the profession some years since, and continues to be sold by Messrs. Maw and Co., Aldersgate-street, for a few shillings. It yields a remarkable instance of the readiness with which a certain class of people adopt and make use of the ideas of others; and of the ease with which they fall into the belief that they are justified in placing their names before the public as originators. I feel that it is not right to allow these illusions to pass unchallenged; and I direct attention to them the more freely as I have no personal interest involved, and am only desirous for recognition of the broad principle that the just claims of inventors should be strictly observed. "I am, &c., "W. Donald Napier.

"22, George-street, Hanover-square, W., February 19, 1879."

Psychologist.—There were so many Munros. Which do you mean? The collector of rare engravings was Dr. John Munro, born in 1815.

Collegiate Prizes.—No award has yet been made for the Jacksonian or Collegial-Triennial Prize Essays. Members of the Council are not allowed to compete. The following gentlemen not then members of the Council have carried off these prizes:—Mr. John Birkett in 1848, Mr. J. W. Hulke in 1859, Mr. John Wood, F.R.S., in 1861, and Mr. Christopher Heath in 1867. The subject of the Jacksonian Prize for the present year is the "Pathology, Diagnosis, and Treatment of Obstruction of the Intestines in its various forms in the Abdominal Cavity."

At Last!—The Metropolitan Board of Works have at length taken steps for the demolition of houses, under the Metropolitan Streets Act, 1877, for the purposes of the Gray's-inn-road improvement. The total number of houses doomed is eighty-six, comprising some of the most miserable in the rookeries of the neighbourhood.

Suffocated through a Defective Flue.—Touching the death of two female servants in the employment of an Independent minister at Glossop, who were found dead in bed on Sunday morning, the 7th ult., under strange circumstances, it appears they went to bed the previous evening in their usual health, but in the morning were found both dead; and for some time the cause of death could not be discovered. On the medical and other evidence adduced at the inquest, the jury found that death was caused by asphyxia, which was produced by the inhalation of the carbonic acid gas generated in the heating apparatus and passing into the sleeping apartment through defective joinings in the chimney.

L.R.C.P. Lond.—Dr. Matthew Baillie left £4000 to the Royal College of Physicians if his son William Hunter Baillie should die without legitimate children. This gentleman, who is still living, has one son—consequently the College will not inherit the sum. It was the widow of Dr. Matthew Baillie who presented the celebrated "gold-headed cane" to the College, where you will see it preserved in the library of that institution.

A New Hospital, Cumnock.—The Marchioness of Bute has had built, at her own expense, a hospital for the poor here. The building is now ready for patients.

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Dr. Seymour.—The only living recipients of the Honorary Gold Medal of the Royal College of Surgeons are Professor George Bennett, F.R.S., of Sydney, and Mr. William L. Crowther, of Hobart Town—both Fellows of the College.

Walter C., Bayswater.—The general result of the inquiry of the Parliamentary Committee into the charges of inefficiency and misconduct brought against the Army Hospital Corps who served in South Africa, was that the more serious allegations had not been substantiated. The Committee considered that certain individuals of the corps had been shown to have been unfit for their duties, but that the proofs had been against individuals who were punished at the time, and that the defects in the treatment of the patients arose principally from the suddenness of the outbreak, which struck down the Army Hospital Corps as well as the other corps, and that the dimensions it assumed could not have been foreseen.

"*The Peculiar People Sect.*"—The grand jury ignored the bill in the case of Robert Cousins, a member of the sect, who was indicted at the Central Criminal Court for the manslaughter of his child in neglecting to call in medical aid.

The New Salford Sewage Works.—The extensive works which for the past four years have been in course of construction at Mode Wheel for dealing with the sewage of Salford by a process of precipitation, are now practically complete, and in a week or two, it is expected, will be in operation. At present the sewage of Salford is discharged direct into the Irwell, at the Mode Wheel outfall, but it is intended by the new works to remove all solid matter from the sewage, and only allow water in a comparatively pure state to pass into the river.

Cremation on the Continent.—The building of a large crematorium in the monumental cemetery of Milan has just been completed. In front a statue by Signor Grandi to Paolo Gorini has been placed, who, so the inscription runs, "in reviving the wisdom of the ancients, restored cremation for the health and decorum of nations, 1883."

The Result of a Duel.—Alb Dauth, the Brazilian medical student at Würsburg University, who shot Captain Emmerich in a duel, has been sentenced to two years' imprisonment. The students maintain that Dauth behaved well throughout.

An Actuary.—Perhaps the following will assist you in your investigations. In his interesting work on the duration of human life, the celebrated Dr. Casper, of Berlin, gives the following conclusions as to average longevity of different classes of persons:—Clergymen 65, merchants 62, clerks and farmers 61, military men 59, lawyers 58, artists 57, and (last of all) medical men 56.

Grog-shops at Sea.—The Sea-Fishing Trade Committee, in their report, call special attention to what is known in the North Sea as "coopering." The "coopers" are smacks fitted out for the sale of spirits and tobacco. "We have it in evidence," says the report, "that they are floating grog-shops of the worst description, and that they are under no control whatever." Moreover, the Committee express the opinion that the interference of Her Majesty's Government with these vessels and with their owners and skippers is imperatively necessary on various important grounds.

Public Baths, Portsmouth.—The Mayor has laid the foundation-stone for these baths. There will be a large swimming and eight private baths. The estimated cost is £3450.

The Cotton Districts Convalescent Fund.—The new hospital at Southport is making satisfactory progress, and arrangements have been made for erecting the necessary building to connect the new with the existing hospital. Negotiations are also pending with the trustees of the old hospital for a joint management. The grant of beds, without charge to patients, until otherwise ordered by the governors is to be continued.

Munificence.—Mr. Thomas Laing, of Linhouse, West Calder, has left the residue of his estate, which amounts to upwards of £30,000, to the Edinburgh Royal Infirmary.

Temperance Items.—The Executive Committee of the Church of England Temperance Society at Crewe have resolved to memorialise the magistrates throughout the country to exercise at the next licensing sessions the absolute power and discretion conferred by the Act of last session, empowering them to withdraw or refuse off-licences. Representations were also to be made to guardians and others to reduce the beer and spirits supplied to inmates of workhouses, asylums, and other public institutions.——The Swansea stipendiary magistrate has decided that under the Welsh Sunday-Closing Act public-houses must be shut up on Christmas-day and Good Friday just the same as on Sunday. This decision is to be appealed against.——At Manchester Assizes, in his charge to the grand jury, last week, Mr. Justice Kay remarked that most crimes of violence in that county resulted from the fatal vice of drunkenness. He was glad to believe that the traffic in drink was diminishing, and that the coffee-taverns and temperance-houses in our large towns were meeting with a considerable measure of success. Another great source of crime, especially in the North, was the fact that in many places people were herded together like swine, or worse. ——Should the Cornish Sunday-Closing Bill become law (of which there seems to be a great probability), Parliament, as is already announced, will be asked for similar Bills for Monmouthshire, Staffordshire, Northumberland, and Newcastle.

The Blind in Lancashire.—Recently societies for the relief, education, and improvement of the blind have been established in Burnley and Blackburn. It was thought there were only fifteen blind people in Burnley, but sixty have been found out, and thirty in Colne, Nelson, and Briefield. In Blackburn it was only known there were twenty blind persons, but the Society has discovered ninety. At Accrington there are over thirty.

The Association for the Better Endowment of Edinburgh University.—The report presented at the recent meeting of this Association states that in ten years the medical students of the University had increased from under 1000 to 1730. About £30,000 is still required to complete the new medical class-rooms.

Alleged Neglect.—The Guardians of Bridgwater have unanimously resolved to ask for an official inquiry by the Local Government Board respecting a charge of neglect against the Medical Officer of the Polden Hill District.

Anti-Vaccination, Brighton.—The anti-vaccinationists of this town held a numerously attended meeting last week. The usual resolutions denouncing the Vaccination Acts were on this occasion followed by the somewhat new argument that the operation, as now usually carried out, was not the vaccination prescribed by the Acts of Parliament!

A Hospital for Animals, Bombay.—According to the *Bombay Gazette* of the 12th ult., Mr. Dinshaw Manockjee Petit, a well-known Parsee gentleman of the city, has presented Rs. 45,000 to the local Society for the Prevention of Cruelty to Animals, for the establishment of a hospital for animals.

Working-Men Serving on Coroners' Juries.—Workmen seem to be subject to some hardships when called upon to serve on coroners' juries. A few days since a working-man complained to Sir John Humphreys that it often necessitated workmen losing a day's work, and at times had entailed dismissal. With reference to the latter alternative, another juryman present told the coroner he lost his situation through serving on one of his inquests. He showed his employer the summons, who said if he attended he would put some one else in his place; and this he did. The name of the employer was handed to the coroner.

The Proposed Sanatorium for Hove.—A Local Government Board inspector has held an inquiry at the Town Hall, Hove, respecting a proposal of the Hove Commissioners to borrow £6000 for the purpose of erecting a sanatorium for that district. The opposition offered to the proposal was that such an institution was unnecessary, in consequence of the increased sanitary precautions taken by the authorities. The inspector will shortly make his report.

Milk from Diseased Cows.—A farmer of Hall Green, near Birmingham has been fined £20 and £10 with costs respectively, for—first, selling a quantity of milk obtained from cows suffering from foot-and-mouth disease; and, secondly, for omitting to give notice to the police that he had animals affected by the disease.

Gratitude.—Doctor (to an acquaintance): Mr. Jones, I am glad to see you have recovered. Mr. Jones: Yes, you have saved my life; how can I thank you sufficiently? Doctor: I saved your life? Why, I didn't attend you! Mr. Jones: Yes—and that is why I am so grateful.

COMMUNICATIONS have been received from—

Mr. Clement Lucas, London; The Registrar of the Apothecaries' Hall, London; Mr. Edward East, London; Dr. Nicoll Evans, Cheshunt; Mr. Arthur Gamgee, Manchester; Mr. Pullin, Sidmouth; Mr. J. H. Timmins, West Malling; Messrs. Kelly and Co., London; Mr. H. de Styrap, Middlesborough; Dr. W. E. Stevenson, London; The Honorary Secretary of the Medical Society of London; Mr. J. Chatto, London; The Registrar of the University of London; Dr. Robert Lee, London; Dr. W. H. Lamb, London; The Secretary of the Army Medical Department, London; The Sanitary Commissioner for the Punjaub, Lahore; The Registrar-General for Scotland, Edinburgh; Mr. F. W. Rudler, London; Mr. C. B. Mellis, London; Mr. W. W. Reeves, London; Dr. J. H. Stowers, London; Dr. Littlejohn, Edinburgh; Messrs. B. F. White and Son, London; Dr. H. Eales, Birmingham; Dr. A. E. Sansom, London; Dr. J. Mitchell Bruce, London; Dr. J. Kingston Fowler, London; The Honorary Secretary of the Manchester Medical Society; The Secretary of the Royal College of Surgeons of Edinburgh; The Secretary of the London Fever Hospital, Islington; The Honorary Secretary of the Royal Medical and Chirurgical Society of London; The Honorary Secretary of the British Medical Benevolent Fund, London.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Deutsche Medicinal-Zeitung—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Glasgow Medical Journal—Revue Mensuelle de Laryngologie, d'Otologie, etc.—Midland Medical Miscellany—Archives Générales de Médecine—Monthly Homœopathic Review—Glasgow Herald, January 27—Tijdschrift voor Geneeskunde—Edinburgh Medical Journal—Scholastic Gazette—New York Medical Journal—L'Impartialité Médical—Revista de Medicina—Journal de Médecine—Journal of Cutaneous and Venereal Diseases—Birmingham Medical Review—Medical News—South-Eastern Gazette, January 27—Il Propugnatore della Salute—Analyst—Western Medical Reporter—Toledo Medical College—Medical Bulletin—Night and Day.

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THE HUNTERIAN ORATION.

Delivered at the Royal College of Surgeons of England,

FEBRUARY 14, 1883.

By T. SPENCER WELLS,
President of the College.

MR. VICE-PRESIDENT, MY LORDS, AND GENTLEMEN,—Just seventy years ago, Matthew Baillie and Everard Home, being, to use their own words, "desirous of showing a lasting mark of respect to the memory of the late Mr. John Hunter, which shall at the same time express the very high sense they entertain of the very liberal conduct of the Royal College of Surgeons, in supporting and preserving the Hunterian collection," agreed with Sir William Blizard and Mr. Cline to endow "an *annual* oration, to be called the Hunterian Oration, which shall be read or delivered in the theatre of the said College on the 14th day of February in each and every year (being the birthday of John Hunter)." They devised that such oration "shall be expressive of the merits in comparative anatomy, physiology, and surgery, not only of the said Mr. Hunter, but also of all such persons as are or shall be from time to time deceased, whose labours have contributed to the improvement or extension of chirurgical science." After the first oration in 1814, one was delivered every year until 1849. Since that year it has been biennial, and the indefinite phrase, "from time to time deceased," has been interpreted as applicable to the Fellows and Members and other distinguished men who have died since the delivery of the previous oration. This custom I shall follow; and, before alluding to any other subject, I will endeavour to bring before you some account, necessarily very brief, of a few of the men who have died since February, 1881, "whose labours have contributed to the improvement or extension of chirurgical science."

Were I to attempt to do more than make a passing allusion to such men as Schwann, and Bischoff, and Darwin, and Rolleston, and include comparative anatomy and physiology in the term "chirurgical science"—which in the home of the Hunterian Museum I should almost be bound to do—the short space of one hour would be so fully taken up as to exclude any other subject. And even if I were to include some of our countrymen who have rather advanced the *medical* department of chirurgical science, and allude to such veterans as Christison and Billing, or Alderson, or Watson whose loss is so recent, and to whom personally I shall always be grateful for kind encouragement in the earlier years of my practice in London; or to our Scotch brethren, as Pirrie and Spence; or Thompson of Lisburn, who did the first ovariotomy in Ireland; or McClintock, a leader among our Dublin brethren—any notice must be so brief as to be useless. Still more so were I to include those of our brethren abroad or in America, like Pirogoff, Busch, Hueter, Davaine, Atlee, who now "rest from their labours," and whose "works follow them." I am compelled, therefore—not from want of respect or appreciation of such men, but simply from want of time—to limit my remarks to those Fellows and Members of this College who have died since Mr. Holden's eloquent oration was delivered here two years ago.

Three hundred and sixty-eight Members and Fellows are included in this death-roll of only two years. A hundred years ago, in 1783, when Hunter had just bought the house in Leicester-square, which in its altered form of Alhambra was burnt down last year, the Members of this College numbered 835. In a hundred years we have increased in number more than twentyfold, for we have now 16,093 Members and 1186 Fellows—a total of 17,279 men associated in our work. In the two years which have passed since the last Hunterian Oration, 368 of the Associates have died. The average age of the Fellows was about sixty-six years, and of the Members fifty-seven years. One Fellow and four Members attained the age of ninety years and upwards, and other thirteen Fellows and twenty Members eighty years and upwards. A few Members died within five years of obtaining their diplomas, and we lament the loss of one Fellow who was only admitted last year.

Two of our deceased Fellows—Luke and South—had attained the highest position in our College. Both were Members of Council, both Examiners, both had been President twice, and both had been teachers of surgery in large metropolitan hospitals.

M. Luke was twice President of this College—in 1853 and 1862. He delivered the Hunterian Oration in 1852. For many years he was one of the Examiners, and he was connected with the London Hospital from 1816, as a pupil, till his death at the age of eighty-two, when, after having long retired from private practice, he held the office of Consulting Surgeon. He attended the lectures of Abernethy and Astley Cooper, and was one of the personal links connecting these great masters of our art with the surgeons of our time. Luke's work as hospital surgeon and as teacher certainly contributed to the advance of surgery in his time. In his operation for femoral hernia, by small incision and division of the stricture without opening the sac, his success was very remarkable. In his Hunterian Oration Mr. Luke refers to a letter of Hunter's urging upon this College the establishment of a library, which he "would consider one of the happiest wants of his life," as a proof that he regretted his own deficient early education; and Mr. Luke strongly insisted upon the necessity of a good general education for all medical men, and upon the study specially of French and German, and he spoke with great satisfaction of the examinations in the classics recently instituted by the Council of this College. Turning to the study of Hunter's character as an example to ourselves, he noted the "perfect honesty and integrity of all his scientific and professional acts," his indifference to money—except as enabling him to promote his favourite objects—his beneficence, his wonderful industry, and his careful subjection of all his doctrines to the test of fact or experiment.

South was one of the last surviving relics of the staff of the then united hospitals of Guy's and St. Thomas's; apprenticed to the younger Cline of St. Thomas's, and after very many years' service as Assistant-Surgeon there, succeeding too late in life to the full surgeoncy. He was a member of our Council from 1841 to 1871; was an Examiner for many years; was Arris and Gale Professor; delivered the Hunterian Oration in 1844; and twice, in 1851 and 1860, was honoured by the highest distinction his colleagues on the Council could bestow. His works are translations of Otto's well-known "Compendium of Anatomy" and of Chelius's "Surgery," which he greatly enriched by his own notes. His text-book on the Bones and his "Household Surgery" have both done useful service. When Frank Buckland discovered the coffin of John Hunter in St. Martin's Vault, it was owing to the exertions of South that the body was removed to Westminster Abbey, and the inscription on the tablet which has been placed over the grave in the Abbey was written by South. For many years he had been engaged on a history of this College, and of the Barber-Surgeons. His widow has permitted me to read the manuscript volumes—most beautiful specimens of neat and distinct handwriting, and very extraordinary evidence of industrious research. One extract from these volumes I may now use as illustrating the advancement of the College since Hunter's time.

A former President—then styled Master of the Corporation, Mr. Gunning—wrote as follows, on retiring in July, 1790, from the office of Master. John Hunter was one of those present when these remarks of the Master were read. After some complaints of the imperfect way in which the College books were kept, and the unnecessary expenditure on dinners, he said—"Your Theatre is without lectures; your Library room, without books, is converted into an office for your clerk; and your Committee-room has become an eating parlour. . . . . If, gentlemen, you make no better use of the Hall than what you have already done, you had better sell it. . . . . I am sorry to observe that you have instituted lectures neither in Surgery, nor indeed in Anatomy of any degree of importance, nor have you held out any gratification or reward for rising merit."

Now our library contains about 39,000 volumes, and every year becomes a more complete library of medicine and the auxiliary sciences. Our museum is our chief possession,

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the most complete of its kind in the world, and the offices of Assistant-Conservator are valued as rewards to rising merit. Our hall is not only used for the lectures of Flower and Parker, Power, and Eve, and of a succession of our leading practitioners, but for the examinations of the young men who will become the surgeons of the future. The Council has already taken the first step for providing additional accommodation for the examinations by securing the services of one of the greatest architects of our time—Mr. Waterhouse—to report upon different plans, which will have to be carefully considered. I am also hopeful that, by a judicious outlay of part of our accumulated funds—assisted, perhaps, by contributions or legacies—we may supply what is now felt to be a great want—I mean such a complete central pathological laboratory as may assist the men who are leading the advance of Experimental Physiology and Pathology. Dr. Ogston's work at Aberdeen has already proved how very useful such a laboratory may be, and more than justifies the most sanguine hopes of the good to be expected from the endowment of a Chair of Pathology in the Northern University by the munificence of my predecessor in the Presidency of this College—Sir Erasmus Wilson.

George Gulliver, who died last year in his seventy-eighth year, was a pupil of Abernethy, dresser to Lawrence, surgeon in the Guards, one of the first Fellows of the College under the new charter—elected "in recognition purely of scientific merit,"—for twelve years a member of our Council, and Hunterian Professor of Comparative Anatomy and Physiology. In 1863 he delivered the Hunterian Oration in this place, warmly criticising some who had said that the material for these orations is "nearly exhausted." He maintained that "there is perennial interest and instruction in reviewing the works of a man of genius, in the now steady and now fitful lights and shadows of advancing science," and he warmly upheld, against what he believed to be unfounded claims of French and German physiologists, the just merits of the British school of Physiology, instancing the labours of Hunter and his disciples, especially of Hewson, who "fairly entered that prolific field of cells and endosmosis which was left utterly forgotten and barren for upwards of half a century afterwards, until new minds, with the aid of better instruments, found in it such a variety of rich fruits, and confirmed so many of his long-neglected conclusions."

In one of Gulliver's lectures he asserted that a moderate quantity of beer may promote the formation of a chief product of digestion—the chyle. His illustrations of the molecular base of the chyle, of the intimate structure of tubercle, of the softening of fibrine, and his investigations into fatty degeneration of tissues and their relation with arterial changes and apoplexy, were all in advance of the pathology of his day. He argued that the modern "protoplasm" is but a synonym of the old "coagulable lymph," and that a delicate shut sac might be formed by coagulation of fibrine without any cell agency. His demonstrations that the red blood corpuscles in the mammalia are non-nucleated, while in the oviparous vertebrates they are nucleated, was a distinct addition to the knowledge of the age; and his experiments upon the conditions under which fractures of the patella are united by bone or only by ligament, as well as his observations upon shortening of the neck of the thigh-bone in young persons, were important additions to surgical diagnosis and pathology. Gulliver's life affords another proof that the career of an army surgeon is far from being unfavourable to the cultivation of science. His son, now Assistant-Physician at St. Thomas's, has already shown that he is worthily following in the path which earned honour for his father.

The name of George Critchett recalls, to many who hear me, meetings for several years at our Council-table, and his pleasant companionship at many less serious gatherings; and it would be difficult to name one whose loss has been more sincerely regretted. His life and work are remarkably illustrative of the recent extraordinary progress of ophthalmology in this country. It has been said of him that his carreer commenced in the "pre-scientific period of ophthalmology." But it must not be forgotten that the foundations for the most important of the advances of the German school were laid in England by Hunter, in ground prepared by Isaac Newton and Thomas Young. The anatomy of the eye was well known before Hunter's time; and Haller and Hunter, with Newton and Young, had done much to increase our knowledge of the physiology of vision. Daviel's extraction of cataract, Cheselden's iridotomy, and the treatment of disease of the lachrymal sac, were already proofs of great progress. But it was not until after the beginning of this century that well-educated surgeons in any country devoted themselves to the study of diseases of the eye. Hunter's papers on the use of the oblique muscles, on the colour of the pigmentum of the eye in different animals, and his investigations into the structure of the crystalline lens, are proofs of his interest in the subject. The foundation of special hospitals in London in 1808 and 1810, followed soon after in other large towns, and in Scotland and Ireland, and the works of such great surgeons as Travers, Lawrence, Guthrie, and Tyrrell—of such an anatomist as Jacob, and such an oculist as Mackenzie—did much to increase the general knowledge of diseases of the eye. In Germany, until about thirty years ago, the school of Vienna occupied the most important position. Then the school of Berlin entered upon the path which has led to as great, as rapid, as extraordinary a progress as ever has been recorded in the history of any other branch of medicine, equalled only by the advance gained during a still more recent period in abdominal surgery, surgical gynæcology, and the use of antiseptics.

It was in 1851 that the great physiologist Helmholtz invented the ophthalmoscope, and thus enabled us to investigate some diseases of the eye which before were completely hidden in darkness. Just at this time Albrecht von Graefe began his brilliant but short career, and in twenty years he worked out all the most difficult and complicated questions in ophthalmology for the aid of the practical surgeon. Graefe called to his side many able men to assist in his great work. Heinrich Müller worked out the microscopical and pathological anatomy of the eye; Donders, the affections of refraction and accommodation; and one distinguished German, who joined this College after a brilliant career in Berlin and Paris—Liebreich—devoted himself mainly to the study and teaching of the ophthalmoscope. I well remember, when in 1853 I brought from Berlin almost the first ophthalmoscope which was tried in this country, with what delight Critchett watched its earliest trials. When some called it a "toy," and others feared its possible dangers to a sensitive retina, Critchett eagerly tested its utility. He, and a fellow-workman happily still among us, beloved by many and honoured by all, who had done much to increase knowledge of the "parts concerned in the operations on the eye," and whose microscopical researches had greatly increased our knowledge of ocular histology (even to our visitors I need not name Bowman), side by side, with generous rivalry, and throughout a long and useful career, either by improvements in practice or by clinical teaching and additions to our literature, greatly assisted in the recent progress of the science and art of ophthalmic surgery. How much of this progress is due to the teaching and example of Critchett at Moorfields and the Middlesex Hospital, it is perhaps difficult to say. But it is certain that no one could see him operate without admiration, or without some desire to be able to imitate his perfect coolness, his delicate touch, and his exact precision; while all might learn how a successful operator, by attention to every detail which can influence the result, deserves and obtains his success and his reputation. A junior colleague, Soelberg Wells, had studied in Berlin under Graefe, and his Handbook became a valuable guide for our students. His faithful and fertile work at Moorfields and King's College will not be forgotten in the annals of those institutions. Liebreich will be remembered by his enthusiastic and successful work for ten years at St. Thomas's, and the translation of his "Atlas of Ophthalmology" (equally distinguished by artistic skill as by a faithful and trustworthy interpretation of intra-ocular changes) will always be valued as a notable contribution to the literature of modern ophthalmology. Our public school-rooms have also been greatly improved by the seats and desks suggested by his endeavour to remove some prevalent causes of defective vision. He now enjoys artistic leisure in a sunnier clime. George Critchett's labours are over, but his son remains, and we may rejoice in the continued accession of able workers in this special field. And while we have so many special hospitals, and eye departments in so many general hospitals, and such men as work in all—there is no fear for the future of ophthalmic surgery in the country

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where its foundations were laid, in optics by Newton, and in physiology by Hunter.

Probably no man in the whole world, during the last twenty or thirty years, has done so much with his own hands to prevent or relieve severe pain as Joseph Clover. As an administrator of chloroform, or of some other anæsthetic, his services were in almost constant demand. For many years resident in University College Hospital, then extensively occupied in general practice, he became so well known for his careful and precise mode of administering narcotic vapours or gas, that little time was left him for other pursuits. In some respects, although he supplied a real want in daily practice, this limitation of his work is to be regretted; for the valuable improvements he made in several surgical instruments, especially in the double-current exhausting syringe, so useful in lithotrity, afterwards improved by Bigelow, prove that, with less delicate health and more leisure, his many friends would have been able to record more numerous and enduring memorials of the life-work of a singularly industrious man. Now they must be content with thinking

> "On that best portion of a good man's life,
> His little, nameless, unremembered acts
> Of kindness and of love."

I should hardly do more than mention the name of Dr. Peacock, though one of our Members, as he was so purely devoted to the practice of a physician, if he had not been one of our Examiners. And now I can do little more, for want of time, than allude to his valuable gift to our museum, in recognition of which, in 1876, he received the Honorary Gold Medal of the College. He died when visiting St. Thomas's Hospital, in a ward which had been under his own charge during his years of active work and teaching.

Few men were better known in our medical societies, from ten to thirty or forty years ago, than Edwards Crisp. His Jacksonian Prize Essay on the Structure, Diseases, and Injuries of the Bloodvessels remains a sufficient proof of the industry and attainments of a very active man. In his later years he spent much time in investigating diseases of the lower animals, and the natural history of parasites. He obtained the Astley Cooper Prize for his Essay on the Structure and Use of the Thyroid Gland; a second time the Jacksonian Prize, on "Intestinal Obstructions"—besides others on Croup and Diphtheria, and Disease in Lambs. He first demonstrated the existence of valves in the splenic vein. He is said to have accumulated a museum of comparative and pathological anatomy exceeding 5000 specimens. He was a remarkable instance of a man who, busily employed in the daily work of a large general practice, also took an active part in medical politics, while assisting usefully in the advance of zoological science and human and comparative pathology.

Still without passing from our London brethren, I have to record the loss of five veterans. Griffith, of Gower-street, died at the age of ninety, after having honourably carried on a very large general practice for more than sixty years.

George Macilwain, so well known at the medical societies and the Royal Institution for so many years, who wrote the Life of Abernethy, and a thoughtful book, entitled "Medicine and Surgery one Inductive Science," reached the age of eighty-five.

Francis Godrich, after practising at Brompton for sixty years, died at the age of eighty-five. He was one of the founders of the Medical Benevolent College, and he took a leading part in all the improvements and charities of the districts in which he practised. He greatly assisted Mr. Wakley in his successful conduct of the Medical Witnesses Bill through the House of Commons.

Another octogenarian, John Merriman, was one of a very old medical family. Samuel Merriman the elder attended the lectures of William Hunter, and practised in London all through John Hunter's career. Having attended 12,000 cases of labour, he took for his motto, "Terar dum prosim," which the family have retained ever since. He died in 1818, aged eighty-six. His nephew, the second Samuel Merriman, author of "Difficult Parturition," died in 1852. These two were uncle and cousin of John Merriman, who began practice in Kensington the year after the death of John Hunter. He was the father of the second John Merriman, whose death I have just referred to. He was attached to the household of the Duchess of Kent, and of our Queen, attended the Princess Sophia, was consulted by the Prince Consort, and received many proofs of the gratitude of these Royal persons. He carried with him into pleasant retirement the good wishes of all classes in the "old Court suburb," and he is succeeded by a son and grandson who worthily maintain the traditions of the name they bear.

Frederick Toulmin died, in his eighty-fifth year, only ten days ago. He had practised for nearly fifty years in Clapton, where he and his brother succeeded their father. He was a kindly, genial man, a charming companion, and his anecdotes of the leaders of the profession in his early days were many and very interesting. Mr. Toulmin's great grandfather was a surgeon. His brother and his nephew are the fourth and fifth in direct family succession in the profession during a period of more than 150 years. He was a dresser under Sir Astley Cooper, and the testimonial which Sir Astley gave him, when a candidate for a dispensary surgeoncy, was so gratifying to him, and is so characteristic of the great surgeon, that I venture to read it here. Sir Astley wrote: "When I look around me and observe the number that I have had a share in educating, I find no individual to whom I am more sincerely attached than to Frederick Toulmin. If I be asked the reason of this, my answer will be that his knowledge in all the branches of his profession is most extensive, and his character as a man the most amiable. My best wishes will ever accompany him. His prosperity will always be next my heart.—ASTLEY COOPER."

Among the general practitioners around London I may mention Stephen Alford, of Hampstead, who took an active and useful part in the attempts made for several years past to protect and reform habitual drunkards; Hemming, who worked hard at diseases of the ear; and Duke, of Clapham, who, after more than forty years' work in very varied and large practice, and continual struggles with parochial authorities when fighting the cause of the sick poor, has left the best of all legacies to the many sons who follow their father's profession—the "good name" which is "better than riches."

It is to such men as these that Johnson's portrait of his friend Levett would apply:—

> "When fainting Nature called for aid,
> And hov'ring Death prepared the blow,
> His vig'rous remedy displayed
> The *power* of art without the show.
> . . . . . .
> "No summons mock'd by cold delay,
> No petty gains disclaim'd by pride;
> The modest wants of every day
> The toil of every day supplied."

Donald Napier was a surgeon who inherited mechanical genius, and though he devoted himself specially to dental surgery, he constructed and improved many ingenious surgical instruments. The Association of Surgeons who practise Dental Surgery owe a great deal to Napier's zeal, and he did very much, although he died at fifty, to improve the position of dental surgeons.

Although he lived a little beyond the metropolitan district, the noble figure and grand head of Heckstall Smith were almost as well known to us in London as in Kent, where he practised for more than fifty years. He was a general favourite—did much useful sanitary work—and has left a church, which was built and endowed almost entirely by his exertions, to perpetuate his memory.

Nor should we forget Hardwicke, who left practice on being elected Coroner for Central Middlesex, and died at his post.

Turning from London to the provinces, I again speak first of men who reached old age.

Thomas Radford, who attained the age of eighty-eight, and for sixty-three years had been associated with St. Mary's Hospital for Women, in Manchester, enriched that institution by presenting to it a library said to be one of the most complete of its kind in Europe, and by founding a museum. His work on the Cæsarian Section is too well known to call for more than mention here.

Stephens, of Shields, was an octogenarian whose services to the town he served were gratefully acknowledged. Greenhow, of Newcastle, was one of the original Fellows of the College. At his death, at the age of ninety, there was only one senior Fellow on the list. He was a bold, skilful, and successful operator. He had unusual success in lithotomy, and repeatedly excised the os calcis for caries. He had a very large experience in ophthalmic surgery, and

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invented a very useful fracture bed. During the cholera epidemic in 1832 he laboured incessantly; and, twenty years afterwards, foretold the second epidemic, which arrived as he predicted. And he pointed out how, by overcrowding, by burial of the dead within the town, by bad drainage, bad water, and impure air, his townsmen were prepared to fall victims to the pestilence.

Gore, of Bath, also an octogenarian, was of great service to that town in the improvements he obtained in its water supply and general sanitary administration. Green, Superintendent of the Birmingham Lunatic Asylum, died at eighty-one. Williams, of Swansea, who died at the age of seventy-nine, was the son of a surgeon who practised nearly a century ago, and was at that time the only Member of this College in South Wales. Two surgeons of provincial hospitals—Symonds of Oxford, and Nunn of Colchester—were old friends of mine. In many anxious cases they have shared with me serious responsibility, and I am indebted to both for much assistance. Symonds was one of a representative medical family—son of an Oxford surgeon, brother to the eminent physician of Clifton, and father to the present able and active Surgeon to the Radcliffe Infirmary. He well maintained the social position of our profession in the University and the county where he was so popular. Nunn thoroughly deserved the place he held for so many years as the most fully employed surgeon in his town and district; a trusted consultant by his brethren, and a warm supporter of the hospital, where he earned the gratitude of the poor.

Drewry Ottley, who died last month, aged eighty, joined this College thirty-six years ago. He was the author of the best Life of John Hunter—that published with Palmer's edition of Hunter's works. After many years' practice in London he settled at Pau, where he remained for more than twenty years, but for several years past has lived in retirement near London. His loss is regretted by many old friends.

John Postgate was a most successful teacher in Birmingham, and did much to prevent adulteration of food, drinks, and drugs. Several Bills were introduced into Parliament by the members for Birmingham, influenced by Mr. Postgate, and the Amended Acts of 1872 and 1875 are mainly due to his exertions.

Time alone prevents me from alluding to many other of our deceased brethren whose average age at death represents for each about thirty-five years of professional work. Pray consider for a moment what that work is. Walter Scott wrote, "I have heard the celebrated traveller Mungo Park, who had experienced both courses of life, rather give the preference to travelling as a discoverer in Africa, than to wandering by night and by day the wilds of his native land in the capacity of a country medical practitioner." Only a small proportion of our brethren have acted purely as consultants or operating surgeons. By far the larger number, some without, but more with, some *medical* qualification in addition to our diploma, have been the general practitioners or "family doctors" of the people—the trusted medical attendants of at least nine-tenths of the population. Wherever their lot may be cast, in town or country, they instruct both rich and poor how to preserve health, and remove or avoid known causes of disease. And although little may be recorded of many, we do know that the nation is as much indebted to them as to any other class of public servants. By night and by day, at the service of anyone who may require help in sickness, at the opening or the close of natural life, in mental aberration or in bodily suffering, injured by wound or accident, at almost any distance, in any weather, sometimes suffering themselves from illness or over-fatigue, the members of this College, often without expectation of reward—perhaps bestowing money, hard earned and ill spared, as well as affording surgical aid to the needy—ungrudgingly, cheerfully, gladly do their duty day after day and year after year, until, "unknown, unhonoured, and unsung," they rest in peace. But no—not *unhonoured*. There may be no monumental epitaph, no biography nor memoir, nothing beyond the erasure of a name from the College Calendar, and yet the nation has lost a good and faithful servant, whose place must be filled by others, who in their turn pass through our portals and enter upon the work which is prepared for them.

And it is the most important duty of this College, while maintaining the scientific value and character of its diplomas, to guarantee to the public useful and skilful practitioners, really fitted for the daily practice of the healing art. In order to insure the value of the diploma as a proof of education and knowledge and skill, the Council and the Examiners, recognising the necessity that the surgeons of the future must be well-educated gentlemen, and that their scientific and practical knowledge shall fit them for their daily work, have been earnestly endeavouring to fill up our ranks by attracting, as far as possible, young men who, before they begin professional studies, have had the advantage of as high general culture as can be obtained in our best schools. In this desire we have the hearty concurrence of the Medical Council and of the College of Physicians; and I trust the day is not far distant when, without either aid or interference from the State, the two Royal Colleges will correct mistakes in the working of the Medical Act, prescribe a common course of study for students, and agree upon a mode of examination which shall secure for the country a body of well-educated medical men, who, either as teachers or as students in the metropolis or the provinces—as army or navy surgeons, or as civilians at home or abroad—by observation, by research, by experiment, by improvements in the practice of our art, by additions to our literature, by daily attempts to relieve the sufferings of others, may emulate the best of their predecessors, and, like them, while living be honoured and loved, and when dead, not forgotten.

So far I have spoken of deaths among our brethren at home. In India, in our colonies, at sea in our Navy or in our mercantile marine, other losses might be deplored. But I must pass on to speak of some of the Army surgeons, who in India, at the Cape, and in Egypt have done honour to their country and their calling. Brigade-Surgeon Martin, who died in India last March, was mentioned in despatches as "attending to the wounded under heavy fire."

Forty years ago, one of our oldest Fellows, whom we all congratulate upon continued vigorous health and continued interest in the progress of modern surgery—a teacher of many who are now themselves teachers—Mr. Arnott, when delivering the Hunterian Oration, spoke of the great French Army-surgeon Larrey, who had recently died, as "the first military surgeon who dressed the wounded under the very fire of the batteries," and said that to him we "owe our place of honour on the field of battle." The army surgeons of our day well maintain their reputation, not only for gallantry, but for self-sacrifice to duty. What can be finer than the conduct of Shepherd, who, riding away from the bloody field of Isandhlwana, with a good chance of escape, dismounted to assist a wounded man, and was killed by the assegais of the Zulus; or of McCrea, who, severely wounded in the chest himself in the first charge, continued to attend the other wounded, as he was the only doctor on the field?

In the military operations on the Transvaal frontier against the Boers, the courageous devotion of army surgeons to their duty was conspicuous. At Laing's Nek, "as the 58th Regiment advanced and the men were falling rapidly, Surgeons King and McGann moved up behind the advancing column, and, on its retirement, remained, amidst a hail of bullets, attending to the wounded. . . . At the final disaster at Majuba Hill, the officers of the Medical Service remained faithful to their duties even unto death. Dr. Cornish was shot as, with a piper of the 92nd Highlanders, he was carrying a wounded man on a stretcher. . . . Landon, always keen for duty in the field, and taking a special pride in his Army Hospital Corps, met his fate at the final rush of the Boers. . . . The ruling passion strong in death, he called Dr. Babington's attention, shortly before he expired, to the meritorious conduct of his men." I have copied this from a colonial newspaper, the *Natal Witness*. Let me say something more about Landon. He was kneeling attending to a wounded soldier when a bullet wounded him in the loin, and Longmore writes: "He at once fell forward. The lower half of his body became completely paralysed, and Landon told Corporal Farmer he must die. Farmer was almost immediately struck by a bullet in both his forearms, and was suffering excessive pain from injuries to the ulnar nerves. Landon had a field case with him containing morphia and syringes, and he had the upper part of his body propped up against a boulder of rock, and in that position administered the morphia injection in both Farmer's arms in succession. The Corporal was so relieved that he fell asleep, and remained so for several hours." Well may Longmore write: "It is difficult to imagine a more perfect example of

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professional heroism than was afforded by the conduct of Surgeon Landon, from the time when the Majuba fight commenced to that when death put an end to his own sufferings." And well have the men of St. Bartholomew's done by placing a tablet in their chapel, to keep in memory his bright example, by a record of his last words—"I am dying; do what you can for the wounded." And not Bartholomew's men only—not only this College—not army surgeons only, but the whole profession, the whole nation, will rejoice with me when it is made known that Her Majesty the Queen was so much impressed by the story which I have just read to you of Landon's noble conduct, that the report has been preserved among her private records—another proof of the Queen's interest in her soldiers, and in the men who are devoted to them.

The last Egyptian campaign has added another to the list of army surgeons killed in action while attending to the wounded. George Shaw had served in cholera camps in India, in the field in Afghanistan, and in the advance through the Khyber. He was a very gentle, amiable man, most devoted to the soldiers. He went to Egypt with the Bearer Company, and at Kassassin, while dressing wounded under fire, was shot through the head.

It is gratifying also to be assured that in Egypt, as in South Africa, the men of the Army Hospital Corps worked as bravely and as well as the examples of the medical officers led them to do. My old comrades, the naval surgeons, also deserve full credit for the way they did their work during the Egyptian campaign—on board ship at the attack on the forts of Alexandria, or on shore with blue-jackets and marines, alike under fire with the fighting line, or in the armoured train, or combating disease in camp, or on the march. We have been assured by everyone in a position to know—from the Commander-in-Chief downwards—that the naval surgeons were always ready, willing, and cheerful. And while we speak with pride and satisfaction of the manner in which our brethren, both in Army and Navy, who served at the seat of war acquitted themselves, we must not forget those who laboured at home; the heads of both the Medical Departments, and those under them, have well merited a generous recognition of their forethought and good service.

And what a change for the better has taken place in the practice of army surgeons since Hunter's time! Military surgery, before the publication in 1794 of his last work, so far as the treatment of gunshot wounds is concerned, was influenced by the false doctrine of the poisonous nature of the wound—the necessity for the escape of the poison—and therefore for the dilatation of the wound and the keeping up of suppurative discharge. Hunter served as Staff Surgeon in the Army in the expedition against Belleisle in 1760, and in Portugal in 1763. In 1776 he was appointed Surgeon Extraordinary in the Army, in 1786 Deputy Surgeon-General, and in 1791 Surgeon-General—as Longmore says, "a laborious office, corresponding with that of the Director-General under existing arrangements." He held this office during the early part of the war with France which preceded the peace of Amiens. After Hunter's death the simpler treatment of gunshot wounds which he taught has been generally followed, and other great improvements in military surgery have been accomplished. Secondary amputations have been shown to be more fatal than those performed soon after the wound. Amputations have been often avoided by excision of joints or of injured portions of bone. The use of anæsthetics, and latterly of antiseptics, in spite of the much larger number of wounded after modern battles, have greatly lowered the death-rate; while, thanks to our experience in the Crimea, and the perfection of the system of ambulance transport in our Indian Army (all admirably worked out by the indefatigable perseverance of one of our own Fellows—the Professor of Military Surgery at Netley)—the transport of our sick and wounded in time of war is so perfect as to have been copied by other armies; while all the administrative arrangements for the care and treatment of sick and wounded, the organisation of military hospitals in time both of peace and of war, and the service in the field, were proved in the late Egyptian expedition, under all the disadvantages of a rapid and unexpected change of base, to have been most creditable to the Army Medical Department. If this Department obtains such a control over its own affairs as other branches of the Army, we need not fear for its future efficiency. To insure this efficiency the Medical Officers and the Army Hospital Corps should be made one Royal Corps—placed on a perfect equality with other corps, and receive a fair share of honorary distinctions. The Director-General and the Principal Medical Officer of a division should be secured rank and pay proportionate to their arduous and responsible duties, and be provided with a subordinate for secretary's duty. A field-hospital fully equipped for the field should be maintained at Aldershot, or elsewhere; and the whole corps be frequently exercised during peace in all the duties they may be called upon to perform in war. Let us trust that this may be the result of the Commission which has been sitting under the presidency of Lord Morley, and of which one of our Fellows, Sir William Mac Cormac, is a member. Under their own head—a united body—having entire control over and command of their own department, subject only to the General Officers commanding—our Army Surgeons will cheerfully accept the responsibility of collecting, removing from the field of battle, and attending to the first wants of the wounded, and for their subsequent care and treatment, as well as for the equally important duties of sanitary officers in preventing disease and maintaining the physical condition of our Army; and if the corps desire a motto, let me suggest one well deserved by their conduct in the past, and encouraging to good service in the future,—

"FAITHFUL UNTO DEATH."

(To be continued.)

VIENNA GENERAL HOSPITAL IN 1881.—The following statistics are taken from Obersanitäts Rath Dr. Hofman's report on the Hospital for 1881:—During the year 23,565 patients were treated, with a mortality of 13·7 per cent., or, without tuberculosis, of 9·1 per cent. There were 2084 cases of phthisis, 1195 of which terminated fatally; 777 were improved and 62 unimproved. The mortality in 212 cases of ileo-typhus was 22·6 per cent., and of exanthematous typhus 23 per cent. in 52 cases. Tracheotomy was performed 30 times, with 4 recoveries, 2 with doubtful results, and 24 deaths; herniotomy was performed 59 times, with 22 deaths; lithotripsy 14 times, with 1 death; litholapaxy 22 times, with no death; laparotomy 20 times, with 13 deaths and 5 perfect recoveries; ovariotomy 64 times, with 38 complete recoveries and 25 deaths; and total extirpation of the uterus 6 times, with 3 recoveries and 3 deaths.—*Phil. Med. News*, Dec. 30.

REST IN AFFECTIONS OF THE THROAT AND LARYNX. Dr. Major, Instructor in Laryngology at McGill University, Montreal, in a paper read before the Canada Medical Association (*Canada Med. Jour.*, December), draws attention to the therapeutic value of rest in the various diseases of the throat. In the ordinary use of the gargle very much needless disturbance is made, while all that can be done by this is accomplished when the head is only thrown back for an instant during the time the respiration is suspended. The patient should never rinse the mouth after using it, as this removes the small portion of the medicament left in the salivary secretions which come into contact with the parts while being swallowed. But Dr. Major especially dwells upon the necessity of rest of the larynx itself when the subject of acute or chronic disease; and when pain is present the rest should be absolute. It must be observed, however, that whispering is not rest, but involves much more fatigue, distress, and effort than speaking in an undertone. In acute laryngitis absolute rest becomes the most important factor; and in a great majority of cases rest in itself will be sufficient to cure the disease. And in chronic disease, however useful local treatment by stimulants and astringents may be, if rest be neglected, convalescence will be greatly delayed. Dr. Major relates some cases in proof that the subacute form requires absolute rest, that is best secured by tracheotomy, which is too seldom resorted to at a sufficiently early period. Even in cases of tubercular and other disease the rest thus secured stays the disease and secures comfort. In injuries of the larynx from scalding water, etc., rest will secure in a few days what would otherwise require weeks. Under the influence of tracheotomy, ulcers, which have long refused to heal, rapidly take on a healthy action. When, as in spasms of the glottis of an obscure nature, the tracheal tube may have to be worn for several months or longer, it will be found highly useful to substitute a lighter *gold* outer tube for a silver one, this being much cleaner and causing less irritation to the wound.

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PRESIDENTIAL ADDRESS

DELIVERED AT THE ANNUAL MEETING OF THE

OBSTETRICAL SOCIETY OF LONDON.

By J. MATTHEWS DUNCAN, M.D., LL.D., F.R.S.E., etc.,
President of the Society.

AFTER a brief mention of the Fellows of the Society who had died since the last annual meeting, an enumeration of the papers read before the Society during the year, an announcement of the intended removal of the Society's library to more suitable premises, and a eulogy of his successor (Dr. H. Gervis), Dr. Duncan proceeded:—

This great Society has many functions to fulfil, and of these not the least important is a moral one, which gets little place in our statement of "objects," and which has, for two years, occupied no part of our time. On, happily, very rare and extraordinary occasions the Society may be called upon to censure and even expel a Fellow, thus exercising moral discipline in a decided manner; but it wisely avoids discussion of such matter, and keeps within very narrow limits the direct exercise of control over its members, leaving this branch of medical police to the Colleges of Physicians and of Surgeons, who have long taken charge of it. But silence does not indicate forgetfulness or low estimation; and our active juridical interference, concerned as it has been only with minor disorders in individuals, gives no indication of the supreme importance of our moral interests as a society. In no way can we, or do we, do more good than by increasing and diffusing a kindly spirit and mutual goodwill in our ranks. Nothing contributes more to our dignity and our success than sense of honour and love of truth. By promoting science we increase the weight and power of truth. Without high moral qualities in the practitioner—qualities of heart and of head—the work he does will all be tainted by his imperfections, and correspondingly fall short in its utility to his patients, his profession, and to himself. The intellect may be stored, the judgment may be sound, the hands may be skilful; yet the work does not reach an attainable degree of perfection if the heart is not right.

The promotion of science is avowedly our great object, and accordingly it is our chief performance. The work has been done in previously announced papers and in casual contributions. Of these, some have been purely scientific, or, in the view of the mere practical man, apparently useless; some have been more or less practical or immediately useful, or intended to be so. We want still a great increase of the, at first sight, useless kind, and we shall hold it the best evidence of the progress of the Society that they appear and are cordially received. A great master of medical method, Helmholtz, has said that he who pursues science with practical results in view will pursue in vain. The papers combining practical ends with scientific elaboration have been admirable, and must be useful and honourable to us. This Society will always regard such papers as deserving of encouragement, but they need no special fostering care, for the fruits of their application in practice are a sufficient stimulus, sometimes more than sufficient. The more this kind of utility is paramount, the less is scientific severity, and the greater the departure from the guidance of logic, and consequently the less reliability. A great result, indeed, of our scientific work has been to show us what we should not expect to be able to do, and what we should avoid attempting or doing.

Besides scientific and mixed scientific and practical papers, we have had before us proposals purely therapeutical, and several histories of splendid work in practice. The surgical achievements which find place in our *Transactions* are as brilliant and wonderful and successful as any to be found in the history of the art. They show what skill guided by science can dare and do, and the novel operations contribute in this and other ways to the solution of important practical problems. That a thing can be done successfully is not enough, however, to show that it should be done. It is not judicious to excise the uterus in elderly women in order to prevent cancer of it. For myself, I have no doubt that the novel operations or series of them which have, in last session, been laid before us, will not be, in any sense, without good fruit, helping towards a sound judgment as to the extent or the limits of their applicability.

It is natural that the ingenious and bold surgeons who devise and execute new operations should press them strongly upon the profession, demanding quick approval, and it is to be lamented that they should sometimes misconstrue the relative slowness or silence of their brethren. Were new therapeutical proposals to be quickly adopted, our whole practice would, by their number and variety, be brought into utter confusion. The silence or slowness of the profession regarding them is a kind and useful reception, for nothing more violent is required to secure for most of them speedy oblivion; while the stronger and better few, surviving, demonstrate their merits and demerits, and secure or lose a place in Medicine. By slowness and silence, even with some active depreciation, the profession obtains the best results, and this without any unnecessary delay. The use and acceptation of a new and good operation has never been a simple proposal and jubilant reception, and should not be; the whole matter must have time to ripen, and the special operation must exhibit plainly its qualities—what it can do, measured against what the corresponding disease does. Sometimes, as when the issue of disease, not cancerous, is in all cases, or nearly all, certain early death, the problem to be solved is a comparatively easy one: death for all *versus* a certain amount of cure. But when there is uncertainty as to the nature, difference of opinion as to the importance, or doubts as to the very existence of the disease to be remedied, the profession does well to be silent and slow. The problem to be solved is a difficult one; and if the operation puts life in the balance, there is a heavy responsibility which demands increased slowness and care.

The history of the operation of ovariotomy is often, one may say regularly, cited as a warning against silence and slowness of recognition; but it is quite otherwise, being a good example of an operation gradually and in due time gaining for itself a beneficent position of eminence. That theoretical and other mistakes were made in opposing it, may be very true; and theoretical mistakes made in supporting it too. But these neither hastened nor delayed the adoption of the operation in ordinary practice. As soon as it made a clear and sufficient saving of life it was accepted enthusiastically everywhere, and not till then; and we cannot wish a better fate for any similar proposal. Even now, where there are not skilled ovariotomists, ovariotomy is not an accepted operation: the poor sufferers have life prolonged by avoiding it.

The proposer of a new operation should not expect his brethren to see it in the same light as he does. For him it is gilded, and he jealously guards and promotes it. His judgment of it is that of an enthusiast. The wise practitioner may discommend it, or he may abstain from recommending it; and the proposer is too ready to interpret this conduct as indicating disapproval of him and his bold and original method, while it is really quite consistent with admiration, and even encouragement short of avowed approval. As evidence in favour of it gradually gets strength, so the practitioner at length is justified in making trial of it, and he may at last adopt it; and his slowness, differing as it does from the inventor's wishes, is wise, and not hostile to him.

Proposers of new operations have generally expended much labour, and ofttimes much money, in developing them: and the profession should, and does, admire the zeal and recompense the sacrifice, even though it may reject the operation. But there is often too much expected by the zealous proposer, and too little care taken by the critics, even by those who are essentially kindly, to avoid injury to the natural sensitiveness of such proposers. Against these evils we can only urge the force of moral obligations, which, though possibly too often in the mouth, cannot be too potent in the heart.

I am not quite sure that enthusiasm alone explains the whole peculiarity of attitude of our recent promoters of novel operative proceedings, for it appears to me to be fairly deducible from the tenor of their practice and writings that they do not attach the same value to life as the profession generally. The spirit of the times has great influence on such estimates, as is exemplified in many changes in the conduct of statesmen and jurists, in somewhat analogous circumstances; and it is possible that the profession

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generally may be induced to come nearer to the views of the promoters of special operations. Meantime, the weight of professional opinion seems to be in favour of the old high regard of the value of life. There is now a demand, in connexion with this matter, for the combined work of the surgeon and the actuary. Data might surely be obtained which would be sufficient to settle, approximately, the value of life in the diseases calling for tooth-extraction, removing of piles, excision of the mamma, lithotomy, oöphorectomy, ovariotomy, hysterectomy, and others; and, on the other hand, the danger of the operations themselves: and from the two results, viewed in the light of established professional practice, might be deduced a scale of justifiable or of ordinarily incurred risk, which might facilitate and corroborate judgment as to the due proportion of danger in new operations. Already some limited computations of this kind have been made, but they have been done by special pleaders and are insufficient.

A well-conducted inquiry would lead to conclusions which might, on the one hand, diminish our estimate of the value of life, or increase our estimate of the importance of mere chronic ailing; or the inquiry might confirm the opinions on these subjects which are at present generally held. We might thus be able, with great assurance, to judge whether or not a mortality of one in five or one in twenty is to be encountered in an operation for the relief of mere chronic ailing; and so on, according to the gravity of the ailing or the danger to life arising from the disease.

ORIGINAL COMMUNICATIONS.

FERROCYANIC TEST-PELLETS AS A CLINICAL TEST FOR ALBUMEN.

By F. W. PAVY, M.D., F.R.S.(a)

Most, I think, have felt, who have stopped to give consideration to the matter, that it would be exceedingly desirable if something more convenient than the method of procedure with heat and nitric acid, which has been in use so long, were placed at our command as a reliable test for albumen. At least, such is the expression which has from time to time fallen from those I have met; and I have been so strongly impressed myself in this way, as to have been induced to turn my attention towards endeavouring to meet the want.

The convenience of the cupric test-pellet for sugar inclined me to look for something that could be kept and employed in a solid form; and I started with the view that to be suitable for the purpose it must be freely and quickly soluble, devoid of objectionable physical properties, and a sharply marked and reliable precipitant of albumen.

During the last two or three years I have carried metaphosphoric acid in my urinary pocket-case, and have frequently been in the habit of otherwise employing it. It is known to constitute an excellent test for albumen, and I tried for some time to bring it into a convenient form for use. In a pure state it is a glacial body, which, although deliquescent, does not quickly dissolve. Kept in fragments, they stick together in such a manner as to prove troublesome at the time of use. I mixed the acid with other agents, as citric acid, sulphate of soda, chloride of sodium, and cane-sugar, but I failed to obtain a satisfactory product. Thus, finding that I could not succeed in getting what was wanted with metaphosphoric acid, I looked around for another suitable agent.

Yellow prussiate of potash and acetic acid employed together have long been known to furnish a valuable test for albumen. There may be other tests as good, but I think it may be said that there are none that can be spoken of as actually better. Citric acid may be made to take the place of acetic acid, and thus a test capable of being kept and used in a solid form is supplied. The precipitant of the albumen is ferrocyanic acid, and this is liberated just as effectually by citric as by acetic acid.

I at first thought that it would suffice simply to mix the yellow prussiate of potash and citric acid in the proper proportions, and compress into a pellet, to obtain the test in the form I wanted. Experience, however, soon showed me that the matter was not so easily to be disposed of. Difficulties presented themselves, which have taken time and consideration to overcome. With the willing and able assistance, however, which Mr. Cooper has rendered in carrying out the mechanical operations I have suggested, a pellet has been produced, which seems, as far as I can at present judge, to supply all that can be desired. Its components are the sodic ferrocyanide and citric acid. Grounds exist for the employment of the sodic instead of the potassic ferrocyanide.

All that is necessary in using the pellet is to crush to a powdered state within a folded piece of paper with a silver or other coin from the pocket, or in any other way that may suggest itself, and to run into an ordinary-sized test-tube, and pour in the urine to be examined to the height of about an inch. On simply agitating freely, without the application of heat, a precipitate will immediately, or almost immediately, appear when albumen is present. The test is so delicate that the smallest amount of albumen gives rise to a distinctly recognisable opalescence, and, with a larger quantity, a dense white precipitate is produced. Instead of crushing the pellet, it may be broken in half or placed whole in the urine. Used in this way, it takes a minute or so for it to be dissolved and the reaction to be produced.

An estimate may be formed of the amount of albumen present by allowing the precipitate to settle and reading off its height in proportion to the contents of the tube, in the same way as is done after the application of heat.

As no employment of heat is required in the application of the test, it is not necessary that a test-tube should be used. A wine-glass or medicine-bottle will answer instead, and the quantity of urine should be kept down to about that recommended when a test-tube is used.

Enough acid exists in the pellet not only for liberating the ferrocyanic acid from the ferrocyanide, but for more than neutralising the alkalinity that is likely to belong to a specimen of urine limited to the quantity which has been recommended to be taken. Through this circumstance the test acts equally well with alkaline as with acid specimens of urine.

Phosphates do not interfere with the validity of the reaction given by the test. They not only are not liable to be precipitated by it, but the acid present will promote the solution of phosphates already deposited.

Should the urine be turbid from lithates, it must be cleared by warming before the test is employed. A number of ways in which this can be done will readily suggest themselves without recourse to the use of a spirit-lamp, where no spirit-lamp happens to be at hand.

If thought proper, the test may be used in the same manner as some persons are in the habit of employing strong nitric acid, viz., by bringing the specimen and the test into contact with each other without admixture, and looking at the line of junction for the precipitate. Thus used, the pellet should be dissolved in a little more than sufficient water to cover it, and the urine then allowed to flow gently down the side of the test-tube until a stratum of about half an inch in height has collected. The lamina of precipitate which is formed from specimens containing a minute amount of albumen comes out denser and more sharply defined than with nitric acid. Further, if the contents of the tube are afterwards shaken together a diffused precipitate is visible, whilst in the case of the strong nitric acid the precipitate disappears.

With urine containing oleo-resinous matter, consequent upon the administration of an oleo-resin medicinally, it is known that nitric and other acids occasion a precipitate. The same will naturally occur with the ferro-cyanic pellets, and this is the only fallacious indication that I am at present aware belongs to the test. Error from this cause, whenever the conditions permit it to be presented, must be guarded against in the same way as has been hitherto done under the employment of nitric acid.

Since this communication was written, I have seen the albumen precipitant test-papers introduced by Dr. Oliver, of Harrogate. They certainly form a very neat and elegant adaptation. Whilst encountering the difficulties that presented themselves with the production in a satisfactory state of the ferrocyanic pellets, the idea crossed my mind of papers soaked separately in the two agents and dried, but I did not act upon it, as I thought

(a) Communicated to the Clinical Society, February 9, 1883.

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the presence of the paper in the test-tube would be undesirable, and that it would be best, if possible, to keep from any extraneous substance. In the pellets there is nothing besides the two agents actually constituting the test, and their nature is such as to be perfectly harmless in every way. Properly preserved in a bottle, I have no reason, from the opportunity I have yet had of judging, to think otherwise than that they will keep for an indefinite time. They are made by Mr. Cooper, of 58, Oxford-street, W.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

HOSPITAL FOR SICK CHILDREN.

CASE OF TYPHOID FEVER WITH PAROTID BUBO —RECOVERY.

(Under the care of Dr. GEE.)

[Notes by Dr. ANGEL MONEY, Medical Registrar.]

THE patient was a boy aged three years and a half, residing at 30, Mount Pleasant, Pentonville, N. The history showed that he had been ailing since November 5, 1882, with a cough; on November 9 he came as an out-patient, when it was noted that there was abortive labial herpes, with signs of pulmonary catarrh; on November 30 the temperature was 103°, and the patient was admitted into the hospital. The mother said that he had vomited now and then, had no appetite, drank much, bowels were open once a day, and there was insomnia. No cause could be given for the illness. Patient had had measles at the age of nine months, followed by whooping-cough; otherwise no illness.

Family History.—Ten children; two miscarriages in between the other children; patient the ninth child; seven living, three dead—one of croup, one of teething. One (the third pregnancy) was a premature birth at seven months, and died in thirty-six hours, but was in no immediate relation to the miscarriages. One boy and one girl had had abscess in neck—probably strumous. Mother thought patient also had had one. No rickets. Consumption on father's side: a brother and father, aged thirty-six and forty-six respectively, died of it. A sister, aged five, now in hospital with chronic bronchitis (? tubercular).

On admission there was observed to be vomiting nearly every day, with high fever—most 104·2°, least 102·2°; pulse 144-136; no rose spots. Spleen palpable; motions frequent (about four a day), all fluid and pale; some tympanites; some delirium at nights; tongue dry and glazed, with a slight fur; râles of coarse character throughout lungs. Systolic apex-murmur; heart's apex-beat about natural; no sign of hypertrophy. Knee phenomena present on both sides, and readily obtained. Urine acid; no albumen, no sugar.

December 5.—Rose spots on abdomen and thighs to-day, fairly numerous.

6th.—Temperature 100·8° this morning; pulse 124; still sick occasionally, but only after milk.

7th.—Temperature 103° this morning. Diarrhœa still; liquid, not large, stools—about six a day. Tympanites; rose spots; delirium still present, and spleen to be felt still. Tongue dry, not much fur; pulse 132; knee phenomena well marked; lips sore.

11th.—Temperature 100·8°; had not been below 100°. Swelling of right parotid gland, the socia parotidis included; evening temperature 99·4°; parotid of left side natural. (The boy in the bed opposite has genuine mumps to-day, both glands affected—this got well in a few days.)

12th.—Discharge of matter from right ear.

13th.—Double otorrhœa. Temperature 99°. Tongue cleaner, less dry; parotid swelling more marked, socia parotidis distinctly affected also.

14th.—Temperature 98·8° this morning; pulse 120; breathing 36. Still a little bronchitis.

18th.—Incision into parotid—half an ounce of thick pus let out. Temperature 101·4° last night, 99° this morning. Pulse 112.

21st.—Small sacral bedsore. Still fever—102·8° this night. Still purulent discharge from wound of parotid.

22nd.—Discharge is free from abscess. Temperature 101·6°, night; pulse 132.

23rd.—Still bronchitis. Still fever—102°. Blotchy mottling of skin of face and trunk, of indefinite characters. Tongue thickly coated, tends to be dry. Patient very pale. Still otorrhœa. Bowels acting more frequently again; the motions fluid and pea-soupy in colour and consistence.

24th.—Patient no better. Temperature 102°. Lungs: still only signs of bronchitis. Tongue dry and coated. Still diarrhœa.

25th.—Still the mottling of the skin (? measley). Temperature 102·2° last night, 103° this morning; pulse 140; breathing 80. Much small crepitation throughout both lungs, left the more; no dulness, no bronchial breathing.

26th.—Temperature 100° last night, 99·6° this morning. Tongue moist and cleaner. No rash. A little discharge from eyes yesterday and to-day. Pulse 108, good. Parotid swelling still poulticed, still swollen, still discharges.

28th.—Temperature 98·4° this morning; pulse 108. Another focus of suppuration below the lobule of right ear in the parotid gland. Bowels open four times; motions relaxed. Lungs: râle less.

29th.—Fresh incision into parotid made at ten o'clock last night. Pulse 108. No fever. Bowels open twice; motions pale, semi-solid. Tongue rather dry, and somewhat furred.

31st.—Good deal of discharge from parotid. No fever.

January 2.—Fever again. Temperature: morning 101·4°, evening 102·8°. Another abscess in the parotid opened. Otherwise doing well.

3rd.—Temperature 99·2°; tongue moist; pulse 108. Heart and lungs, *nil* definite. Patient much wasted. Less otorrhœa. General impression is favourable to patient.

7th.—Patient very hungry. Temperature still fluctuates; 101·8° to-night. Parotid swelling also fluctuates; now more, now less swollen. Sinuses (three) discharge a little. Lobule of ear is swollen and angry. Lungs, *nil* definite.

9th.—Fresh incision into socia parotidis, with escape of pus therefrom.

12th.—Patient is ravenous for food. Parotid swelling still marked; four incisions discharging very little. Lobule of ear and neighbourhood very œdematous. Strength and flesh are being rapidly gained. Another incision made to-day let out but little pus.

18th.—Patient doing well in every way. No otorrhœa. Sinuses in parotid are drying up and swelling is less.

25th.—Got up on couch for the first time.

30th.—Walks about ward. Parotid yields no discharge; there is very little swelling.

February 6.—Patient quite strong. Parotid gland nearly natural. Sent to St. Albans Convalescent Home.

Remarks (by Dr. Money).—Murchison wrote that he had met with six cases of parotid bubo in the course of enteric fever—I presume in the adult; five of the cases died. Louis, Chomel, and Gairdner each report one case. Chomel regarded these swellings as critical and auspicious, but Trousseau looked on them as unfavourable signs. Dr. Gee has never before met with a case of parotid bubo in a child. With regard to the pathology or really difficult part of the subject: Dr. Gee told me that he looked on the disease as of local origin, the typhoid state of the tongue and mouth inducing changes about the opening of the parotid duct, which led by continuity of texture to inflammation of the gland. I suggested, as favouring this view, the addition of the possible factor that the opening of the duct became blocked by the dried secretions, and so led to tension from the accumulated parotid secretion being unable to escape—just as is supposed to occur in cases of mammary abscess secondary to an eczematous condition of the nipple. Other notions tending to explain such occurrences may be sought in the known fact that suppuration may occur almost anywhere in connexion with, and usually towards the end of, or after, typhoid fever. Though the explanation offered here is by no means complete, it would serve no purpose to enter into the causes of suppuration generally. The fact that otorrhœa came on first in the right ear might be regarded as bearing out Dr. Gee's view; but, then, why did not double parotid bubo occur? This might be explained by appealing to the notion of accidentalism. At one time it was conceivable that we had to do with a case of mumps, for there was an example of this usually bilateral affection in the ward at the same time.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 17, 1883.

THE HUNTERIAN ORATION.

It cannot be gainsaid that annual, or even biennial, orations in praise of the life and deeds and teachings of any one man must almost inevitably become, as a rule, a rather wearisome duty, as the years roll on, and the list of those who have had to discharge the duty lengthens. Now and then a great orator will make the subject eloquent, and delight his audience by making the dry bones of old facts live, and breathe, and speak; a great philosopher or keen metaphysician will throw new lights on the old story of a life and draw from it new lessons; or a laborious searcher into the past may happily disinter new facts in the life-history of the subject of the oration, and so give his discourse a fresh interest. But, in the long run, any endowment for a frequently occurring oration cannot but prove a troublesome task unless the orators are allowed very considerable liberty in the manner of fulfilling the duty imposed upon them. And when Dr. Matthew Baillie, Sir Everard Home, Sir William Blizard, and Mr. Cline founded the Hunterian Oration, "to be read or delivered in the theatre" of the Royal College of Surgeons on John Hunter's birthday, they, apparently, recognised that to deliver an oration year after year on the merits of Hunter only might prove a somewhat burdensome task. They therefore devised that the Oration should be "expressive of the merits in comparative anatomy, physiology, and surgery, not only of the said Mr. Hunter, but also of all such persons as are or shall be from time to time deceased, whose labours have contributed to the improvement or extension of chirurgical science." This wise forethought, and the elasticity of the terms used, render the duty of giving the Hunterian Oration a comparatively easy one. Moreover, after the year 1849 the Council of the College obtained leave to make the Oration *biennial* instead of *annual*; and the phrase, "from time to time deceased," has been interpreted as applicable to such Fellows and Members of the College, and other distinguished men, as may have died in the interval between each Oration. And in these ways the burden has been much eased to the shoulders of the elected orators.

The President of the College, Mr. Spencer Wells, who delivered the Oration on Wednesday last, availed himself of the liberty of interpretation, of which we have spoken, with unusual largeness; but no one will quarrel with him on that account. It is well that, occasionally at any rate, mention should be made, however brief such notice must of necessity be, in the Hunterian Oration of as many as possible of the Fellows and Members of the College who, during the previous two years, have "ceased from their labours," after having in various ways and in various spheres of duty shown themselves worthy sons of their College, of their profession, and of their country: and Mr. Spencer Wells performed a graceful act in a graceful and appreciative way. In the course of his Oration Mr. Wells gave, from a letter written by Mr. Gunning on his retirement from the office of Master of the Corporation of Surgeons—as the head of the College was then styled—in 1790, a quotation that marks in the very strongest way the strides made by the College during the present century. Mr. Gunning found fault with the Corporation for their unnecessary expenditure in dinners—a vice the remainder, we may suppose, of the old habits of a City corporation or guild,—and for the imperfect way in which they kept their accounts—a fault certainly not only not at all confined to, but generally supposed to be especially rare in, the City; and the Master went on to say, "Your Theatre is without lectures; your Library-room, without books, is converted into an office; and your Committee-room has become an eating-parlour. . . . . I am sorry to observe that you have instituted lectures neither in surgery, nor indeed in anatomy of any degree of importance, nor have you held out any qualification or reward for rising merit." Now, Mr. Wells remarked, the Library of the College contains about 39,000 volumes, and every year becomes a more complete library of medicine and the auxiliary sciences. The Museum is the most complete of its kind in the world—and he might have added, its catalogue is the best of its kind,—and the offices of Assistant-Conservator are valued as rewards to rising merit; and the Hall and Theatre of the College is used not only for the lectures of such men as Flower, Parker, Power, and Eve, and of a succession of our leading practitioners, but also for the examinations of the young men who will be the surgeons of the future; and he expressed himself as being hopeful that, by a judicious outlay of part of the accumulated funds of the College—assisted, perhaps, by contributions and legacies—the Council may be able to supply "such a complete central pathological laboratory as may assist the men who are leading the advance of Experimental Physiology and Pathology." That would be a grand addition to the work already done by the College in fostering the education of the profession, and in promoting the advance of the art and science of Medicine. In the early parts of his Oration—we are only enabled to publish a portion of it this week—Mr. Wells many times alluded to John Hunter's writings, and his work in Anatomy, Physiology, and Pathology, in all departments indeed of surgical science and art; but in the latter part he dwelt more directly on some of his labours; and especially pointed to the fact, clear and plain enough to the unprejudiced mind, but not seldom persistently denied by "anti-vivisectors," that Hunter did learn, by means of experiments on living animals, the feasibility and safety of ligaturing a main artery in its course. John Hunter was, it will be remembered, for many years an army surgeon. He served as Staff-Surgeon in the expedition against Belleisle in 1760, and rose in rank till in 1791 he became Surgeon-General to the Army, a position corresponding with that of the Director-General of the Army

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Medical Department. Now, during those years he did much to improve military surgery, teaching especially a much simpler and better treatment of gunshot wounds. These historical facts led Mr. Wells to enlarge on the immense improvement that has taken place in military surgery in common with all surgical art and science since Hunter's time; and to speak of the organisation of the Army Medical Department. He is in favour of remodelling it on the plan of forming the Medical Officers and the Army Hospital Corps into one Royal Corps, like the other scientific corps, to be of course placed on a perfect equality with them, and to receive a fair share of honorary distinctions. "Under their own head," he says, "a united body—having entire control over and command of their own department, subject only to the general officers commanding—our army surgeons will cheerfully accept the responsibility of collecting, removing from the field of battle, and attending to the first wants of the wounded, and for their subsequent care and treatment, as well as for the equally important duties of sanitary officers in preventing disease and maintaining the physical condition of our Army." And Mr. Wells provides the new Royal Corps with a motto, "Faithful unto Death," an excellent and most appropriate motto unquestionably, for the Army Medical Officers have ever been that, and ever will be, so long as they wear the uniform of the Service, no matter whether they are members of a Royal Corps or of a Department.

A NEW FACT IN THE PATHOLOGY OF PARASITIC ORGANISMS.

THERE can be no doubt that the most pressing question of pathology at the present moment is the relation of parasites—in the widest meaning of the name—to disease. Whilst crowds of young and ambitious pathologists are vieing with each other in the discovery of organisms in the various specific diseases, the senior and more sober of us are patiently, but not less anxiously, looking for the determination of the causal link that will connect such organisms with pathological processes. In the case of the lowest parasitic organisms—bacilli and micrococci—it must be confessed that the prospect of success in this direction, however enticing it may be, is not very bright at present; and the various attempts that have been made from time to time, in tuberculosis particularly, to patch together a consistent doctrine from scraps of the old and the new pathology, have proved to be premature and disastrous. In these attempts there has probably been shown far too little disposition to take advantage of well-ascertained facts respecting the life-history and mode of pathological action of the larger, animal, parasites. Valuable analogies might be drawn between these and the lowest, vegetable, organisms. We now understand very fairly the ways in which several of the animal parasites produce disease. Some, like the echinococcus, do so by their simple presence in delicate and vital organs, such as the eye and the heart. Others rob the system of valuable nutriment—for example, the tænia. A third set of parasites lead to anæmia by causing constant hæmorrhages on a small scale, to wit, the tunnel-worm in the duodenum, and the bilharzia in the kidney. The trichina sets up general irritation by the emigration of its hordes from the intestines to the muscles. A fifth group cause local suppuration and ulceration, and prevent healing by keeping up constant foulness and discharge; the mycetoma, or fungus-foot of India, being the type of such parasites. Thus we approach the microscopic organisms of the inflammatory and septic processes; and respecting these we shall probably be not far from the truth if we conclude that the oxidation which is at the bottom of their life-processes of growth and multiplication, and the consequent development of heat within the human tissues, must be the cause of the pyrexia and visceral degenerations which accompany them, and by which they prove fatal. The mode of working of the specific organisms (if such there be) of the chronic constitutional diseases (tuberculosis, leprosy, syphilis, etc.) is, however, quite obscure; and it is in their instance that, as we have said, the analogy of the higher, animal, parasites promises now to supply a valuable link in tracing the relation of organisms to disease.

The filaria disease, which has attracted so much attention during the last few years, has hitherto remained mysterious in the respect which we are now discussing. There could be no reasonable doubt that the *Filaria sanguinis hominis* was associated with certain "lymph-diseases," such as chyluria, lymph-scrotum, and other forms of elephantiasis; but it was equally certain that in the majority of instances of filaria disease no lymph disease was to be found. In the words of Dr. Manson, "There is abundant evidence that *Filaria sanguinis hominis* does not always, or even generally, give rise to disease. As a rule, parasite and host live together for years in perfect harmony." As our readers know, from the numerous articles by Dr. Manson which we have republished from time to time on this subject during the last six years,(a) the *Filaria sanguinis hominis* which infests the blood is the embryo form of an enormously (250 times) larger worm, which inhabits the lymphatic vessels. Inasmuch as the mature female filaria is also a human tenant, it follows that in every instance of filaria in the blood there must be a parent filaria in some corner of the lymphatic system. But, as we have just said, evidence of the presence of the parent, in the shape of lymph disease, is the exception and not the rule; whence it follows that it is only in special conditions—in certain subjects, at particular times, or under otherwise peculiar circumstances—that the mature worm demonstrates her presence by giving rise to chyluria or elephantiasis. At this point, then, the inquiry begins:—What are the conditions that determine lymph disease in filaria disease? What is the link between the mature parasite and elephantiasis? How comes it that in but one subject out of many serious disease is the result of the presence of such a tenant?

The answer to this inquiry has now been given by Dr. Manson, to whose indefatigable labours we are already indebted for a great portion of our knowledge of the structure, life-history, and pathological relations of this remarkable parasite. We publish to-day on another page that part of Dr. Manson's last paper on filaria disease, in the *China Customs Gazette*, which refers to the special point under discussion. This extract ought to be read by all, and will be found to present an account of one of the most curious processes of disease in the whole range of pathology. The foundation of Dr. Manson's argument is the fact that the mother filaria—residing, let us say, in the lymphatics of the scrotum,—whilst naturally viviparous, occasionally aborts. This remarkable fact appears to have been sufficiently proved by direct observation of the most satisfactory kind. Now, as the embryo filaria born at full time is a long *filarial* or thread-like body, which can easily pass through the smallest vessels, whilst the premature embryo is contained in a chorional envelope of oval or rounded shape, which is much too large to traverse the neighbouring lymphatic glands into which the current at once sweeps it, the result is obvious. A mature brood pours through the lymphatics into the circulation: an imma-

(a) See vol. ii. for 1877, page 589; vol. i. for 1878, pages 220, 249, 304; vol. ii for 1878, page 731; vol. ii. for 1880, pages 404, 646; vol. i. for 1881, page 615.

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ture brood plugs the lymphatics all around the spot where the mother lies. The lymph-current is completely interrupted; distension occurs behind the seat of arrested flow; and lymph-scrotum is produced. In a similar manner elephantiasis of a limb, or chyluria, may be developed. Thus, in a way quite novel to us, the connexion between parasitic disease and a definite anatomical change of a morbid kind has been successfully traced.

The importance of Dr. Manson's observations is not, however, to be measured by the novelty of the facts from the point of view of the zoologist, or even of the morbid anatomist. It is of the greatest interest to us that filaria disease itself, although it has not yet made its appearance to any extent in Europe, should be thoroughly understood in all its bearings. But the student of general pathology will see in Dr. Manson's discovery an importance far transcending this. It would appear as if he had determined an entirely new manner of working of disease. As far as we know, we have never before been able to prove—even if we have ever before suspected—that certain diseases in man may be due, not to the presence of parasites within him, but to *processes of disease or disorder in parasites within him*. We have generally believed that the more healthy and vigorous the guest, the more injurious is his influence on the unwilling host. No doubt this conclusion was right as far as it went; and the result of such healthy action on the part of parasites was the various kinds of injury which, as we have already seen, they inflict upon the organism. But it appears that we must now widen our views of the method of working of parasitic disease; and none of us can say where these extended views are to be limited. When we consider the extraordinary variety of animal and vegetable organisms that infest the body, we can readily believe that the filaria does not stand alone in its remarkable relations to human pathology. Especially seductive is the suggestion that in the discovery that at least *one disease in man is due to the disease of a parasite*, may be found the explanation of the occasional association of specific constitutional diseases with organisms which under ordinary conditions must come in contact with the tissues, probably even flourish in the tissues, without obvious bad effect. The diseases of vegetable organisms are, doubtless, as real as the diseases of the plants which we see around us; and no one can tell how far such diseases may not have an influence of the gravest kind upon the health of mankind. At any rate, the doctrine of *the disease of a disease* is a new feature in pathology, with which we must in future reckon; and which, by the almost infinite extent of its bearings, has opened up an enormous field for the pursuit of investigation, and, we trust, for the treatment of disease.

THE WEEK.

TOPICS OF THE DAY.

Recently, at the Clerkenwell Police-court, an application was made by a barrister, on behalf of the London Society for the Abolition of Compulsory Vaccination, for a warrant or summons against the resident medical officer of St. Pancras Workhouse. The charge it was desired to make was one of manslaughter, based upon the verdict of a coroner's jury. The facts stated were, that a child under three weeks old was vaccinated in the workhouse, became seriously ill soon after, and died. At the inquest it was alleged that vaccination had set up an ulceration of the child's arm, and that death was due to that cause only. It will be remembered that we gave the full particulars of the inquiry referred to a few weeks ago. The magistrate said that, as the medical gentleman in question could easily be found, a warrant was needless; again, it was not usual to grant a summons for manslaughter, and he considered it would have been far better to have laid the facts before the Public Prosecutor. The applicant said the Society for which he appeared believed no good would result from such a course, and legally there was nothing to prevent them instituting proceedings. They based their application on the evidence of other medical men, given at the inquest, that it was wrong to have vaccinated a child of such tender age, more particularly as it was not a full-grown child, and was small and weak. The child was a girl, the offspring of poor people, and the present action of the Society was undertaken in the interest of the poor. Eventually the magistrate consented to allow a summons to issue on the facts stated, charging the medical gentleman referred to "for that he did feloniously kill and slay a certain female child, Lilian Ada Williams." Unless the ultimate decision in this case is a decisive one, rather an extensive field of persecution for parochial medical officers will have been opened up by the Society in question.

In his capacities of medical officer of health and public analyst, Dr. Sedgwick Saunders has found it necessary to bring to the notice of the City Commission of Sewers the repeated and urgent complaints which are constantly reaching him of the inadequacy of the water service on high levels in the City. The time allowed by the servants of the New River Company was, he said, far too short to fill the cisterns placed in the upper storeys of large structures, subdivided as they were into several independent holdings for economic reasons, and much inconvenience was experienced by the occupants through the deficient supply. Cases occasionally arose in which the owners objected to lay on any water service at all, on the ground that the supply of water in cisterns on the top floors was so scanty that the occupants were not fairly dealt with by the New River Company, who contracted to that end with the public, and charged heavily for the accommodation. He submitted the matter to the judgment of the Commission in the hope that they would see fit to make an urgent remonstrance, or take some stringent measures to compel the Company to show more consideration for the wants of the public. As regards quality, Dr. Saunders shows, in his annual report of analyses made during the past year, that the water-supply had, in the main, sustained its excellent character, although, during the autumn quarter especially, the organic matter increased to an appreciable, but not dangerous, extent; and its general standard of purity was, during such excess, correspondingly diminished. The following remarks of Dr. Saunders are worthy of consideration. It was not deemed expedient, he says, to institute any prosecutions during 1882, partly on account of the practical difficulty experienced by all public analysts in obtaining convictions, and also on account of the great leniency shown by the magistrates in awarding punishment to proved offenders. He has again, in common with many of his colleagues, publicly to express his regret that the officially appointed referees and censors in the Government Department of Chemistry at Somerset House, to whom the judges are bound to submit disputed cases, have not seen fit to publish standards of purity, both for the guidance of the analyst, and to enable the magistrate to arrive at a just conclusion as to the extent any admixture of foreign substances in food or drugs should be attributed to accidental and unavoidable circumstances rather than to fraudulent intention.

A disinfecting apparatus, the agent being heat, both moist and dry, patented about a twelvemonth ago by Schimmel and Co., of Chemnitz, has begun to be used in several hospitals in Berlin, Stettin, and other parts of Germany. It consists of a large case with double walls of

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sheet metal, and a bad heat-conductor between; this communicates with a chimney at the top behind, and in front has two doors. The upper doorway admits a frame-bearing waggon on rails, and the lower another waggon, also on rails, with the heating system. The former waggon has a permeable bottom and crossbars in the frame, from which are hung in linen bags the clothes to be disinfected. The lower waggon carries a thick tube which returns (horizontally) on itself, and bears a series of projecting ribs. Above, and parallel with it, is another tube of copper, with numerous small holes to let out steam. The laden clothes-waggon having been pushed into the upper part, and the door closed, steam is admitted into the rib-tube and non-perforated system; and this dry-heating is continued until a thermometer, readable outside, marks 110° C. Then the admission of steam for dry heat is lessened, and steam is admitted into the perforated tube. The steam is thus allowed to act directly for about twenty to thirty minutes, after which the dry-heating by the other tube system is continued about a quarter of an hour longer. The whole process of disinfection lasts from an hour and a quarter to an hour and a half. The upper waggon may then be taken out and laden afresh.

A crowded vestry meeting of the inhabitants of the parish of St. Botolph Without, Bishopsgate, was recently held under the presidency of the rector of the parish, for the purpose of considering the desirability of providing artisans' dwellings in the parish. Mr. Teetjens, in the course of the proceedings, made special reference to the fatal fire in Windsor-street, in dwellings which he described as totally unfit for the habitation of human beings; a whole square and several streets of similarly constructed buildings were to be found there, and the sooner they were removed the better. He suggested that a portion of the funds arising from the parish trusts should be allocated for the purpose of providing suitable dwellings for the poor in the neighbourhood, and a resolution to this effect was adopted. Mr. Coleman, one of the trustees of the parish charity funds, stated that a proposition was now under the consideration of the trustees for the erection of model dwellings in the parish.

Since our last notice of Lord Morley's Committee, a few meetings have been held at the War Office, and on one occasion the Committee visited Aldershot, when several officers commanding regiments and others quartered there attended to give evidence. Until the report is made public it would be premature to offer any opinion, but we may be permitted to express a regret that so many different subjects were handed over to this Committee to deal with, necessitating such a protracted inquiry. A distinct charge was made against the administration of the Army Medical Department in the late Egyptian campaign, and against the conduct of its officers, and it is to be regretted that so unnecessarily long an interval should elapse between the accusations made and the publication of the results of the Committee's inquiry thereon.

The *Times* has lately seen fit to publish various items of pathological or therapeutical information that are selected for this honour apparently on account of possessing some sensational element; and the latest instance of this has been a paragraph on the probability of that domestic and useful, but decidedly unpleasant insect, the cockroach, becoming an active agent in medicine. Yet it is used almost universally in Russia as a diuretic in certain diseases, and it is also frequently used in European medical practice as a cure for Bright's disease. The Professor of Materia Medica in Jefferson's College recently stated that cockroaches are not entirely unknown in medical practice in Philadelphia, though physicians do not care to have it known that they prescribe so unpopular an insect, and few druggists will acknowledge that they keep it in stock. The Professor says that cockroach tea may be used with good effect in certain cases; its medicinal properties resemble those of cantharides, and when prescribed it is in the shape of a pill, made with the powder of the dried insect. The cockroach is no more offensive than the cantharides, both being of the same class of insect, and the smell is not so objectionable as that of the Spanish fly. A reporter of the *Philadelphia Record* has visited the leading drug stores of that city, inquiring whether powdered cockroaches were kept in stock, when he was informed that they did not sell them, but that a prescription containing the active principle could easily be prepared by drying half a dozen of the insects, and powdering them so as to make a pill; or a solution could be prepared by soaking fat female cockroaches in whisky. Several American physicians affirm that it is only a matter of time when cockroaches, or the active principle, will be in as common use in that country as they are in Russia or Central Europe.

The New River Water Company recently applied for an injunction to restrain the Ware Union Rural Sanitary Authority from proceeding with excavations in connexion with their sewerage works, which, it was alleged, were being carried on in such a way as to cause a serious risk of letting out the water of the New River. An injunction was eventually granted, restraining the defendants from proceeding with the works except in the due exercise of the powers conferred upon them by the Public Health Act.

It would seem as though the new President of the Local Government Board intended to make himself personally acquainted with his duties. Very recently, accompanied by Mr. Owen, permanent Secretary to the Board, and Dr. Brydges, one of the medical inspectors, he paid a visit to the infirmary of St. Giles, Camberwell. From Camberwell Sir Charles Dilke proceeded to the Newington Infirmary, which is one of the largest establishments for the sick poor in the metropolis.

THE HUNTERIAN BANQUET.

On Wednesday evening the President and Vice-Presidents of the Royal College of Surgeons of England entertained at dinner in the Library, as usual after the Hunterian Oration, a large and distinguished company. Among others, there were present the American Minister, Mr. J. Russell Lowell; the Dean of Westminster, Baron Pollock and Mr. Justice Hawkins, Sir Trevor Lawrence, M.P., Mr. G. A. Sala, etc.

THE TREATMENT OF INNOMINATE ANEURISM.

On Tuesday last, 13th inst., at the meeting of the Royal Medical and Chirurgical Society, there was a long and important discussion on the treatment of aneurism of the innominate artery, arising out of the reading of three papers by Mr. Heath, Mr. Marsh, and Mr. Morris respectively. The papers by the two last-named authors especially opened the subject of the value, dangers, and results of treatment of innominate aneurism by the distal ligature of the carotid and subclavian arteries simultaneously—a mode of treatment which has been strongly recommended in some quarters. The general sense of the meeting seemed adverse to the proceeding, and this was founded on the results obtained in the hitherto recorded cases. In only one (Mr. Heath's) does life seem to have been much prolonged, although it was admitted by several speakers that a great amount of discomfort and pain is saved by this plan of treatment. The *rationale* of the double ligature is not very clear at present, while, as an immediate consequence, it is quite certain that the additional blood-pressure below the seat of the ligature

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must greatly tax the powers of a possibly diseased vessel. Thus, in one of the cases related (Mr. Marsh's), death occurred fifty-one days after operation from bursting of the sac, due to dilatation of the aorta in a new direction. Mr. Holmes thought it would be well to try the effects of ligature of one trunk at a time, and of the most accessible—viz., the carotid: the subclavian could be ligatured at a future time if circumstances called for it. In Mr. Heath's case the common carotid was tied for aneurism of the external carotid, and a cure resulted without ligature of any of the branches of the external carotid. The woman unfortunately died of cerebral disease on the opposite side, due to embolism. There was extensive disease of the aortic valves. The full report will appear next week.

THE PARTIALLY PECULIAR PEOPLE.

THE fanatical sect amongst ourselves that trusts entirely to prayer and anointing with oil for the cure of all manner of diseases, is quite impartial in the application of its tenets; but it would seem that there are peculiar people in other lands who do not possess the courage of their convictions in that full degree which is necessary to insure their universal observation in practice. Faith and inunction, they say, is good enough for women and children, but in the case of the lords of creation a little medical science is desirable. This would appear to be the attitude taken up by that blighted patriot Arabi, who is now kicking his heels in Ceylon. He informed the reporter of the *Ceylon Times*, who had an interview with him recently, that for himself, in the event of illness, he was quite prepared to be attended by European medical advisers. "But, as for the women and children," he added, "well—that was quite another thing. They never took medicine. God was good, and they would, when ailing, get well by His mercy." Arabi's reasoning inevitably conducts to the conclusion, either that he is himself outside the range of God's mercy, or that that mercy, while sufficient for women and children, is inadequate in the case of a male adult, and requires to be supplemented occasionally by a little blue pill and black draught, or other human inventions.

THE MORBID ANATOMY OF EROSIONS OF THE CERVIX UTERI.

A RECENT number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains a criticism by Dr. J. Veit (who, as our readers will be aware, has, with Dr. Ruge, minutely investigated the subject) of the views of Fischel upon the origin of cervical erosions. Fischel (of whose paper on the subject we gave an abstract in our number for April 9, 1881) stated that in a certain percentage of women the mucous membrane, for a little distance around the external os, had the same structure as the cervical mucous membrane, but was covered by pavement epithelium; and that when any cause led to the shedding of this pavement epithelium, the eroded appearance resulted from the exposure of the cervical structure. We cannot here follow Dr. Veit in his minute criticism of Fischel's work; but, as we mentioned the views of the latter author, we may also give the conclusion to which Veit comes after studying the researches of Fischel. He believes that the cervical mucous membrane may become epidermis-like in structure by a direct change of cylinder into pavement epithelium. He holds that there is no shedding of a superficial layer of pavement epithelium, but that the latter structure becomes, over the eroded surface, directly changed into cylinder epithelium; the tissue infiltrated with inflammatory products, and beset with glands of new formation. The production of an erosion is a process having a certain analogy to inflammation, and does not depend, as Fischel would have it, on ectropion of the cervical mucous membrane.

MUNIFICENT BEQUEST TO METROPOLITAN HOSPITALS.

THE late Mr. George Tierney, formerly Commissioner of Greenwich Hospital, has bequeathed the munificent sum of £5000, free of legacy-duty, to each of the following medical charities in the metropolis, namely, Charing-cross Hospital, the Middlesex Hospital, St. George's Hospital, the Seamen's Hospital, University College Hospital, the Westminster Hospital, and the Brompton Hospital for Consumption. Mr. Tierney further expresses his desire that his good friend Dr. Quain shall receive and enjoy from the various charities any rights or privileges incident to the bequests.

THE LONDON FEVER HOSPITAL.

WE have always much pleasure in bringing to public notice the doings of that useful and well-deserving institution, the London Fever Hospital. The eighty-first annual meeting of the governors of the Hospital was recently held at the Freemasons' Tavern; Dr. Buchanan, of the Local Government Board, and Consulting Physician to the Hospital, presiding, in the absence of the Earl of Devon. From the reports of the Physicians, Dr. Cayley and Dr. Mahomed, it was shown that during the past year 1001 patients had been admitted, an increase on the previous year of 86. Of the whole number 948 were cases of contagious fever, and the others were cases of acute disease of a febrile character. There remained from the previous year 97 cases, making a total of 1098 under treatment during the period. Of this number 63 died, and 99 remained under treatment, after the discharge of 936. The rate of mortality was 6·3 per cent., which was below that of the previous year. The sum of £16,404 had been received, and the expenditure reached £15,515, leaving a balance of £775. Thanks were voted to the medical officers, and specially to Dr. Cayley for his excellent report; in commenting upon which the Chairman remarked that a perusal of it would show that patients who were treated in the Fever Hospital had a better chance of recovery than those who underwent ordinary home treatment. Dr. Buchanan utilised the opportunity to point out that experience had shown that the thousand fever patients treated in the Hospital had been no source of danger to the surrounding population; and for the public protection he urged that every endeavour should be made to increase the number of annual subscribers, since it could hardly be expected that the exceptional income of the past year would be entirely maintained. Dr. Thomas Barlow, of University College Hospital, and Dr. George Gulliver, of St. Thomas's Hospital, were elected Assistant-Physicians to the Hospital.

THE DUBLIN BRANCH OF THE BRITISH MEDICAL ASSOCIATION IN REVOLT.

ON the 13th inst. the adjourned meeting of the Dublin Branch of the British Medical Association was held at the King and Queen's College of Physicians, when the adjourned debate on Medical Reform, which was commenced at the annual meeting of the branch on January 25, and continued on Tuesday, February 6, was again resumed, and was concluded. The discussion, which was on all the three days of debate of a very animated character, arose on a portion of the report of the Council of the Branch, stating that the Council "could not advise the branch to accede to the request of the Medical Reform Committee of the parent Association to memorialise the Government to introduce a Medical Acts Amendment Bill, based on the report of the Commissioners appointed to inquire into the granting of medical degrees, etc." On the first day the adoption of the report was moved by the Rev. Dr. Haughton, and to that motion the following amendment was moved by Dr. Atthill:—"That the report be received and adopted

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excepting the seventh paragraph (that relating to the subject in question), which, together with an annexed report of the Council upon the report of the Medical Acts Commission, be referred to the incoming Council for reconsideration, with a recommendation that the policy of the parent Association, in reference to medical reform, shall, in principle, be supported by the Branch." At the meeting of the 13th inst., as at the previous meeting, there was a large attendance of members. The chair was taken by the President of the Branch, Dr. Banks. The debate was resumed by Dr. William Stokes, who was followed by Dr. Thornley Stoker, Dr. William Thomson, Dr. Edward Hamilton, Dr. Barton (President of the Royal College of Surgeons in Ireland), Dr. Finny, Dr. Corley, Dr. J. W. Moore, Dr. Ashe, and the Rev. Dr. Haughton, in reply. The Chairman then put Dr. Atthill's amendment, and declared it to be carried. On the amendment being put as an original resolution, Dr. W. Thomson moved, by way of amendment—"That this Branch declares its approval of a well-considered scheme of conjoint examination in each division of the kingdom and of the reconstruction of the Medical Council, including direct representation of the profession." The President of the College of Surgeons seconded the amendment, which was put and negatived. The resolution of Dr. Atthill was then put and carried. Dr. Kidd said, as he protested against the line of policy endorsed by the resolution just passed, there was no course open to him but to resign his seat on the Council of the Branch. The Rev. Dr. Haughton, Dr. Stokes, Dr. Finny, and Mr. Swanzy also resigned their seats on the Council. The proceedings then terminated.

ANEURISMS ABOUT THE GALL-BLADDER.

INSTANCES of death due to hæmorrhage from aneurisms on the smaller branches of the cœliac axis are certainly not very common; but Professor Halla recently showed an example of such a condition before the German Medical Society in Prague (*Wiener Med. Wochenschrift*, No. 5). The patien from whom the specimen was taken had suffered during life from melæna. In the œsophagus, stomach, and intestines, blood was found, which came from the duodenum, in which, at a distance of two fingers' breadth from the pylorus, an ulcer leading into the gall-bladder was to be seen blocked up with a blood-clot. The gall-bladder contained about twelve stones, and in its wall there was a small aneurism of the right hepatic artery, which had burst, and apparently led to death. A second small aneurism was also found projecting into the gall-bladder, and depending from a branch of the gastro-duodenal artery, The explanation given by Halla was that gall-stones had set up ulceration and arteritis, and so led to the formation of aneurisms, analogous to those occurring in the walls of pulmonary cavities. The binding together of the gall-bladder and the duodenum was regarded in a similar light.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.

THE annual meeting of the governors of this Hospital took place on February 12 at the London offices; Frederick Charles Colman, Esq., Treasurer, presiding. The report of the Board of Management stated that the receipts for the past year had amounted to £6047 in round numbers, and the expenditure to £7749, necessitating the sale of the invested property of the institution, consisting of £1158 Consols. Notice had been received that the late Mr. Jones had bequeathed the residue of his estate to the Hospital. The estate is being administered under the direction of the Chancery Division of the High Court of Justice, and the amount to be eventually received is expected to yield an income of about £2000 a year. The Board have resolved not to spend any portion of this legacy in building, as it will be needed for partly maintaining the present and proposed enlarged Hospital. The Hospital being unequal to the demands for accommodation, the Board are desirous of receiving offers from the benevolent to build twelve additional houses, as they possess abundant land for the purpose. These houses will, like the others, if desired, bear the names of the benevolent donors, or of any relation or friend "in memoriam." The funds for building and furnishing one of these houses has already been given by an anonymous friend. It was reported that H.R.H. the Duke of Albany, President of the Hospital, had consented to take the chair at a public dinner to be held on April 18 at Willis's Rooms.

THE PARIS WEEKLY RETURN.

THE number of deaths for the fifth week of 1883, terminating February 1, was 1149 (662 males and 487 females), and among these there were from typhoid fever 45, smallpox 15, measles 17, scarlatina 3, pertussis 8, diphtheria and croup 38, erysipelas 3, and puerperal infections none. There were also 52 deaths from acute and tubercular meningitis 239 from phthisis, 33 from acute bronchitis, from pneumonia 95, from infantile athrepsia 75 (18 of the infants having been wholly or partially suckled), and 24 violent deaths (21 males and 3 females). The number of deaths registered exceeds the mean of the preceding four weeks, which is 1117. Among epidemic diseases there has been an increase in deaths from measles from 11 to 17, but a marked decrease has taken place in those from typhoid fever (from 66 to 44), so that the normal mean of deaths from this disease in non-epidemic periods is not exceeded. The hospitals, too, have only recorded 67 cases in place of 146 during the preceding week. Between August 4, 1882, and January 31, 1883, the victims of the disease in Paris have amounted to 2437. The births for the week amounted to 1253 (the mean of the preceding four weeks having been 1232), viz., 675 males (484 legitimate and 191 illegitimate) and 578 females (425 legitimate and 153 illegitimate): 115 infants were born dead or died within twenty-four hours, viz., 55 males (36 legitimate and 19 illegitimate) and 60 females (41 legitimate and 19 illegitimate).

THE NAPPER TESTIMONIAL.

A MEETING of the subscribers to the above was held on Saturday last at the rooms of the Association for the Promotion of Social Science, to witness the presentation of the Napper Testimonial by Mr. Erichsen, who also acted as chairman on the occasion. Amongst those present were Mr. Hallowes, of Redhill, chairman of the provisional committee; Mr. Malcolm Morris, treasurer; Mr. Henry C. Burdett and Dr. Stowers, hon. secretaries to the fund; and members of the profession from St. Mary Cray, Redhill, Croydon, Newick, and other places. The testimonial consisted of a handsome silver salver, in an oak case, bearing the following inscription: "Presented to Albert Napper, Esq., M.R.C.S. Eng., of Cranleigh, Surrey, by some of his professional brethren, and friends of the cottage hospital movement, in recognition of the services he has rendered to the profession and the public as the founder of cottage hospitals—January, 1883"; a parchment scroll containing the names of subscribers; and a sum of money. Mr. Erichsen, in making the presentation, dwelt upon the great and lasting services which had been rendered by Mr. Napper both to the suffering poor and to their employers generally, as well as to the profession, more particularly its provincial members. Mr. Napper, when expressing his sincere thanks for the public recognition, and his gratitude for the testimonial, said he had no desire to take credit for the conception of the first idea of cottage hospitals. He was quite

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aware that the writings of Dr. Thompson, of Burton-on-Trent, had forestalled him. Mr. Napper stated, *inter alia*, that for upwards of two hundred years his family had always had its representative in the profession.

THE GLASGOW ASSOCIATION FOR THE RELIEF OF INCURABLES.

THE annual meeting of the Association for the Relief of Incurables for Glasgow and the West of Scotland was held on the 7th inst. The reports, which were adopted, stated that, in order as far as possible to meet the necessities of outdoor patients, a large number had been added to the roll of pensioners. At Broomhill Home vacancies were immediately filled. At the close of 1881 the number of patients in the Home was 58, and 13 were admitted during the past year, making a total of 71. Of these 7 died, 2 left by desire, 1 was placed on the outdoor fund, 2 were removed, reducing the number to 59. There were 132 on the outdoor pensionlist in 1881, and 47 added to the list during the year, making a total of 177. Of these 14 died, 1 was sent to Broomhill Home, 1 to the Home for Incurables at Perth, 1 to the Asylum for Indigent Old Men, 1 to the Poorhouse, and 8 were struck off the roll, leaving 151. It is intended to add another wing to the present buildings at Broomhill, and for this purpose a bazaar, held in March last, realised £5286 11s. 3d., and, with subscriptions and donations subsequently, has been increased to £11,628 2s. 4d. When this increased accommodation has been completed, cases of cancer and epilepsy will be admitted. The income for the year amounted to £3547, being £32 less than the previous year. The expenditure for the year amounted to £3738, exceeding the income by rather less than £200.

THE LIVERPOOL HOSPITAL FOR WOMEN.

THE medical staff of the Liverpool Hospital for Women was formed on the 12th inst., and is composed of three honorary medical officers (Drs. Burton, Imlach, and Lupton) and three honorary assistant medical officers (Drs. Eddies, Davies, and Steel). The Committee are negotiating for the purchase of the old Southern Hospital as the most suitable building procurable. The institution is to have a free department and a paying department, and the free department is to be strictly limited to those who are unable to pay. The funds in hand amount to £3750. About £10,000 is, however, wanted to start on a secure basis.

SYPHILITIC LESIONS OF THE INTESTINES.

AT the meeting of the Medical Society of Vienna on January 19, Professor Kundrat related the results of investigations made by Mrazek and himself on the alimentary tract of individuals affected with syphilis. It has been said that syphilitic disease of the intestines is very rare in the adult, but more frequent in the hereditary form of the affection. The proportion of five in forty, which was the average ascertained by Birch-Hirschfeld, is regarded by Kundrat as too high. When still-born children, already in a state of decomposition, were taken into account, Kundrat found only nine cases of intestinal disease out of a total of 200 specimens of syphilitic children. The disease of the alimentary tract was never found alone. There were always morbid changes in other organs. The small bowel was affected eight times, the large bowel twice. Generally the whole of the small intestine was diseased, though the stress of the mischief fell on the jejunum. Two types of disease were recognised, one more or less limited to the lymphoid structures, the other irregularly disseminated along the intestines. In addition to signs of catarrhal inflammation, there was hyperplasia leading to the formation of nodules, some as large as a hempseed. The microscopical characters were like those found in other early syphilitic growths. It was noted also that the contents of the bowels were thickened, the meconium being tenacious and sticking to the wall of the intestine. The peritoneum showed alterations in the form of inflammatory products of various sorts and a small-celled infiltration around the vessels. In two instances there were perforations of the gut and purulent peritonitis. It would therefore seem that such perforations can occur during intra-uterine life.

DIABETIC COMA.

THE ingenious and by no means unattractive theory put forward by the late Professor Sanders and Dr. Hamilton some three years ago, that coma in diabetes was due to the presence of fat circulating in the blood, was well calculated to call forth further observation, and stimulate physicians to study anew the phenomena in question. Since the appearance of their paper several cases have been published, some confirmatory of the new theory, others in refutation of it. Amongst the latter we may mention a case published by von Jacksch, and quite recently one by Drs. Foster and Saundby in the *Birmingham Medical Review* for January; whilst cases in which the presence of fat in the blood was recognised, either during life or on the post-mortem table, have been recorded by Starr, by Hertz, and by Professor Fraser. The lipæmic theory, if we may so call it, is practically this. The fat tends to adhere to the sides of the bloodvessels, causing gradually an obstruction to the flow of blood, resulting eventually in the formation of embola and thrombi, with consequent extravasations of blood. These changes taking place in the lung, give rise to dyspnœa and insufficient oxygenation of the blood, whence carbonic acid poisoning and coma. This explanation is, as we have already said, very taking, and in a case where the plugging of the vessels had been demonstrated on the post-mortem table, it would be difficult to deny that a rational and satisfactory explanation of the symptoms had been given. The upholders of this theory do not deny the presence of acetone or an allied substance in the system in these cases; but it is for them insufficient to explain the phenomena of diabetic coma. The opponents of this theory consider that the symptoms are due to acetonæmia, *i.e.*, to the toxic effects on the medulla oblongata of acetone in the circulation. We shall not stop to discuss now whether the substance really be acetone, or whether it is free diacetic acid or ethyl-diacetic ether. The settlement of this point does not belong to our present purpose. The case which Drs. Foster and Saundby have published in support of this latter theory is that of a boy aged seventeen, who came under observation suffering from diabetes of a very acute form. Within a few hours of his admission to the hospital, symptoms referable to the nervous system made their appearance, and about eight hours later he died. The blood was examined a few hours after death and in the post-mortem room, and no fat globules could be detected on either occasion. No fat embolisms were found in any of the viscera, and it was especially noticed during life that though there was marked dyspnœa, there was no cyanosis. It is evident, therefore, that in this case capillary embolisms in the lung had no share in the production of the symptoms. The blood of this patient was examined some days after death, and gave no acetone reactions, but this part of the investigation was probably worthless owing to the lapse of time that had taken place. Whilst attributing the fatal result in this case to acetonæmia, the authors lay a good deal of stress—almost too much, we think—on the constipation from which the boy undoubtedly suffered, and speak of prescribing croton oil in a similar case in the future. This seems to us rather a heroic measure. One of the most

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interesting features of their case was the warning they got of impending danger, in the fact that the urine gave a deep red colour with perchloride of iron. The exact cause of this is not known; it is due to the presence of acetone or some allied substance in the urine, but it may be interpreted to mean that toxæmic symptoms are very likely to make their appearance. It must not be forgotten, however, that this condition of the urine may be found in diabetes without being followed by any serious symptoms, and that it has been observed apart from diabetes, notably in a case recorded by Von Jacksch, where a boy recovered from an illness in which convulsions, coma, and Cheyne-Stokes' respiration were the chief symptoms, the urine containing neither albumen nor sugar, but giving a deep red colour with perchloride of iron, and his breath smelling of ether. After his recovery the urine no longer gave this reaction. In conclusion, we would say that this case affords some confirmation of an idea that was forced upon our minds some years ago, by our observing how very apt young people with diabetes were to die, almost straight off, on being admitted into a hospital. The idea was, that for some reason it was dangerous to place such persons on a purely diabetic diet suddenly. That reason has recently been given by Jaenicke, who attributed the presence of acetone in the blood to imperfect digestion of the animal matter so commonly given in diabetes, and declared that in all cases in which an animal diet was given, acetone could be detected in the urine within forty-eight hours by means of the perchloride of iron test. Whether there is anything in this theory or not we cannot at present say, but the suggestion implied by it seems worth following up. It is evident that there is a good deal yet to be made out about diabetic coma.

INOCULATION OF SYPHILIS BY A MIDWIFE.

The trial of Mrs. Martha Schofield, of Attercliffe, near Sheffield, on a charge of "having, on various days in August, September, and October of last year, inflicted grievous bodily harm upon a number of persons," was proceeded with before Mr. Justice Day, and concluded, on Monday, February 12, at the Leeds Assizes. The woman was well known in her own neighbourhood, having practised as a midwife for many years. Some eighteen months ago (the prosecution were unable to fix the exact date), in the discharge of her duties, she contracted venereal sores on the forefinger and the thumb of her right hand. The sores were so definite in character that no doubt could be entertained of their real nature; but the sore on the forefinger was the one almost solely referred to, so that on the thumb need not be again mentioned. Dr. Hime, as well as other medical men, examined the finger, and told the woman the nature of the sore, as well as the danger she ran of infecting any women whom she might attend. Mr. Booth likewise informed her of the serious nature of the affection, and told her that she would have to put her business entirely on one side for awhile. Other surgeons confirmed the diagnosis, and emphasised the caution given to her. It appeared that at least three women, were infected as well as an infant; and that two husbands subsequently contracted the disease from their wives. There was no questioning these facts; and it was in evidence that the woman had given, to persons who had noticed that something was the matter with her finger, four different accounts of it. In defence, six married women, who were attended in their confinements by this midwife in July, August, September, and November, were called, and testified that no ill effects of any kind had followed her attendance. It was further stated that the midwife wore a leather finger-stall, or some other covering; but it did not require much argument to show that not only was this no protection against the disease, but that it was actually a source of further danger, as it "was in a dirty state, and had evidently been in use for a long time." The midwife's counsel also raised some legal points. His Lordship, however, emphatically overruled them. After a brief but careful summing-up, the jury retired, and in somewhat over an hour returned with a verdict of guilty on all the counts, but recommending the prisoner to mercy on account of her previous good character and her old age, adding "and we think she has displayed a great amount of ignorance in the matter." The prisoner was ordered to be brought up for sentence at some other period of the assize. The case is one of great importance, especially to poor women, who, for the most part, have to content themselves with the aid of a midwife. Doubtless she is competent in ordinary cases to see them well through their troubles, though there are many occasions when skilled aid would save them much suffering. If to these dangers, that of being infected with syphilis is to be added, their lot is hard indeed. In the present case the midwife had been warned not by one medical man, but by several; and, apparently, independently one of the other. There can, therefore, be but little doubt that she must have been well aware of the nature of the risk to which her patients were being subjected—a risk that was all the more dangerous from the circumstances under which it was presented. There can be no question as to the justness of the verdict, and though some pity may be felt for the woman on account of her good character and her old age, it must be acknowledged that she deserves punishment.

We are requested to announce that the Committee of the Army Medical Department "Memorial to the Officers who fell in Afghanistan and South Africa" have decided that the memorial shall take the form of a mural tablet sculptured in white marble, and placed in the Royal Victoria Hospital, Netley. The subject of the tablet, which will represent medical officers and men of the Army Hospital Corps attending wounded on the field, has been designed and will be executed by Count Gleichen.

We understand that the Business Committee of the Edinburgh University Council, acting under a remit from the Council, have forwarded a communication to the Prime Minister, Lord Rosebery, and the Lord Advocate, urging the early introduction of the promised Bill appointing a Commission. Similar steps are being taken by St. Andrews; and at the recent Educational Conference in Aberdeen, a unanimous resolution in support of the proposed Executive Commission was forwarded to the proper authorities.

The Senatus Academicus of St. Andrews University has conferred the honorary degree of Doctor of Laws upon John Cleland, M.D., F.R.S., Professor of Anatomy in the University of Glasgow.

Glass Coffins.—In order to prevent the diffusion of the products of decomposition of human bodies in the air and water, Dr. A. Meyer proposes to substitute glass coffins for those made of wood. They will be opaque, very thick, and formed only of two parts hermetically closed by a silicated mastic as indestructible as the glass itself. By suitable pressure an anti-putrescent gaseous atmosphere (carbonic acid, for example) may be introduced into the coffin, and preserve the corpse from putrefaction during an indefinite period of time. Dr. Meyer adds that these coffins can be readily supplied by the trade at prices which will more and more approximate to those paid for wooden coffins.—*Lyon Méd.*, February 11.

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THE INTIMATE PATHOLOGY OF FILARIA DISEASE.(a)

By PATRICK MANSON, M.D.

THERE is abundant evidence that *Filaria sanguinis hominis* does not always, or even generally, give rise to disease. As a rule, parasite and host live together for years in perfect harmony. Nature has adapted the requirements of the former to the organisation of the latter. But the evidence is equally strong that at times this harmony is disturbed, and that the presence of the parasite entails grave disease to its host, and that this disease is sometimes in one organ, sometimes in another. These are circumstances which demand an explanation. Why should the parasite give rise to disease in one man and not in another; and why should one organ suffer in one subject, another organ in a second, another in a third, and so on?

The explanation I propose to supply. I have some diffidence in bringing it forward, for it is of so strange a character, and unlike anything in pathology, that I fear many will disbelieve my facts and ridicule my conclusions. Nevertheless, the facts are correct; and this being the case, I do not see how the conclusions I deduce from them can be avoided. Many years may elapse before my observations are confirmed, for hundreds of cases may have to be examined before one similar to those I will refer to is encountered; and even when this has been met with and described, I barely hope that, unless it is vouched for by some very eminent authority, it will carry conviction to all minds. The facts of parasiticism are as strange as they are important, and just in proportion to this is the difficulty in getting them believed.

Some time ago(b) I gave the particulars of a case of lymphatic œdema of the legs, associated with slight enlargement of the groin glands. I described how I punctured the glands with a hypodermic syringe, and how I found in lymph thus obtained not only the usual form of embryo filaria sanguinis hominis, as seen in the lymph and blood, but ova of the parasite containing active and perfect embryos. This for a long time remained an isolated and, by me, misinterpreted fact. To account for the presence of the ova, I supposed that the parent filaria was normally oviparous, and some ambiguity in Lewis's description of the worm gave ground for this. But afterwards I had the good fortune to find two specimens of the mature worm for myself. An examination of these convinced me that they were certainly viviparous, and that my former hypothesis was therefore incorrect. How, then, seeing that the animal was not oviparous, was I to account for the presence of the ova in the case I refer to? I searched the gland lymph of dozens of cases, and also the lymph from many lymph scrota, and several cases of chyluria, but in vain. I could not meet with ova a second time. I began therefore to think, improbable though the supposition seemed, that the hypodermic needle I used to extract the lymph had wounded the uterus of the parent worm, and thus allowed the ova to escape. But in the spring of last year a second case turned up in which ova were found, and under circumstances in which it was impossible to suppose their presence was owing to injury of the parent. The following are my notes of the case:—

Case 62.—*Lymph Scrotum—Filariæ in Lymph from Scrotum, also Ova containing Coiled-up and Active Embryos—Small Number of Parasites in the Blood—Operation.*

Tui, male, aged fifty, Tchangtchiu, Khioatan; a farmer. There are some 200 to 300 inhabitants in his village, including several cases of elephantiasis. One, called Benga, I operated on some years ago, removing a twelve-pound scrotum. When young, was careless about the water he drank, taking it indiscriminately from pool, well, or river. When a little over ten years of age, had frequent attacks of ague, both quotidian and tertian. His scrotal trouble began at eighteen. He had hydrocele then, and at times inflammation of the scrotum, and lymphous discharges. Two years ago, he says, I tapped his hydrocele. I forget the circumstance, and the character of the fluid withdrawn. As I did not inject iodine, doubtless at the time I considered the hydrocele to be of filarious origin, although he says the fluid removed was clear and straw-coloured. The hydrocele did not return, but the scrotum enlarged. He has attacks of fever and enlargement of the groin glands, and, irregularly, some three to ten times a month, the scrotum discharges a clear fluid, very like urine in appearance.

May 18, 1881.—The scrotum is as large as a pumelo, and the penis is buried in it. The upper and anterior part is firm like a forming elephantiasis, while the lower and back part is covered with enormously dilated lymphatics, some of the ampullæ containing clear fluid being as large as the tip of a finger. 7 p.m.: Pricked a vesicle; profuse discharge of fluid, in which I found filariæ. A slide of blood from the finger drawn at 9 p.m. contained no parasites.

19th, 6 a.m.—Slide of finger-blood examined; no filariæ. Lymph drawn last night again examined; it had coagulated but feebly; it again yielded filariæ. The feeble coagulum was now broken up by stirring. It rapidly disappeared, a small quantity of red deposit and some white cloudy flocculi subsiding. In this sediment were many embryos, and in nearly every slide ova, with active embryos struggling vigorously to stretch their chorional envelopes. No double outline could be detected in the embryos. The chorion could be distinctly made out, especially when the activity of movement had somewhat subsided.

20th.—An assistant examined a large slide of blood drawn at 10 p.m. last night, and in it found one embryo; and again at 6 a.m, to-day, but then found none. I examined several slides of sediment from the lymph of the 18th, and found embryos still alive, many of them enclosed in an oval or nearly globular sac, and two specimens in which the chorion was half stretched. These latter embryos were still working vigorously, but had not quite completed the stretching operation, as a third of either anterior or posterior end was still doubled on the rest of the body, no room having as yet been gained for the animal to lie completely outstretched.(c)

In this man a very few embryos still found their way into the circulation, but there certainly was no free communication between the lymphatics of the scrotum and the blood.

21st.—Scrotum removed, skin of penis being preserved. I quite expected to find the parent worm in this case; but, although the scrotum was cut up into very small pieces and carefully searched, no trace of the animal was observed. The tissues were much more dense than is usual in lymph-scrotum, and their bulk was considerably greater than obtains in the generality of these cases. In fact, it appeared, but for the vesicles and discharge, more like an ordinary case of elephantiasis. No lymph could be made to regurgitate by pressure on the groin glands.

June 10.—Case doing well. Since the operation the blood was frequently examined, and at suitable times, but no filariæ were found in it.

Here, then, are two cases in which the ova of the parasite were found in the lymphatics. It is evident that my first case was not exceptional. Occasionally, ova *are* passed into the lymphatics. Like other animals, therefore, the parent filaria is liable to miscarry. This, at first sight, would appear to be a matter of little importance, but reflection will show that this is by no means the case. The accident is fraught with danger, and is, in fact, the cause of the elephantoid diseases, and the key to their intimate pathology.

In the instances in which the parent worm has been discovered she was found in lymphatic vessels on the distal side of the glands. This has been shown to be in many, if not in all, cases her normal habitat. Her progeny, therefore, must travel along the afferent vessels, through the glands, and so on to the thoracic duct, and thence into the blood. The long, sinuous, and powerful body of the embryo is well adapted to perform this journey. But suppose, instead of this mature embryo, an ovum is launched into the lymph-stream prematurely, and before the contained embryo has sufficiently extended its chorion, then this passive ovum must certainly be arrested at the first lymphatic gland to which it is carried by the advancing lymph-current. It measures $\frac{1}{150}''$ × $\frac{1}{300}''$, whereas the outstretched embryo is only about $\frac{1}{3000}''$ in diameter. It is much too large to pass

(a) Part of a paper on Filaria Disease in the *China Customs Gazette: Medical Reports* for the six months ended March 31, 1882.

(b) *Ibid.*, xviii. 49.

(c) For a description of the process of chorion-stretching here alluded to, the reader is referred to the *Customs Medical Reports*, No. xiii., page 31, and No. xiv., page 11.

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the glands; and the embryo, rolled up in its chorional envelope, cannot aid itself. It becomes, in fact, an embolus. Now, filariæ are prodigiously prolific. Myriads of young are expelled in a very short time. I have watched the process of parturition in the minute *Filaria corvi torquati*. Every few seconds a peristaltic contraction, beginning low down in the uterine horns and extending to the vagina, expels some twenty or thirty embryos. If this process of parturition occurs prematurely, or peristalsis is too vigorous, and extends to a point high up in the uterine horns where the embryo has not yet completely stretched its chorional envelope, then ova are expelled. These, as they reach the glands, where the afferent lymphatic breaks up into fine capillary vessels, act as emboli, and plug up the lymph-channels one after another until the fluid that carries them can no longer pass. In this way the gland or glands directly connected with the lymphatic in which the aborting female is lodged are thoroughly obstructed. Anastomoses for a time will aid the passage of lymph, but the anastomosing vessels will carry the embolic ova as well as the lymph. The corresponding glands will then, in their turn, be invaded, and so on until the entire lymphatic system connected directly or indirectly with the vessel in which the parent worm is lodged becomes obstructed.

This, I believe, is the true pathology of the elephantoid diseases:—1st, parent filaria in a distal lymphatic; 2nd, premature expulsion of ova; 3rd, embolism of lymphatic glands by ova; 4th, stasis of lymph; 5th, regurgitation of lymph and partial compensation by anastomoses; 6th, renewed or continued premature expulsion of ova; 7th, further embolism of glands. This process, according to the part of the lymphatic system it occurs in, the frequency of its recurrence, and its completeness, explains every variety of elephantoid disease.

It would be tedious to apply the theory in detail. One has but to locate in imagination an aborting female filaria in the different lymphatic areas, and follow out in his mind the effect of embolism of all or part of the lymphatic circle, in order to recognise the key to an entire group of diseases. If we bear in mind what must be the effect of injury, gravitation, diathesis, and so on, on the areas of lymphatic congestion, and do not overlook the circumstance that the lymphatics of one side of the body anastomose with those of the other, there is no fact or variety of filaria disease which this theory does not fully explain.

It may be objected that I have assumed too much in supposing that the parent worm is liable to miscarry. But I have sufficient evidence in the two cases I have narrated that it has occurred; and if it has happened twice in a limited number of cases, it certainly happens not unfrequently. Perhaps I have examined lymph from scrotum, glands, or urine in 200 cases; yet in this limited number of observations evidence of premature birth of ova was obtained twice. Therefore, the thing cannot be of very rare occurrence, although to have sampled the lymph at the proper time, and in a suitable case, must be regarded as a fortunate circumstance not often to be encountered. I trust that the theory I have propounded will not be condemned offhand, but that observers will patiently work out the cases they meet, examining thoroughly the sediments of lymph from scrotum, glands, or urine. If this be done by three or four conscientious workers with suitable opportunities, some one, before many years are over, will find the ova in the lymph just as I have done. With these before him, let him try to account for their presence, and attempt to follow out in imagination the effect of their passage along the lymphatic vessels. I feel sure he will arrive at the conclusions I have expressed, and that he will become a convert to the parasitic theory of elephantoid disease.

A Prolific Family.—The *New England Medical Monthly* records the following case:—"Among the papers of the late Thomas Atwater, of New Haven, the following memorandum was recently found:—Mrs. Mabie, No. 100, Twenty-ninth-street, New York, has been married forty-eight months. July 24, 1858, she had one child; July 20, 1859, two children; March 29, 1860, two; March 4, 1861, three; February 18, 1862, four—total, twelve children, all born within three years and seven months, and all are living and healthy. This is a copy from a memorandum given by the father, Mr. Mabie."—*Philadel. Med. Reporter*, December 9.

THE DUBLIN SANITARY ASSOCIATION.

The eleventh annual meeting of this Society was held on Thursday, February 8, in the Molesworth Hall, Dublin. Mr. Jonathan Pim, President of the Association, occupied the chair.

Mr. John J. Digges La Touche, one of the Honorary Secretaries, read the annual report of the Executive Committee, from which we make the following extracts:—

"The Association numbers 237 members, being two less than the number for the year 1881. The income for the year amounted to £105, whilst the expenditure for the same year amounted to £102; the difference between which, added to the balance from the accounts of 1881, makes a balance to the credit of the Association of £17 odd.

"The Committee regret to have to state that in relation to compulsory notification of infectious diseases very little progress has been made, save, perhaps, that the lapse of time has caused the public to be more familiarised with the idea, and has induced the medical profession to tone down their opposition to it, so that a fairly good Bill will now have a chance of passing if properly supported. The Census Commissioners had, in accordance with the Committee's application of last year, prepared a return in relation to the social census, which is very full and complete, and will eventually prove of great use in elucidating the causes of the Dublin death-rate.

"Action would appear to have been at last taken in regard to the most important matter of baths and washhouses. A very good site had been obtained, and the Corporation, acting under a report of Dr. Cameron, the Superintendent Medical Officer, and of the city architect, have decided to spend £7000 in building swimming-baths, other baths, and washhouses, with an estimated expenditure for maintenance of £500 per annum. The Committee, though in every way very unwilling to discourage an undertaking so important and long neglected, are of opinion that the amount to be expended on what in Dublin is to a large extent a tentative work is too great, and will operate to prevent many institutions of the like kind being established throughout the city in close proximity to the homes of the poor. Mr. Vacher, the Medical Officer of Health for Birkenhead, points out in his paper, 'Cheap Baths for the People,' that the result of building handsome and expensive baths is that the very classes for whom they are built are the people that do not use them, as evidenced by the results in Liverpool; and he further shows, in his paper on 'Public Baths,' how baths for practically useful purposes might be built at prices varying from £300 to £2500.

"Before the close of last year a circular was sent by the Association to the Dublin hospitals to inquire—(1) whether patients suffering from infective diseases are received; (2) whether the building in which such patients are treated is isolated from the rest of the hospital; (3) whether there are separate wards for the treatment of the different forms of infective disease. As the replies had not arrived before the last annual meeting the subject was not then brought forward. It has, however, always been the opinion of the Association that infective diseases should be treated in very large hospitals rather than in a number of small ones, so as to have as few foci of infection as possible, as well as on the ground that disinfection of clothing and other measures of quarantine are more likely to be effectively carried out where subdivision of labour is not too great. The result of this inquiry may be summarised as follows:—St. Vincent's, Mercer's, National Orthopædic (Adelaide-road), and Jervis-street (at present) do not admit infective diseases; Cork-street Fever and the House of Industry Hospital separate the different forms of such diseases: the Meath does so as far as possible; while the City of Dublin and Steevens's treat their infectious cases in isolated buildings, but do not separate the forms. No answers were received from Sir P. Dun's, the Mater Misericordiæ, the Adelaide, or St. Joseph's Hospital for Children.

"In the matter of domestic scavenging a very important and satisfactory change is being quietly effected. Your Committee has been favoured with a copy of the report of the Superintendent of Scavenging, dated November 7, 1882, in which it is announced that the Corporation have commenced to clean out the ash-pits in all the eight districts of

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the city. At present, and until the arrangements are in full working order, this will not be made known to the citizens by public advertisement; but any citizen requiring his ash-pit cleansed has merely to send a post-card to the Superintendent of Scavenging, Corporation-yard, Winetavern-street, to have it attended to. The death-rate in the Dublin Registration District during the past year was 27·9, as compared with 27·0, the rate of the previous year; the rate, however, for 1882 compares favourably with the average rate for the previous ten years, viz., 28·9, and is very much lower than the rates for 1879 and 1880—35·7 and 35·9 respectively."

Dr. William Moore, President of the King and Queen's College of Physicians, moved the adoption of the report, which was seconded by Mr. La Touche, and carried. Mr. William Findlater, M.B.; Mr. Robert Sexton, J.P.; Dr. Anthony Traill, Fellow of Trinity College, Dublin; and Mr. Alfred Webb were among the subsequent speakers.

The following important resolution was unanimously adopted by the meeting, viz.:—"That this Association is of opinion that every effort should be made to secure the passing of the 'Notification of Infectious Diseases Bill' for Ireland, as the experience in Edinburgh and other towns where it exists, proves its very great value in preventing the spread of disease.

FROM ABROAD.

Professor Jaccoud on the Treatment of Typhoid Fever.

During the discussion on typhoid fever, in which the Paris Académie de Médecine has been engaged for so many weeks, Prof. Jaccoud delivered the following address (*Bulletin de l'Acad.*, February 6) on the treatment of the disease:—

"For the last sixteen years I have submitted the subjects of typhoid fever to a uniform treatment, the principles and effects of which I have detailed in my publications of 1871 and 1872; and I am now desirous of explaining to the Academy the reasons, the means, and the results of this treatment. Its reasons I have derived from two characteristics of the disease, which are so constant and so independent of the individuality of the patient (except in degree) that they justify this therapeutical heresy which bears the name 'uniform treatment.'

"These characteristics are, in the first place, adynamia, resulting, on the one hand, from the typhoid infection itself, and on the other, from the duration and intensity of the febrile consumption; and, in the second place, abnormal calorification, this, independently of the consumption it leads to, being the direct source of dangers of another kind, which menace quite specially the heart and brain. Thence two indications, likewise constant, which I formularised in 1872—(1) spare and sustain *from the commencement* the strength of the patient, foreseeing the prolonged aggression to which he will be submitted; (2) subtract a portion of the caloric that has been produced, and restrict its formation. I always fulfil these indications, which are constantly the same, from the time that I am certain of my diagnosis: for I can see no valid reason for waiting in a state of inaction, with all the placidity of a spectator, for accidents which I am certain I shall have to contend with. I obey these fundamental indications, then, not only by a treatment as uniform as their own constancy, but by a treatment commenced at once.

"This treatment consists of two parts, the one absolutely constant and invariable, the other eventual. 1. The constant treatment is put into force, I repeat, from the time that the diagnosis is certain. It comprises alimentation by means of broths, wine, and especially milk, given in divided doses, so that the daily quantity may amount to between one and two litres. I have never yet met with a case in which it was not tolerated; and, independently of its alimentary properties, milk here possesses the precious advantage of maintaining diuresis at a rate which is sufficient to prevent accidents that, in the stationary period, too often result from excrementitious retention. The constant treatment also comprises alcohol, of which I give from thirty to eighty grammes per diem, according to the individual conditions of the patient and the daily incidents of the disease. To the alcohol I add three or four grains of the extract of cinchona; and I maintain this treatment unchanged until the definitive disappearance of the fever. By this sustained alimentation, and this medication, I fulfil at a useful moment the indication derived from the adynamia. It is moreover to be noted, as I have already stated in 1872, that alcohol not only responds to this indication, but that it also fulfils, at least partially, the indication derived from the febrile process, for it lowers the temperature, and it derives on itself, to the advantage of the patient, a portion of the pyretic combustion—the autophagy is diminished. Still, I do not stop here, and from the onset I fulfil the indication derived from the abnormal calorification by means of cold lotions of aromatic vinegar. I have them applied four times in the twenty-four hours when the evening temperature does not exceed 30° C., and six times when it rises to 39·5°, increasing them to eight when it reaches 40° or more. These lotions constantly give rise to a refrigeration of variable duration, which is a true artificial remission; but, besides this, in a great number of cases they exert an effect on the calorigenous process itself, so that at the end of two or three days the thermic curve descends below its primary level—the lotions now being not only anti-thermic, but truly anti-febrile. The indication derived from abnormal calorification is thus completely fulfilled, a portion of the caloric being abstracted, and its production restrained.

"2. So much for my constant, unchangeable treatment; and I now advert, in a passing manner, to the eventual treatment, when I recognise the fever as possessing a *grave character*. To judge of this I have four signs. First, and before all, the continuity of the fever—that is to say, the amplitude of the morning remissions. I regard as insufficient those remissions which are not at least equal to the diurnal oscillations of the normal temperature—say eight-tenths of a degree centigrade. These insufficient remissions denote a special gravity, and tenacity of the febrile process. 2. An interrupted series of evening temperatures above 40°. 3. Absence of depression of the general level of the curve after three days' employment of the lotion. 4. Feebleness of the heart's action, as estimated by the pulse, and especially by direct examination. This element of judgment is independent of the preceding signs, for, with only its own gravity, and while sensibly equal in its course, the fever may act upon the cardiac tissue in a very different manner according to the individuality of the patient,—so that the condition of the heart becomes thus of itself a sign of the first importance in relation to the urgency of eventual treatment.

"Whenever, then, the grave character of the fever is demonstrated to me by one or other of the preceding signs, I intervene more actively, and associate with my fundamental treatment antifebrile medicinal agents. I have attained a method which appears to me to favourably fulfil the two conditions of *obtaining the prudent maximum of antipyretic effect with the possible minimum of dose*. The ordinary agent of my medication is quinine in the form of the bromhydrate, which causes less fatigue to the stomach than the sulphate. Since 1876, I replace it, according to the cases, by salicylic acid, but the method of administration is always the same—I proceed by series of two, rarely of three, days consecutively. When the signs already enumerated oblige me to again intervene, I always leave an interval of at least forty-eight hours between the two series of administrations. For either medicine the dose for the first day is from one gramme and a half to two grammes, which is my maximum; that of the second day is half a gramme less; and when there is a third day, the dose is the same as on the second day, or diminished still further by half a gramme, according to the case. Whatever the daily dose may be, I cause it all to be taken within the space of thirty minutes in the morning between ten and half-past ten if I wish to act on the evening temperature, or in the evening between half-past nine and ten when I wish to modify the morning temperature. I decide between these two eventualities after an examination of the curve, that is to say, accordingly as the grave character of the case consists especially in the rise of the evening figure, or especially in the slightness of the morning remission. In the exceptional cases in which the temperature presents the *inverse type*, I act exclusively on the morning temperature until the fever resumes its normal course. Administered in this way, the doses indicated suffice to obtain between the morning and evening, or between the

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evening and the morning, a temporary fall of temperature which ordinarily exceeds a degree centigrade, and frequently attains 2°. Moreover, after one or two of these medicinal series, it is the rule for the curve to descend to a lower level, whatever may be the ulterior duration of the fever. One word on my choice between quinine and salicylic acid. In the same dose, and given according to my method, the acid has an antipyretic action which is sensibly equal to that of quinine, so that there is no motive for preference. Salicylic acid also remedies, to a certain extent, the inconveniences due to excrementitial retention, inasmuch as a notable proportion is eliminated under the form of salicyluric acid. It partakes then, with benzoic acid, of the property of favouring the elimination of azotised products retained in the economy during the malady: but I have no need to seek this special action of the acid, thanks to the introduction of milk into the regimen of my patients, so that I have here no sufficient motive to prefer it. But this medicine possesses especially powerful antiseptic properties, and it is for this reason alone that I prefer it whenever I can use it—that is to say, when my choice is not impeded by what I regard as absolute contra-indications to its employment—alcoholism, violent cerebral symptoms, feebleness of the heart, renal determination, and intensity of thoracic symptoms. When, in spite of all these reserves, I find myself at liberty to do so, I employ the acid in place of quinine; and its antipyretic effects, whether immediate or remote, have always seemed to me similar. As to the inconstant indication derived from broncho-pulmonary congestions and stases, I meet it by the persistent application of dry cups, placed morning and evening, to the numbers of from forty to sixty, on the lower limbs and at the base of the thorax."

(*To be continued.*)

EFFECTS OF THE AMERICAN CLIMATE.—Alluding to the supposed "desiccating" effects of American climate on English visitors or residents, which have been recently brought forward in some of our popular scientific journals, the *Philadelphia Med. News* (December 30) makes the following observations. "An attentive examination of data leads to two propositions:—1. Those recently introduced to the climate and social conditions of America may consume some extra adipose tissue in the effort to maintain an equal pace with the habitual rate of progress of our citizens. This postulate may be accepted as largely true: 'acute Americanitis'—by which term we mean the effect not only of the climate, but of social conditions of our American life—makes a large demand upon the stored-up resources of the human organism. 2. The influence of the American climate on the progeny of Europeans seeking a home here is in the direction of increased bodily development. Observation of the ordinary product of emigrants after three or four generations, and the statistics of the Provost-Marshal General's Bureau during the late war, supply the data. Anyone attentively regarding the descendants of the old Puritan, Knickerbocker, Huguenot, and Creole families, who have been acted on during many generations by the climatic conditions of America, must observe a very marked tendency to fulness of habit, to obesity even. In fact, 'the lank and shrivelled Yankee' belongs to that era when the first impressions were made on the nutritive functions of European emigrants. The statistics of the Provost-Marshal General show that the average bodily development of Americans sprung from European ancestry is much greater than the ancestral prototype."

PARISIAN JOURNALS IN 1883.—According to Brunox's *Annuaire des Journaux de Paris*, 1291 journals of various kinds appear in that capital. Of these, 50 relate to religious subjects; 110 to jurisprudence; 240 to political economy, commerce, and finance; 22 to geography and history; 128 to recreative reading; 38 to instruction; 62 to literature, philology, and bibliography; 11 to the fine arts; 3 to photography; 9 to architecture; 3 to archeology; 15 to music; 29 to the theatre; 73 to fashions (3 of these to hair-dressing); 138 to technology (various industries); 92 to medicine and pharmacy; 51 to science; 24 to the military and naval arts; 28 to agriculture; and 18 to horses; while 23 remain unclassed. The number of daily political journals is 67; that of journals devoted to finance, industry, and teaching has considerably increased; while that of the other journals remains stationary.—*Gaz. Médicale*, February 10.

REVIEWS AND NOTICES OF BOOKS.

Quain's Elements of Anatomy. Edited by ALLEN THOMSON, M.D., D.C.L., LL.D., F.R.S., formerly Professor of Anatomy in the University of Glasgow; EDWARD ALBERT SCHÄFER, F.R.S., Assistant-Professor of Physiology in University College, London; and GEORGE DANCER THANE, Professor of Anatomy in University College, London. In two volumes. Ninth Edition. London: Longmans, Green, and Co. 1882. Pp. 747 and 947.

IN this new edition of a well-known work, the whole of it has been subjected to a thorough revision. The general anatomy has been revised by Professor Thane, assisted, in the parts of special surgical importance, by Mr. Godlee. For the histological section Mr. Schäfer is specially responsible; and the account of embryology has been almost re-written by Dr. Thomson. Being thus brought up to the latest date by editors of the highest distinction in their several departments, the work keeps its old position as the standard English work upon anatomy.

The Treatment of Diseases by the Hypodermatic Method. By ROBERTS BARTHOLOW, M.A., M.D., LL.D. Fourth Edition. Philadelphia: J. B. Lippincott and Co. Pp. 350.

THIS edition is considerably larger than its predecessors, but the original plan of the work has not been altered. Naturally, morphia claims the largest share of the author's attention, and we are led to expect beneficial results from its use in almost every disease known—even in the convulsions of albuminuria. On this latter subject Dr. Bartholow says:—"In albuminuria the arterial tension is low, the perivascular lymph-spaces are distended with serum, and the brain-substance is anæmic. In this state of things Traube found a sufficient explanation of the convulsions, which by others were supposed to be caused by uræmia. In the treatment of uræmic convulsions considerable doses of morphia are not only well borne, but are demanded by the conditions present. For an adult half a grain may be administered at once; and this must be repeated promptly if the convulsions continue, or if they recur after having ceased for a time. As much as two grains may be injected within a few hours in severe cases. The author must, however, repeat the caution that *such heroic medication must not be undertaken without due consideration and an accurate diagnosis.*" This last passage, which we have italicised, is certainly remarkable; if it means anything, it means that a state of uræmia is the indication for a large dose of morphia—a statement so opposed to all our experience as to be beyond criticism. There is one other statement, too, which has surprised us much, and that is, that ether employed subcutaneously intensifies chloroform-narcosis. How a powerful stimulant, such as ether is when injected under the skin, can have a narcotic effect, is beyond our comprehension. We have seen it immediately, as if by magic, arouse a patient from a state of diabetic coma; and that it can have an exactly opposite effect in coma from chloroform-inhalation, we, with all deference to Dr. Bartholow, find it difficult either to accept or to understand. For the rest we may say that the author has performed his task very thoroughly. The chapter on the habitual use of morphia especially shows sound common sense and is full of good advice. But we cannot help thinking that the author might have incorporated all he had to say in his work on Materia Medica and Therapeutics, without any detriment to this special line of treatment.

The Journal of Psychological Medicine, Vol. VIII., Part II.

THE current number of this journal is not an advance upon its predecessors. The first article—nominally devoted to Darwin—is in reality a violent attack upon the doctrine of evolution, and upon certain positions which the writer believes to be bound up in that doctrine, but which most evolutionists would repudiate. The strength of the writer's language, and the weakness of his arguments, of themselves counteract his intentions so thoroughly, that we need not be at the trouble of deprecating the one or confuting the other: but when he states that modern scientists call poetic

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emotion, "the thrill of a ganglion"; thought, "cerebration"; life, "molecular force"; the Deity, "a primordial germ"; and so forth—placing the phrases in inverted commas as if they were quotations—we are constrained to ask, What is his authority for these expressions? It is scarcely necessary to assure our readers that no man of science ever seriously wrote or spoke such rubbish. An interesting article on the Genesis of Ideas in the Blind Deaf Mute, by Mrs. Burnet, is the only other paper that calls for remark. While not pretending to treat the matter scientifically, it contains a very valuable collection of facts, all of which appear to have been carefully authenticated.

The American Journal of Neurology and Psychiatry, November, 1882.

Contains records of several cases of Nerve-stretching, the results of which are, upon the whole, slightly encouraging. Three of the operations are recorded by Dr. John Wyeth, and were performed on the sciatic nerve for the relief of "fulgurating" pains in the legs. In the first case, one of ataxy, both sciatic nerves were stretched, and there was great relief for nine months; but at the end of a year the patient returned to have the operation repeated. In the second case, relief from severe neuralgia ensued, and lasted for about two months. Two cases of stretching of the facial nerve for the relief of kinesis of the face, recorded by Dr. L. C. Gray, were wholly unsuccessful; but one case in which the median was stretched for the relief of athetosis (Dr. Hammond's original case of this malady) was immediately successful, and at the end of a month from the date of the operation the movements had not returned. Dr. Janeway contributes a paper on the Diagnosis of Cerebral Lesions, which contains much that is interesting, though little that is new. One case of slow and one of swift compression of the cord from dislocation of the odontoid are reported by Dr. Gibney. Elaborate studies of the psychology of notorious criminals are frequent occurrences in the American quarterlies, and, in the one under notice, the case of a murderer named Walsh is investigated by Dr. Leuf, who arrives at the conclusion that the criminal "psychologically could not help doing what he did," and that he was morally irresponsible Dr. Leuf has no doubt; but yet he was not legally irresponsible, "because there is most reason to believe that he fully appreciated what he was doing, that he never forgot the penalty the law imposed for wilful murder." How Dr. Leuf arrives at these astonishing conclusions does not appear; but for right-down inscrutability and undiscoverableness, the obsolete test of the "knowledge of right and wrong" is child's play compared with these. Such doctrines are as mediæval as the belief in witchcraft. The editorial article is, of course, mainly concerned with Guiteau, but some paragraphs of general interest are added. It is pretty well understood here that American lunatic asylums are inferior in administration to our own; but the frightful scandals that are recorded of no fewer than four asylums in this one number of the journal indicate that this inferiority is immensely greater than is generally known. The curious tendency of public opinion to attribute to every asylum an abuse that is found to exist in one, restrains us from entering in detail into these matters; but, unquestionably, if such statements as those made and proved or left uncontradicted concerning American asylums were to be made of any asylum in this country, they would arouse sufficient uproar to imperil a government.

Poor-Law Medical Officers' Association.—The Council of the Poor-Law Medical Officers' Association request that those gentlemen who have not yet replied to the circular forwarded to them by the Chairman and Secretary, in reference to taking office as local honorary secretaries, will do so at their earliest convenience, to enable the proposed organisation to be completed.

An Unfortunate Nephrectomy.—The operation of nephrectomy, so popular of late in New York, has not been resorted to so enthusiastically as it was before the recent removal of the kidney from a patient in one of the city hospitals. No urine was passed after the operation, and the woman died in two days. It was found that there had been but one kidney—that removed by the surgeon.—*Phil. Med. News*, December 23.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, February 6.

John W. Hulke, F.R.S., President, in the Chair.

A Case of Unilateral Anophthalmos.

Mr. R. J. Godlee showed a male infant, aged four months, with complete absence of the left eye. The lids had remained unopen till the child was seven weeks old; then there had been a muco-purulent discharge from between them, which gradually became serous, and finally disappeared. There was no other abnormality about the child's body. The orbit was perfect; the lids were apparently smaller than on the other side; the eyelashes were turned inwards. When the child cried there were no tears on this side. The palpebral fissure opened into a deep slit, at the bottom of which there was a whitish appearance, but nothing at all like an eyeball could be seen. He had called this unilateral anophthalmos, though there was another term which might have been applied—viz., monophthalmos—but this, he thought, ought to be reserved for those cases where the two eyes were fused into a central one—the true "cyclops"; and besides, in this class of cases there was always deficiency of development in some other direction as well. Another reason for preferring the term "unilateral anophthalmos was because he regarded his case as analogous to those where there is no eye at all, and also to cases where the eye is abnormally small. In 1875 only six cases had been recorded, three of which were living. Of the others, two were found to have considerable deformity of the brain. In the third all the muscles of the eyeball were present, except perhaps the levator palpebræ superioris. He could not remember exactly how far the optic nerve had been traced in that case.

Mr. Nettleship had seen two cases of this condition, both very closely resembling Mr. Godlee's case. The first of these had been described in the first volume of the *Ophthalmological Society's Transactions*; in that, tears had been noticed to come from both orbits. In the second the point had not been determined. In both a sort of button could be felt under the conjunctiva, which perhaps was the remains of a stump, and he thought he could feel something of the same kind in this case. He suggested that the child should be examined under chloroform.

Mr. Bowlby mentioned the case of a boy eleven years of age, under the care of Mr. Willett, in whom one eye was congenitally absent. The upper lid could be raised, so that the levator palpebræ was certainly present; the palpebral fissure was much smaller than on the other side, and the bones were not so fully developed. He was unable to say anything about the tears.

Ante-mortem Clot in the Pulmonary Artery.

Dr. Mahomed commenced by observing that he thought that the general attitude of medical men, in regard to the possibility of the formation of a clot on the smooth endocardium whilst the circulation was going on during life, was one of entire scepticism, notwithstanding that its occurrence had been supported by the testimony of such high authorities as Dr. Richardson and Sir Joseph Fayrer. He called attention to a paper that had recently appeared in the *Journal of Anatomy and Physiology*, the author of which claimed to have met with twenty such cases in the past seven years; but he (Dr. Mahomed) did not find in the description therein contained any evidence which proved that the clots were not of post-mortem origin, and he was strongly of opinion that in the majority of instances, at any rate, this was the case. The specimen he had brought this evening was taken from the body of a woman aged forty-nine years, who was admitted into Guy's Hospital, under the care of Mr. Howse, suffering from epithelioma of the cheek. This growth was removed, and the wound healed well after the operation. Subsequently an enlarged gland appeared below the jaw and was removed. The patient at first went on well, but three days later after dinner she felt faint, turned pale, her lips became blue, and she passed a motion; an hour and a half later she was again faint, passed a loose

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motion, and became pale and pulseless. From this state she did not rally, and died in half an hour. At the post-mortem examination the pulmonary artery was found to be filled with a firm rather dark clot, notably drier than ordinary post-mortem clots; it pervaded every branch of the artery on both sides, and was covered by a layer of thin whitish material looking like lymph. On section a central clot was found surrounded by a layer of fibrin, and this central portion could be squeezed out from the outer portion of the clot. No other similar clot was found elsewhere, though all the important vessels were examined. Between the vagina and rectum was a large dermoid cyst attached to one ovary (which he had put upon the table as a card specimen), about which he would only say that apparently it contained a large quantity of pus and some peculiarly moulded caseous masses. This cyst pressed very greatly on the rectum, where were many dilated veins. At the base of the right lung there was found a small pulmonary apoplexy, which he thought might have resulted from an embolus carried from one of the rectal veins. The clotting of the artery might have started from this point. His view was that the clot did not completely fill the artery during life, but occupied the centre of it, and that it was surrounded by the clot formed from the last blood expelled from the right ventricle during life (for this was found empty and contracted).

The PRESIDENT remarked on the great interest of this case. Clots in the pulmonary artery were very rare, and it was always difficult to determine whether they were autochthonic or embolic.

Dr. NORMAN MOORE remarked that clots in the heart, or, as they were then called, polypi of the heart, first came into notice soon after the discovery of the circulation of the blood, and for many years from that time "polypus of the heart" was a favourite subject for a thesis for degrees at Leyden, Montpellier, or Edinburgh. A reference to those published shows that their writers associated them with sudden death—so much so, that when a person died suddenly it was a common saying that such an one had died from a polypus of the heart. Dr. Matthew Baillie was the first to pave the way to upset this doctrine, by pointing out that the majority of these cases were quite inconsistent with the function of life being carried on at all. For his own part, he had never seen a case in which there was evidence that a clot had formed in the pulmonary artery and spread into the smaller branches. Clots sometimes formed in the smaller branches, but he had never known such an occurrence cause sudden death.

Dr. MORRISON referred to a case of clotting of the pulmonary artery associated with gangrene of the lung that he had brought forward two years ago, in which he had, for want of any other cause, attributed the gangrene to the cutting of the artery.

Dr. HALE WHITE referred to the case of a patient at the Seamen's Hospital, which had recently been published in the *Lancet*. The man had suffered from heart disease for some time, and during the last three days of his life it was observed that his heart would completely stop for a few seconds at a time, and then go on again. At the post-mortem examination a clot was found in the left ventricle, extending thence into the aorta as far as the orifice of the innominate artery. On section the clot was found to be softening in the centre in the aorta, and as it was traced back to the heart it gradually became more and more recent, whilst that in the ventricle itself might be regarded as post-mortem. He thought that at each cessation of the heart's action a little clotting took place, and that when the heart resumed again the clot was pushed a little way into the aorta.

Mr. BARKER remarked that, in regard to the very firm clots that are sometimes found, they may have been formed during the last few hours of life, when death has been lingering. Part probably formed at the time of death, and a good part was formed after death.

Dr. DAWSON WILLIAMS asked Dr. Mahomed if he had understood him to say that there was a layer of fibrin on the outside of the outer clot, because, if such was the case, he would like to know what explanation Dr. Mahomed had to offer of such an occurrence.

Mr. SUTTON said that at the Middlesex Hospital, amongst the cancer patients, they could, if death were lingering, predict with certainty that clotting of the pulmonary artery would be found post-mortem.

Mr. BOWLBY asked whether any clots had been found in the rectal veins. Even if such had been proved to exist it did not necessarily follow that they had started the pulmonary embolism. As regards the ante-mortem clot being confined to the centre of the vessel, that seemed very difficult to accept, as it was well known that the blood-stream was most rapid in the centre, and if any slowing of the current took place it was sure to be more marked along the sides of the vessel.

Mr. LOCKWOOD thought there was an anatomical difficulty in the way of Dr. Mahomed's explanation, as, unless the clot came from the very lowest of the rectal veins, it would have to pass through the capillaries of the liver *vid* the portal vein before reaching the lungs.

Dr. MAHOMED, in reply, said that in the case of gangrene of the lung to which Dr. Morrison had referred he should think it was much more probable that the gangrene was primary. Dr. Hale White's case was certainly a very important one, and he would like to know whether there was any atheromatous ulcer in the aorta. He had been disappointed that more surgeons had not joined in the discussion, as they were so constantly reporting cases of ante-mortem thrombosis (at the rate of about one a week), and he had hoped to have heard an expression of opinion from some of them. The rectal veins had not been specially examined, and the existence of a clot there was only a surmise. His hypothesis was that a very small clot had been carried thence (not by the portal system), and lodged in a small branch of the pulmonary artery; from this the central clot had spread backwards, and contracted so as to become covered with a layer of fibrin, and the fresh layer of blood which coagulated round this at death had again contracted so that it too was surrounded by a layer of fibrin.

CANCER OF AN UNDESCENDED TESTIS.

Dr. MAHOMED, in reference to this specimen, said that the case differed from those recorded by Dr. G. Johnson and Mr. Arnott in that the testis was free in the abdominal cavity. The patient came to Guy's Hospital, saying that for six weeks he had had a dull aching pain in the right lumbar region, and a swelling in the hypogastrium for three weeks. On admission, a large swelling occupied the region of the bladder, and moved with that viscus. On the hypothesis that it was a cyst, it was punctured; but no fluid came out, and the canula was blocked with a whitish material, in which, under the microscope, sarcomatous cells were recognised. There was no other swelling elsewhere, and no evidence of any secondary infection; no sign of disease of the peritoneum. The absence of the testis on one side escaped notice. The question of operation was raised, but a swelling of the leg appeared, from which it was inferred that some of the pelvic glands were invaded by the disease, so an operation was negatived. At the post-mortem the tumour was found to have a small pedicle, evidently the remains of the cord, and the tumour could have been removed with the greatest ease during life, and with success, had it been undertaken early enough; the retro-peritoneal and mediastinal glands were invaded by secondary deposits, as also the thymus gland. An interesting point in the case was the dilatation and ulceration of the duodenum (which was shown as a card specimen) from pressure; the ducts of the liver, too, were much dilated.

ULCERATION OF CALVARIA.

Dr. NORMAN MOORE showed a specimen of ulceration of calvaria, which was taken from the body of a man aged forty-two, who died under the care of Dr. Hensley in St. Bartholomew's Hospital, from abscess of the brain. His scalp was entire, but for many months had felt puffy all over. When the scalp was removed a quantity of pus was found, with some loose fragments of necrosed bone and a large quantity of œdematous granulation tissue. The whole convexity of the skull was ulcerated, with here and there areas of necrosis. On the inner surface of the calvaria were some ulcerated patches, and also some necrosis. The dura mater was entire, but there was an abscess of the posterior part of the right cerebral hemisphere. There was no amyloid disease, and no gummata. There was no history of syphilis, though the question had been carefully investigated, and there was no scar. Such calvaria were, however, almost invariably due to syphilis.

VISCERAL SYPHILIS.

Dr. N. MOORE also showed specimens of visceral syphilis

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from a man, aged fifty-six, who died in St. Bartholomew's. In November, 1881, he had hæmatemesis and other signs of cirrhosis of the liver. In January, 1883, these symptoms, which had abated, were again prominent, and he died of general dropsy. There was a distinct history of syphilis, and there was a well-marked scar on the glans. His viscera showed three pathological conditions attributable to syphilis—(1) a general and uniform thickening of the capsule of the liver and of that of the spleen, without any general peritonitis; (2) amyloid disease of the kidneys; (3) extreme calcification of the aorta, with two aneurisms, both above the diaphragm.

The PRESIDENT, referring to the first specimen, asked what had occupied the spaces that had been left by the ulceration of the bone; and in regard to the second case, too much stress should not be laid upon the scar, as the thicker the scar the greater the probability that it had resulted from the soft, non-infecting sore. The true Hunterian chancre did not cause much destruction of tissue.

Mr. BARKER had seen one case of caries of the parietal bone in a case of extensive caries of the lumbar vertebræ. The patient was a boy aged fourteen, who died from exhaustion, and there was found on the inner surface of the skull-cap a patch of caries about the size of a shilling, and filled with caseous material. Neither syphilis nor accident could be accused of having had any share in its production.

Mr. ALBAN DORAN asked what was the precise signification of perihepatitis, where no evidence or history during life of hepatic disease could be obtained. He had never seen perihepatitis in a case of uterine or ovarian disease or of peritonitis without such evidence of former hepatic mischief.

Mr. HENRY MORRIS thought we should be very careful in accepting the denial of a patient as to syphilis. He had recently had under treatment a man with extensive caries of the jaw, who absolutely denied syphilis. He went on badly until he was put upon anti-syphilitic treatment, when he was rapidly cured.

Dr. MOORE, in reply, said that a large quantity of pus had been found under the scalp, and a considerable quantity of granulation tissue.

TUBERCLE BACILLUS.

Dr. SAMUEL WEST exhibited two specimens of these, prepared from scrapings from phthisical cavities. They were remarkable from the large size of the groups. Both were very rapid cases. The first was that of a policeman, who had always been very healthy, and had lived in the barracks, and who died after an illness of eight weeks' duration. The other case was not quite so rapid. Small caseous patches, scattered throughout the lungs, were found in both patients in various stages of softening; these changes were more advanced in the second case. His own experience had been that in cases of phthisis he always found the bacilli present, though varying much in number. In rapid cases they were usually numerous. Groups and masses such as were seen here were only found in extreme cases. He had found them always of the same size. In acute cases bright bodies might be seen in the bacilli, which were supposed to be spores. He had also seen what he took to be these so-called spores free. He thought we could measure the gravity of a case by the number of the bacilli. Where groups and masses were found, there excavation was going on rapidly. The bacilli existed in far larger proportion in the walls of the cavities than in the lungs.

Mr. ALBAN DORAN asked Dr. West his opinion as to cause and effect in these cases; it seemed to him more probable that the bacilli were formed in the putrescent material of the phthisical cavities than carried there from without, and alluded to the development of bacteria around decaying teeth or in the presence of decomposing food.

Dr. GOODHART asked whether, in using the word phthisis, Dr. West included all destructive lung diseases or whether he only referred to undoubtedly tubercular ones.

Dr. WEST said, in reply, that he had purposely avoided discussing cause and effect in this matter, and he did not think that the fact of their greater abundance in the walls of the cavities afforded any argument one way or the other. Koch's researches, if confirmed, would tend to prove the unity of phthisis, but further evidence on the subject was required.

SULPHURIC ACID POISONING.

Dr. HALE WHITE showed the stomach and transverse colon of a woman who had died fourteen hours after taking some sulphuric acid. The mouth was inflamed and excoriated; the acid had passed into the larynx, and the arytæno-epiglottic folds were ulcerated and covered with a membrane-like slough; the œsophagus was sloughing; the stomach was intensely inflamed and blackened, but not beyond the pylorus; the duodenum was absolutely healthy; the transverse colon was highly inflamed, which must have resulted from direct transmission of the inflammation from the stomach; and the stomach was perforated.

SARCOMA OF CAPSULE OF KIDNEY.

Mr. KNOWSLEY THORNTON showed this specimen. There was a history of growth for six years, and it had been movable. It was an ordinary soft brain-like sarcoma, weighing eleven pounds. It had grown very rapidly lately. At first he had diagnosed the case as a renal one, owing to finding a portion of colon in front of it; but afterwards, finding resonance in the flank, he thought the case must be one of ovarian disease, and accordingly made his incision in the median line instead of outside the rectus, as he much preferred to do in dealing with a renal tumour. The patient was going on well (fourth day).

PERSISTENT OVI-VITELLINE DUCT.

Mr. BARWELL showed this specimen, taken from a boy aged ten years, who came under his care with intestinal obstruction of five days' standing. There was nothing to indicate the site of the lesion. Finding the patient did not improve, he operated on the ninth day, and found a band stretching from the umbilicus towards the iliac fossa, very tense, and dragging on the intestines so as to produce obstruction. It was pervious, and contained some fæces. He tied it in two places, and divided it, but the boy already had peritonitis, and died thirteen hours after the operation. At the post-mortem the diverticulum that had been cut was found to originate from the ileum at its lower part.

THE CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 9.

ANDREW CLARK, M.D., President, in the Chair.

ON SUBPERIOSTEAL AMPUTATION AT THE HIP-JOINT.

THIS case was related by Mr. SHUTER. On October 16, 1881, a consultation was held with Dr. Samuel West and Mr. Rose on a patient, aged eighteen, in whom Mr. Shuter had diagnosed acute necrosis, without suppuration, in the lower end of the left femur. This had led to septicæmia and secondary inflammation of the left hip-joint. Although the diagnosis was not supported, it was agreed that nothing but amputation at the hip-joint would save the boy's life. The next day the following operation was performed:—A circular amputation through the junction of the middle and upper thirds was done, followed by a longitudinal incision on the outer side of the femur down to the bone; the periosteum was stripped off and left in the flaps, and the whole of the bone enucleated. The patient made a good and rapid recovery. A little more than two months after the operation he had a movable stump, and within six months of the operation he was wearing an artificial limb, on which he could get about very satisfactorily, and continued to do so until a few weeks ago, when he was made to discontinue the use of it in order to get a sinus to heal. In 1859, Professor Ollier, of Lyons, after performing many experiments on the lower animals, devised subperiosteal operations on the human subject, with the view of getting bony supports to flaps cut for disarticulations. Among his suggestions was an operation similar to the one Mr. Shuter performed on the hip-joint. This case, however, is the first successful subperiosteal amputation at the hip-joint which has been attended with the formation of bone in the stump, and in which the patient has been able to wear an artificial limb satisfactorily.

In explanation of some questions from the President, Mr. SHUTER said he considered the pus in the hip-joint, noted at the time of the operation, to be secondary to disease of the lower end of the femur. The rigor was probably the sign of the accession of suppuration of the joint.

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Mr. BRYANT congratulated the author of the paper on having brought forward such a remarkably good case. He had never seen a stump so good, so firm and fleshy, and withal such excellent powers of movement. Having said so much in praise, there could be no harm in criticising any little point, and he felt inclined to ask the question, Is there any bone in the stump? He thought there might be some small portions of bone, but practically not much. It was, however, very important to have left the periosteum, for this provided a good firm attachment for the muscles. The operation performed by Mr. Shuter bore a close relationship to that done by Furneaux Jordan, of Birmingham, in which the femur was divided at the junction of the middle and upper thirds. The possibility of doing a subperiosteal operation is, however, not of frequent occurrence. It is not easy to strip off healthy periosteum from healthy bone. The present case seems to have been a typical one in respect of the ease and advantage of peeling off the periosteum. There was a fair proportion of cases in which such a measure could hardly be applied. This would be so in a tumour of the femur requiring amputation.

Mr. CROFT regarded the case as of extreme interest, because it had been asserted that excision of the top of the femur could not possibly be performed subperiosteally. He asked Mr. Shuter how the upper end of the bone was denuded of its covering, and referred more especially to the periosteum over the great trochanter. At the age of the patient the trochanter would be almost, if not quite, joined to the diaphysis, and so it would be necessary to sacrifice the trochanter major, and he anticipated that there would be much difficulty in peeling the mass of muscles off this projection. He felt sure that there was bone in the stump, but whether of the thickness of a crow-quill, or of an ordinary femur, he would not venture to say.

Mr. BARKER congratulated the author on the admirable result, and referred to a case which was under his (Mr. Barker's) care, and in which a similar operation with a similar result took place. The details of the operation might be found in the *British Medical Journal* for January 20, 1883. The operation was performed in February, 1881. The stump had the same hard core, and the same power of adduction and flexion, that were to be seen in the case exhibited to-night. There was no difficulty in peeling the periosteum off the bone.

Mr. CRIPPS said that the case was of rare interest, and opened up a momentous question in practical surgery; he did not think there was much new bone thrown out in the stump, and suggested that the discharging sinus still present might be due to a portion of unremoved sequestrum. Notwithstanding the good result, he questioned very much whether the older method of amputation by transfixion was not preferable. The time which the patient was on the operating-table and under the influence of chloroform was a very important point. Prolongation of the operation must be injurious; and now that we possess such excellent means for preventing hæmorrhage, in the form of Davy's lever, he was of opinion that the tedious operation proposed by Furneaux Jordan had no points of advantage over the method of transfixion with formation of anterior and posterior flaps.

Mr. DICK thought that the ability of the patient to wear an artificial limb was of much more importance than the question of the presence of bone in the stump. The mutilated and dependent condition of patients on whom amputation at the hip-joint had been performed was truly pitiable. The instruments which had been devised by various makers were for the most part cumbersome, expensive, and practically useless. A patient on whom he had amputated the limb at the hip-joint went about on crutches and was periodically obliged to lay aside her supports and take to a sedentary posture on account of palsy induced by the crutches. On these grounds he congratulated Mr. Shuter on such an excellent result, by which the patient was able to use an artificial apparatus and to walk a distance of a mile or so.

Mr. HOWARD MARSH thought the question of sufficient importance to be referred to a committee in order that the structural condition and the mode of progression might be more thoroughly gone into. He conjectured that there would be found to be but little real movement of the stump; it was probable that the pelvis was swung forward, the sound limb acting as the *point d'appui*. He thought the remarks of Mr. Cripps somewhat pertinent. It had fallen to his (Mr. Marsh's) lot recently to perform Jordan's operation twice, and from the tediousness of the procedure he was led to think that the more rapid and older method with the use of Davy's lever was to be preferred, at all events in the majority of cases.

At this point of the proceedings the President suggested that the patient be asked to walk immediately in front of the members of the Society. The suggestion was accordingly carried out, much to the general satisfaction.

Mr. BUTLIN did not consider that Jordan's operation had much to do with subperiosteal resection. The point was, whether the latter method was worth doing; and he regarded the excellent stump of Mr. Shuter's case as the best answer to that question, especially when it appears that Mr. Barker had had a similar successful result. He protested against the innuendo of Mr. Cripps, and advised Mr. Shuter under no conditions to interfere with his admirable stump.

Mr. BARKER explained that in his case it was impossible that any necrosed bone had been left behind, and he could not agree with Mr. Cripps's suggestion.

Mr. DAVY said that less damage would be done to the central structures if the subperiosteal operation were used. During a period of nine years he had been Surgeon to the Surgical Aid Society, and had formed the opinion that artificial instruments for aiding progression were, on the whole, of little use; no satisfactory progression could be got. In this respect Mr. Shuter's case was a noteworthy exception. He felt that he owed it as a duty to the members of the Society to bring before them the thirtieth case in which his lever had been used. The operation was done on the right side, on a man aged forty, in the Westminster Hospital, the lever being employed. Apparently nothing untoward happened at the operation, but within twenty-four hours peritonitis set in, and the patient died rapidly. The autopsy showed that a linear rent had been made in the rectum; and that the peritonitis was secondary to this there could be no doubt. The meso-rectum was short, and probably had something to say to this accident, for no unusual method had been adopted. He had continued to use the lever notwithstanding, and had no reason to be dissatisfied therewith. The percentage of recoveries in cases where his lever had been employed was sixty-five, and there was therefore every ground for being contented.

Mr. MORRANT BAKER had amputated at the hip-joint three times, with recovery in every case; but the stumps were nothing as compared with the one shown this evening. He rather believed that the good result of the present example was due to the long skin flaps, and to the retention of the muscular insertions into the periosteum, more than to the formation of bone, which he was inclined to look upon as of secondary importance.

Mr. HENRY MORRIS was unable to say whether the good issue was the consequence of the way the flaps had been made, or of the new production of bone; but there was no doubt about the admirable way in which the patient walked —a thing which was quite unusual to see after amputation at the hip-joint. He had experienced that it was not at all difficult to perform operations subperiosteally in many instances; quite lately he had removed portions of the femur, and the operations were not much prolonged thereby. Only last Wednesday he treated an abscess of the upper part of the thigh in a boy, where the trochanter and head of the bone were not diseased, and were not removed. The section of the bone was made with a chain-saw; the thickened periosteum was stripped off with remarkable facility by means of a raspatory. In another case a similar procedure was carried out; the periosteum was peeled off to within about an inch of the lower epiphysis.

Mr. CLEMENT LUCAS thought the case ought to be referred to a committee; he said there could not be much bone present in the stump, for the latter could be easily bent on itself. He agreed with the remarks of those speakers who maintained that the retention of the periosteum acted as a surface of natural insertion for the muscles, so that the muscles were matted together in their original position. He said it was most praiseworthy on the part of Mr. Davy to bring his unfortunate occurrence before the members of the Society.

Mr. SHUTER, in reply, gave the outline of a case similar to his own, where he had assisted a friend to carry out the operation. The treatment was successful for a time, but the patient died later of lardaceous disease of the liver.

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The stump in that case contained a mass of new bone, and he certainly considered that a similar condition would be found in his own case; and he believed the good result was due to the bony attachment provided by this means for the muscles left behind. Since Ollier had recommended the operation as early as 1859, he did not think it necessary to associate the name of Furneaux Jordan therewith. In answer to Mr. Croft, the periosteum had not been removed from the great trochanter; but in his friend's case, which was that of a man aged twenty-nine or thirty, the periosteum over the tuberosity was stripped up without difficulty. He agreed with Mr. Marsh that the point was to get the stripping up of the periosteum started. In answer to Mr. Barker, the operation was performed on October 17, 1881. The removal of the periosteum did not take up much time. He thought there was movement to and fro of the stump when the patient walked.

The PRESIDENT remarked that the Society had been engaged in a most useful discussion, which raised three important questions—firstly, as to the structure of the stump; secondly, as to the mode and power of progression; and lastly, as to the comparative benefits of the old and new methods of operation,—and he begged, therefore, to propose that Messrs. Howard Marsh, Croft, and Clement Lucas be nominated as a sub-committee to inquire into the case.

This was carried unanimously.

A SUCCESSFUL CASE OF NEPHRO-LITHOTOMY.

Mr. BENNETT MAY, of Birmingham, narrated this case, which, he said, shows an advance on previous ones in point of size and weight of stone removed, this being three inches long and 473 grains in weight. The diagnosis rested on the prominent symptoms of pain, hæmaturia, and pus in urine. The patient is a coal-miner, aged thirty-four, and the history leaves no doubt that the stone must have been present and growing in the kidney for eighteen years. For the past year he has only been able to live in comfort by avoiding every exertion. The attacks of nephralgia were very severe, always in the left loin, and followed by hæmaturia for a day or two. Examination of the loin showed complete absence of swelling, hardness, or tenderness on palpation. The operation was done October 20, 1882, the incision differing from that of ordinary colotomy in being higher up, so as to skirt the rib. Manipulation failed to make out a stone, but acupuncture detected it at once. The kidney substance was incised in a vertical direction until the wound appeared large enough to permit the extraction, which was accomplished entire by a scooping action of the forefingers. Bleeding of a venous character was profuse, but controlled by pressure. The parenchyma of the kidney appeared healthy; there was no sign of pus, or of a sac. Urine came through the wound on the following day, and continued to flow till the twenty-first day, when it ceased entirely. The wound was soundly healed at the end of the fifth week. The urine has slowly returned to a nearly normal standard. For some time after the operation it was strongly ammoniacal and turbid. It is now almost clear, acid, of specific gravity 1020. Mr. May has tested the patient's recovery by active exercise, etc. He feels perfectly well, is free from pain, and fit for ordinary work. The principal interest of the case is in the question of recovery. There is every indication of this being complete, and of the kidney having regained its functions as a healthy working organ. This is no doubt due to the fact, as pointed out in previous discussions at this Society, that no destructive processes had been established in it.

(The patient was shown, and the stone. The paper was preceded by an expression of indebtedness to the Society's published Reports, whence the writer had derived the information which enabled him to treat the case.)

In reply to some questions by the President, Mr. MAY said that the urine was acid, opalescent, with a little deposit of pus, and of specific gravity 1020.

Mr. HOWSE contributed the outline of a case operated upon on February 6. The stone was of oxalate of lime, and weighed fifty-six grains. The patient was a sailor aged fifty-seven, who had followed his occupation till six years ago, when a severe attack of characteristic renal colic set in, and lasted twelve hours, with vomiting; after which much sand—red, brown, and white—was passed. Seven months after, a second similar attack happened; and the attacks repeated themselves at about the same interval till the last few months, since when the pain had been continual. For two years no sand or gravel had been passed in the water. There had been no difficulty in micturition. The sound detected no signs of stone in the bladder. On entry into the hospital, the patient was described as a well-built, strong man, holding his right hand to right loin, and complaining of forcing pain like needles in the loin, but not radiating into upper part of thigh, as it had formerly. There was no increased area of dulness in the loin. The urine was acid, specific gravity 1025; no deposit; little mucus; no blood; no pus; no crystals. The kidney was cut down upon by a transverse and vertical incision in the loin. The quadratus lumborum was notched to obtain greater space for manipulation. The finger was then worked round to the *front* aspect of the kidney, and a small stone was detected. This could not be made out by palpation of the posterior aspect of the kidney, nor was it struck by the acupuncture method. It is clear, therefore, that the stone might have escaped recognition had not the anterior renal aspect been explored; the fact that under these circumstances there was a point of resistance behind the stone, in the form of the psoas magnus muscle, was probably the explanation of the facility with which the stone could be detected; whereas, in feeling the posterior face of the kidney the structures pressed upon would yield in front of the examining digit. The stone was extracted from the lower part, where the kidney had been freed from the connective tissue and fat. With the aid of the thumb and forefinger and dressing-forceps no difficulty was encountered in grasping and removing the calculus. The temperature rose once after the operation to 102°; at the present time it is 99·4°. He passed a good night, and, with the exception of a little flatulence and pain on breathing, was doing well.

Mr. CLEMENT LUCAS said that hitherto the question whether the kidney should be removed or not had depended on the size of the stone. If this were small, simple nephrotomy was all that was necessary; but if large, then nephrectomy was proper. This view could now no longer be held, and the criterion must be the presence or absence of degenerated kidney structure, so that, even though the stone were small, if the kidney were diseased it would be proper to perform nephrectomy. He felt certain that Mr. Howse had introduced a new departure in the exploration of the anterior renal aspect, and believed he (Mr. Lucas) had left a stone still in the kidney last October, because by palpation behind and acupuncture he had not been able to make out the presence of the calculus.

Mr. BUTLIN spoke of the modesty of Mr. Bennett May in reporting his case. It must be borne in mind that the calculi removed by all three surgeons who had read their cases before the Clinical Society would weigh, when put together, not more than one-half that recorded by Mr. May. Another feature of interest was whether the kidney ought to be removed, as Mr. Barwell suggested, because it was a "vicious" organ, and so likely to reproduce the disease. He thought Mr. May's case a perfect answer to that. In Mr. Butlin's own case, which was the son of a surgeon, there had been a return of "gravel," but it was almost certain that this proceeded from the hitherto sound kidney. Mr. Butlin then mentioned to illustrate the difficulty of diagnosis, in alleged cases of renal calculus, how a number of hospitals and their staffs had been deceived by an impostor.

Mr. HENRY MORRIS did not think the exploration of the anterior renal aspect free from risk, though it might be a very valuable addition to our means of investigation; yet he considered that it should not be adopted unless the organ had been examined in the usual situation, and acupuncture, as recommended by Simon and others, had been practised and failed. In two recent cases he had been unable by the ordinary methods to make out a calculus after an exploratory lumbar incision; possibly in these cases the anterior examination might have been valuable. He testified to the point that such lumbar explorations were free from danger, and had been in three instances (two of Annandale's and one of his own) productive of good to the patient where no stone had been detected. A possible explanation might be that such painful affections were due to a slightly mobile kidney, which mobility would be done away with by the adhesions resulting from the healing of the lumbar incision.

Mr. BENNETT MAY, in reply, said that a full and special chemical report should be appended to the other notes of his case, in order to determine, if possible, how far the kidney

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operated upon was capable of recovery. He said that the anterior exploration would have been very difficult in his case, and that pressing with the hands on the abdomen did not help, nor was a curved hook of any value.

After a formal vote of thanks to Mr. May for bringing the case before the Society, the PRESIDENT asked the members to allow of the prolongation of the meeting in order to permit Drs. Pavy and Oliver to make their communications. This was assented to.

Dr. PAVY then exhibited some test-pellets for the detection of albumen in the urine, a full account of which will be found on another page.

Dr. OLIVER showed some experiments with his test-papers, prepared with various substances—potassic ferrocyanide, potassic mercurio-iodide, sodic tungstate, picric acid, etc.; and also a compound paper, one side having potassic mercurio-iodide, and the other citric acid. The reaction to albuminous urine is practically immediate: a cloud appears and varies in density, according to the richness of the fluid in albumen. If there be much, great clots collect about the paper; if less, small streams; if less still, a mere haze. The urines experimented on before the members of the Society contained less than 1 per cent. of albumen, and the precipitate was quite well marked in each tube. Dr. Oliver mentioned that he intended working out a test-paper method for the quantitative estimation of albumen. He had already succeeded with similar paper-tests for the qualitative and quantitative estimation of glycosuria.

The following living specimens were shown:—

Two interesting cases of Pseudo-Hypertrophic Palsy in adult males, by Dr. Fowler.

Case of Fracture of Radius and Dislocation Forwards of the Ulna at the Wrist, in which the lower end of the latter bone was removed to effect reduction, by Mr. Godlee.

Mr. Shuter's patient, and Mr. Bennett May's case from Birmingham.

The meeting then adjourned.

TRACHEOTOMY.—Dr. M. H. Richardson, in a paper read at the Boston Society of Medical Improvement, after narrating three cases of tracheotomy, and taking a survey of the different modes of performing the operation, says:—"From the experience of others, and from my own, I have arrived at the following conclusions:—1. The point of election is just below the cricoid isthmus. 2. The isthmus of the thyroid, if recognised, should be pushed down, the cervical fascia of the median line having first been incised, and the trachea exposed by carefully separating the parts with a dissector. 3. Or the thyroid isthmus may be entirely disregarded, and the parts freely incised, in which case all hæmorrhage should be checked before opening the trachea. 4. Deliberation, careful dissection, and a bloodless operation are better than the gain of a few seconds at the expense of hæmorrhage into the trachea. 5. Ether should be used, except in extreme asphyxia.—*Boston Medical Journal*, December 14.

RARE SEQUEL OF FRACTURE OF THE BASE.—At a meeting of the Medico-Chirurgical Society of Montreal a specimen was shown in which the right carotid artery in the cavernous sinus had been opened by ulceration from the sphenoidal cells, with the result of fatal hæmorrhage from the nostrils. The young man had received a severe wound over the right eye from an explosion of a boiler six weeks before his death. After recovery from the shock there were no cerebral symptoms, and the wound healed well. The sight of the right eye failed, and Dr. Bailliard recognised a commencing atrophy of the optic nerve. He had several attacks of bleeding from the nose, but his general health was good. Suddenly, one morning, profuse hæmorrhage took place from the nostrils, and death followed before assistance could be obtained. At the autopsy the body and right lesser wing of the sphenoid were found eroded and soft, and a line of erosion extended between the dura mater along the right orbital plate of the frontal bone. Just where the carotid turns up to become the middle cerebral, and where it lies in close apposition to the thin walls of the sphenoidal cells, a perforation three by two millimetres had taken place; there had doubtless been a fracture and subsequent ulceration of the sphenoid.—*Phil. Med. News*, December 30.

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—At the Hilary Term Examination for the degree of Bachelor of Medicine (M.B.), held on Monday, January 22, and the following days, the successful candidates were arranged in order of merit, as under:—

Hamilton, Charles W. | Alcorn, Samuel A.
Boles, William S.

At the examination for the degree of Bachelor in Surgery (B.Ch.), held on Monday, January 29, and succeeding days, the candidates who passed were arranged in the following order of merit:—

Alcorn, Samuel A. | Gloster, James.
Armstrong, John. | Crowe, Daniel.
Cormack, Eugene. | Nason, Chas. St. Stephen Richard.

At the Hilary Term Examinations also the Diploma in State Medicine was granted to:—

Davis, R. Stuart, M.B., B.Ch. | Burke, William H., M.B., B.Ch.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—DOUBLE QUALIFICATION.—The following gentlemen passed their First Professional Examination during the recent sittings of the examiners:—

Richard Macartney, Ceylon; Samuel Wilbraham Griffith, Carnarvonshire; Thomas Anderson, Galashiels; Edward Bridges Townsend, Hampshire; Rowland Owen, Holyhead; John Williams, Anglesey; Alexander William Mackenzie, Linlithgow; Charles Edward Morris, Gloucestershire; Graham Philip Godfrey, Nottingham; Charles Reedy, Limerick; Robert Honohan Cogan, Donoughmore; Francis Augustus Homfray, Gainfore, Darlington; Frank Pritchard Mouth, Chester; George Shepley Page, Cephalonia; John Joseph Butler, Limerick; Samuel Burnside Boyd Keers, Ballymoney; Alfred Bourne, St. John's, Weardale.

The following gentlemen passed their Final Examination, and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

John Gormley, co. Roscommon; Alexander Millar Adams, co. Londonderry; Challoner Clay, Wiltshire; George Clarke, Belfast; Ambrosio Feliciano Fernandes, Goa; John Adolph Albrecht, Pendleton; Glenville St. Clair Van Rooyen, Columbo; Robert James Foulis, Edinburgh; William Tweedie, Rathfriland; Joseph Dunlop, Conagher; Edward Harvey Bird Nickoll, Milton; Samuel Robert Rogers, Ontario; William Hector Macdonald, Toronto; James Unsworth Green, Worcestershire; Adam Richard Stacpoole, Australia; Walter Mount, Nackington; James Henry Curtis, Cork; Eliot William Welchman, Lichfield; Rowland Owen, Holyhead; David Robert Paul, Vizagapatam; Murdoch Mackenzie, Stornoway; Kenneth Joseph Campbell, Yorkshire; Robert Currie, Ballymena; James Smyth, co. Limerick; Austin Concannon, co. Galway; Frederick St. John Kemm, Wiltshire; William Samuel Irwin, Dublin; William John Harvey Fletcher, Staffordshire; James Alister, Lisburn; Robert Daniel Givin, Dervock; Herbert George Harold Clarkson, Yorkshire; William Simpson Flett, Cullen.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—Messrs. Frederick Lucius Nicholls, Eton, and Thomas O'Kelly, co. Clare, passed their Final Examination, and were admitted Licentiates of the College on the 26th ult. During the January examinations, Adolphe Wetzel, Baden, Switzerland, passed his First Professional Examination for the Licence in Dental Surgery; and Frank Herbert Briggs, Leeds, and Francis Bromley, London, passed their Final Examination, and were admitted L.D.S.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, February 5, 6, 7, and 8, the following candidates were successful:—

For the Licence to practise Medicine—

Beattie, William Thomas, Doogary, Omagh.
Croke, Thomas Joseph, Hull.
Daly, Charles Andrew, Charleville, co. Cork.
Lane, Thomas, Leinster-road, Rathmines, Dublin.
McCloghry, Thomas Purdue, Riverstown, co. Sligo.
Mackintosh, George Douglas, 10, Ash-grove, Harrogate.
Strickland, Charles Edward, Kidsgrove, North Staffordshire.

For the Licence to practise Midwifery—

Croke, Thomas Joseph.
Daly, Charles Andrew.
Henderson, Samuel Dunlop, M.D., M.Ch. R.U.I., Kilrea, co. Derry.
Henry, James, M.D., M.Ch. R.U.I., Monaghan.
Lane, Thomas.
Morell, Lowry D., M.D., M.Ch. Q.U.I., Ballybay, co. Monaghan.

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APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 8:—

Gilkes, Norton Gilbert, The Firs, Leominster.
Griffiths, Alfred Philip Henry, Hanover-gardens, Kennington.
Jenkins, Edward Johnstone, St. Bartholomew's Hospital.
Morris, William David Joseph, Cefnydre, Fishguard.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Buck, Lewis Archer, King's College Hospital.
Stevens, Francis, St. Bartholomew's Hospital.

BIRTHS.

HENTSCH.—On February 11, at 29, Shenley-road, Camberwell, the wife of John Page Hentsch, M.R.C.S., of a son.

ROSSER.—On February 11, at 1, Wellesley-villas, Croydon, the wife of Walter Rosser, M.D., of a son, stillborn.

SAUNDERS.—On January 10, at Cape Town, the wife of H. W. Saunders, M.B., F.R.C.S., of a son.

SUCKLING.—On February 7, the wife of C. W. Suckling, M.D. Lond., of 108, Newhall-street, Birmingham, of a son.

TREVES.—On February 8, at 3, Courtnay-terrace, Hove, the wife of Edward Treves, M.R.C.S., of a son.

VERRALL.—On February 9, at 95, Western-road, Brighton, the wife of Thomas Jenner Verrall, M.R.C.S., L.R.C.P., of a son.

MARRIAGES.

SHIPTON—INGLIS.—On February 6, at Holborn, Arthur Shipton, F.R.C.S., of Buxton, to Margaret Emma, daughter of the late John Inglis, M.D., Bengal Army.

TINDAL-ROBERTSON—HUNTER.—On February 10, at Holborn, Frederick, eldest son of W. Tindal-Robertson, F.R.C.P., to Kate Evelyn Sophia, third daughter of Captain Hunter, of Bath.

WHITMORE—ALLEN.—On February 8, at Hanover-square, William Tickle Whitmore, F.R.C.S., of Arlington-street, Piccadilly, S.W., to Constance Adine, younger daughter of Thomas Allen, M.D., of Regency-square, Brighton.

DEATHS.

CRATER, GEORGE, F.R.C.S., at Tenby, on February 5, in his 72nd year.

REECE, HENRY, M.R.C.S., L.S.A., of 168, Piccadilly, W., on February 4.

ROGERS, ALICE, wife of Nathaniel Rogers, M.D., at 37, Cedars-road, Clapham Common, on February 13, in her 77th year.

ROSSER, ELIZABETH SARAH, wife of Walter Rosser, M.D., at 1, Wellesley-villas, Croydon, on February 13.

WILLIAMS, T. WATKIN, F.R.C.S., at Birmingham, on February 11, aged 66.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

MORPETH DISPENSARY.—House-Surgeon. Salary £120 per annum, with furnished house, etc. Candidates must be doubly qualified and registered. Applications, with testimonials, to be sent to the Secretary before March 1, from whom further particulars may be had.

RUNCORN UNION.—Medical Officer. (*For particulars see Advertisement.*)

UNIVERSITY COLLEGE, LONDON.—Dental Surgeon and Clinical Lecturer on Dental Surgery. (*For particulars see Advertisement.*)

WEST LONDON HOSPITAL, HAMMERSMITH.—Assistant-Physician. Candidates must be Fellows or Members of the Royal College of Physicians of London, and not practising as apothecaries. The Medical Council will meet on the 27th inst., at 3.30 p.m., to nominate candidates, who must attend the meeting. Applications and testimonials to be forwarded not later than February 17, at 9 a.m. The election will take place on March 5.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Blean Union.—Mr. Charles Holttum has resigned the Third District: area 4641; population 5004; salary £35 per annum.

Dore Union.—Mr. Scudamore Kydley Powell has resigned the Madley District: area 10,563; population 2936; salary £70 per annum.

Freebridge Lynn Union.—Mr. Joshua Love has resigned the Second South-Eastern District: area 6443; population 1750; salary £26 per annum.

Grantham Union.—Dr. Paterson has resigned the Spittlegate District and the Workhouse: area 10,265; population 8454; salary £50 per annum. Salary for Workhouse £40 per annum.

Martley Union.—Mr. John W. Hinings has resigned the Knightwick District: area 5852; population 1276; salary £55 per annum.

North Witchford Union.—Mr. William Easby has resigned the Second District: area 10,628; population 3404; salary £40 per annum.

Pwllheli Union.—The office of Medical Officer for the Aberdaron District is vacant: area 17,200; population 3479; salary £70 per annum.

Royston Union.—Mr. E. W. Parkinson has resigned the Fourth and Sixth (united) Districts: area 16,997; population 4935; salary £70 per annum.

Runcorn Union.—Mr. J. Willett has resigned the Budworth District: area 17,920; population 6541; salary £60 per annum.

Uppingham Union.—The Hallaton District is vacant by the death of Mr. Roberts: area 7886; population 1032; salary £24 per annum.

Walford Union.—Mr. John Wrixon has resigned the parish of Sarratt: area 1550; population 654; salary £50 per annum.

West Derby Union.—Mr. Richard Prothero, Assistant Medical Officer at Walton Workhouse, has resigned: salary £100.

APPOINTMENTS.

Bolton Union.—Johnson Martin, L.F.P.& S. Glasg., L.S.A. Lond., to the Bolton District.

Bromyard Union.—John W. Hinings, M.R.C.S. Eng., L.R.C.P. Edin., to the Workhouse.

St. Asaph Union.—Richard Humphreys, M.B. and M.C. Edin., to the Llanfairtalhaiarn District.

HANDSOME BEQUEST TO LIVERPOOL CHARITIES.—The late Mr. George Green Hornby, of Liverpool, has bequeathed the sum of £2000 to be divided amongst various of the charities of Liverpool. Of medical charities, the Royal Infirmary, the Royal Southern Hospital, and the Northern Hospital receive £200 each; the Liverpool Medical Missionary Society, the Eye and Ear Infirmary, the General Hospital for Consumption and Diseases of the Chest, receive £100 each; and £200 is to be equally divided between the Liverpool South Dispensary, Liverpool East Dispensary, and Liverpool North Dispensary.

SPREAD OF TYPHUS FEVER.—In his report on the spread of typhus fever in the southern district of Glasgow, the health officer states that, in consequence of one case of typhus fever not having been reported, eighteen persons had been seized, of whom twelve at least might have been saved from infection if the precautions requisite in such cases had been adopted.

ROYAL INSTITUTION.—Dr. William H. Stone will give the first of three lectures on Singing, Speaking, and Stammering, on Saturday next, February 17; and Professor Robert S. Ball will give the first of four lectures on the Supreme Discoveries in Astronomy, on Tuesday, February 20.

ERGOT IN DIABETES INSIPIDUS.—In the *Philadelphia Medical News*, January 6, Dr. Lacy relates three cases in which he found the treatment of this disease by ergot, as practised by Dr. Da Costa, proved highly efficacious. He gave first one drachm and then two drachms of the fluid extract three times a day. Like Dr. Da Costa, Dr. Lacy does not contend that ergot will always cure diabetes insipidus, but that it merits the highest confidence in this disease.

THE ROYAL SOUTHERN HOSPITAL, LIVERPOOL.—The annual meeting of the trustees of this institution was held on the 12th inst., when it was stated that the debt had been reduced during the year from £1028 to £678; but this was only effected by the sacrifice of legacies and donations that it would have been desirable to fund. The total number of patients treated during the year was 8095, as against 7685 in 1881. A nursing institution in connexion with the Hospital had worked so well that it was now self-supporting.

SCIATICA TREATED BY EXTENSION BY WEIGHTS.—Dr. Shoemaker relates in the *New York Med. Record*, December 16, three cases in exemplification of a means which he has found useful in treating sciatica. It consists in the employment of extension of the limb by means of adhesive plaster and the pulley, adding a weight of 18 lbs. or 20 lbs. The extension has to be continued for some hours before complete relief is obtained, and may have to be recurred to again; but the result in these cases was complete after one or two such repetitions. Dr. Shoemaker says, "I find that by taking hold of the foot and making extension by pulling for a few minutes to the extent of 15 lbs. or 20 lbs., if it eases my patient it is a suitable case for the weight and pulley extension. I make button-holes at the foot end of the adhesive straps, so that the foot-piece can be loosened and rest the patient if the leg gets tired, or for any other purpose. I also place the pulley a little above the axis of the leg. I see to it that the leg is thoroughly extended, and make it a point to relax the muscles by hanging on sufficient weights. When the leg tires and the pain subsides, I tell my patient to unbutton the foot-piece, and rest until the reappearance of the pain, which in most cases is after the lapse of a considerable time. In all my cases the recoveries have been perfect."

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VITAL STATISTICS OF LONDON.

Week ending Saturday, February 10, 1883.

BIRTHS.

Births of Boys, 1514; Girls, 1374; Total, 2888.
Corrected weekly average in the 10 years 1873-82, 2843·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	817	814	1631
Weekly average of the ten years 1873-82, corrected to increased population ...	1002·1	1005·3	2007·4
Deaths of people aged 80 and upwards ...	...	...	84

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669683	...	5	3	1	5	...	6	...	3
North ...	905947	...	4	8	3	2	...	8	...	3
Central ...	262388	...	4	1	1	6	...	...	...	1
East	692788	...	9	7	2	11	...	1	...	2
South	1265927	2	7	14	7	18	...	5	...	5
Total	3816483	2	29	33	14	42	...	20	...	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·694 in.
Mean temperature	42·7°
Highest point of thermometer	53·1°
Lowest point of thermometer	33·4°
Mean dew-point temperature	39·5°
General direction of wind	S.E., S., & S.S.W.
Whole amount of rain in the week	1·24 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Feb. 10, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Feb. 10.	Deaths Registered during the week ending Feb. 10.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2888	1631	21·5	53·1	33·4	42·7	5·95	1·24	3·15
Brighton	111262	75	43	20·2	50·0	36·0	42·6	5·90	1·77	4·50
Portsmouth ...	131478	95	63	25·0	...	...	...	...	...	...
Norwich	89612	67	31	18·1	...	...	...	...	...	...
Plymouth	74977	56	30	20·9	52·2	36·0	44·3	6·84	1·42	3·61
Bristol	212779	151	90	22·1	51·7	36·3	43·5	6·39	0·85	2·16
Wolverhampton ...	77557	72	32	21·5	48·4	33·2	39·3	4·06	0·90	2·22
Birmingham ...	414946	316	190	23·9	...	...	...	...	...	...
Leicester	129483	109	52	21·0	50·5	33·0	41·7	5·39	1·49	3·78
Nottingham ...	199349	137	85	22·2	48 8	34·0	40·3	4·61	0·76	1·93
Derby	85574	57	22	13·4	...	...	...	...	...	...
Birkenhead ...	88700	65	41	24·1	...	...	...	...	...	...
Liverpool	566753	457	362	33·3	49·9	35·8	41·9	5·50	0·53	1·35
Bolton	107862	76	51	24·7	46·6	32·8	39·6	4·23	0·75	1·90
Manchester ...	339252	292	176	27·1	...	...	...	...	...	...
Salford	180465	139	98	26·8	...	...	...	...	...	...
Oldham	119071	84	67	29·4	...	...	...	...	...	...
Blackburn	108460	96	61	29·3	...	...	...	...	...	...
Preston	98564	84	47	24·9	...	...	...	...	...	...
Huddersfield ...	84701	63	28	17·3	...	...	...	...	...	...
Halifax	75591	46	36	24·8	...	...	...	...	...	...
Bradford	204807	149	93	23·7	48·0	34·0	40·0	4·44	0·74	1·88
Leeds	321611	225	149	24·2	49·0	34·0	40·4	4·66	0·64	1·63
Sheffield	295497	218	151	26·7	49·0	33·0	40·1	4·50	1·23	3·12
Hull	176296	121	86	25·5	52·0	34·0	40·4	4·66	1·52	3·86
Sunderland ...	121117	90	62	26·7	52·0	35·0	41·6	5·34	0·55	1·40
Newcastle	149464	103	77	26·9	...	...	...	...	...	...
Cardiff	90033	75	28	16·2	...	...	...	...	...	...
For 28 towns ...	8622975	6406	3882	23·5	53·1	32·8	41·3	5·17	1·03	2·62
Edinburgh	235946	140	121	26 8	47·8	33·5	39·7	4·28	0·37	0·94
Glasgow	515589	380	302	30·6	51·0	32·0	41·7	5·39	0·75	1·90
Dublin	349 685	246	254	37·9	50·0	36·0	42·7	5·95	0·61	1·55

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·69 in. The highest reading was 30·08 in. at noon on Monday, and the lowest 29·14 in. by the end of the week.

APPOINTMENTS FOR THE WEEK.

February 17. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Dr. W. H. Stone, "On Singing, Speaking, Stammering."

19. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture VII.

Medical Society of London, 8½ p.m. Dr. Heath Strange will show a Subject of Elephantiasis. Mr. Balance, "On a Case of Recto-Vesical Abscess—Colotomy." Mr. Pitts, "On a Case of Femoral Hernia with Rupture of all its Coverings."

20. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. R. S. Ball, "The Supreme Discoveries in Astronomy: The Scale on which the Universe is Built."

Pathological Society, 8½ p.m. Dr. S. West—Aneurism of Arch of Aorta (two cases). Dr. Silcock—Aneurism of Abdominal Aorta. Mr. Lockwood—An Abnormality of the Bones and Muscles round the Shoulder-joint. Mr. Sutton—Bone Disease in Animals. Mr. Bowlby—Femora Curved from Osteitis Deformans and Chronic Inflammation. Mr. Barwell—Juvenile Osteomalacia; Curved Tibia from Rachitis; Hypertrophy, with Lengthening of the Tibia. Mr. Durham—Tumour of the Thigh (living specimen). Mr. J. Lawson—Recurrent Cartilaginous Tumours of Head and Neck (recent specimen). Mr. Eve—Atrophy of Bone, with Fracture. Mr. Lane—Fracture of Sternum, with Costo-chondral Dislocation. Dr. Hale White—A Peculiar Process from the Fibula.

21. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

Royal College of Surgeons of England, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture VIII.

Royal College of Physicians, 5 p.m. Dr. J. M. Duncan, "On Sterility in Woman." (Gulstonian Lectures—II.)

22. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Spectroscope and its Applications."

23. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. Parker, "On the Metamorphosis of Suctorial Fishes and Batrachia." Lecture IX.

Royal College of Physicians, 5 p.m. Dr. J. M. Duncan, "On Sterility in Woman." (Gulstonian Lectures—III.)

Clinical Society of London, 8½ p.m. Mr. Broadbent, "On a Case of Supposed Hydrophobia treated by Chloral, with Recovery." Dr J. K. Fowler, "On Two Cases of Pseudo-Hypertrophic Paralysis in Adults." Mr. R. J. Godlee, "On a Case of Fracture of the Radius and Dislocation Forwards of the Ulna at the Wrist, in which the Lower End of the latter Bone was removed to effect Reduction. Dr. Pearson and Dr Broadbent—On a Case of Acute Necrosis of the Right Orbital Plate of the Frontal Bone, giving rise to Thrombosis in the Frontal End of the Longitudinal Sinus, in the Cavernous Sinus, and Ophthalmic Vein." Dr. Fowler will exhibit a Case of Occlusion of the Superior Vena Cava.

Royal Institution (Council Meeting, 3 p.m.), 9 p.m. Mr. W. H. Pollock, "Sir Francis Drake."

Earth-Dressing.—In relation to earth being employed as an efficient means of dressing wounds in Esmarch's clinic (applied in bags of gauze previously wrung out in a 5 per cent. antiseptic solution, and retained by a gauze bandage, 85 per cent. of the cases being healed by one dressing), the *Phil. Med. News*, December 30, observes that our German colleagues will be greatly astonished to learn that they have been anticipated in this discovery, and that Dr. Addinell Hewson, of Philadelphia, had written a volume on the subject long since.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

THE USE OF SECONDARY LYMPH.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Dr. Daunt, of Brasil, says, at page 104 of your journal, that he would like to see an authorised opinion as to the efficacy of lymph taken from a case of revaccination. A reference to the "Medical Digest," Section 87 : 2, will enable him to see that opinions differ upon this point. In the *Medical Times and Gazette*, vol. i. 1871, pages 292, 321, two observers agree with Dr. Daunt in his opinion that lymph from cases of secondary vaccination yields as satisfactory results as that from primary cases—a view endorsed by a Scotch surgeon in the *Lancet*, vol. i., 1871, page 397. In the *Lancet*, vol. ii. 1871, page 157, Dr. Barbour contributes an elaborate paper against the use of secondary lymph, in which view he is ably supported by Dr. Alfred Carpenter in the *British Medical Journal*, vol. ii. 1872, page 1089.

I am, &c.,
RICHARD NEALE, M.D. Lond.

60, Boundary-road, South Hampstead, N.W., February 10.

Dr. Chundar Coomar Dey, Calcutta.—Letter and enclosure received.

Ophthalmologist.—The gentleman is permanently blind. He was educated at St. Bartholomew's Hospital and admitted a member of the College in 1834. Very numerous and curious instances are recorded of the fact that the loss of one sense is often followed by the increased acuteness of others. Dr. Moyse, the well-known blind philosopher, could distinguish a black dress by the smell. Professor Upham, of the United States, mentions a blind girl who could select her own articles out of a basket of linen brought in by the laundress.

Ready Facilities for obtaining Qualified Nurses: America.—In some of the American cities a plan for securing the assistance of competent nurses in cases of accident and disease has been adopted, to which we may usefully draw attention. An office in connexion with the Training Schools for Nurses has been opened, in which is kept a directory, giving the names and addresses of all who have qualified at these institutions, and who can thus, without loss of time, be communicated with. The directory gives particulars as to the special qualifications of the nurses, and also whether they undertake cases of ordinary or contagious diseases, midwifery, accident, insanity, etc. A small charge is made for the information thus afforded. This ready, convenient arrangement is adopted in Boston and Philadelphia and other cities. In cases of emergency the advantages of such a registration are obvious.

A Graceful Recognition.—Lord Dufferin, in a letter to Lady Strangford, says:—"I cannot allow you to quit Egypt without placing on record, as Her Majesty's Ambassador, my very great sense of the services you have rendered to our sick officers and men, and to our wounded Arab prisoners, by the establishment of your Cairo Hospital. All the military authorities here are loud in your praise, and I understand that His Highness the Khedive and the members of his Government fully appreciate its usefulness."

Proposed Hospital at Burnley.—Miss Barnes, of Southport, formerly of Burnley, has signified her intention of giving £1000 to the proposed new hospital—£500 to the building and the remainder to the endowment fund. The donations at present amount to £6000, besides the gift of a site. The estimated cost of the proposed building is £10,000.

The Sanitary and Economic Association.—The headquarters of this Association are at Gloucester. A meeting—the first of a series of monthly meetings—was held a few days since, at which Lord Fitzhardinge, a director, presided. His Lordship explained the objects of the Association, which were, in brief, to apply science to the practical affairs of every-day life, and of the application of science to dairy work. His own dairy was worked by steam, and he found that the butter he was now supplying to Clifton and Bristol was far better than that made in the ordinary way.

Staff-Surgeon, Portsmouth.—Yes; Mr. Spencer Wells, the President of the College of Surgeons, was formerly in the Medical Service of the Royal Navy, as were Professors Owen and Huxley.

Culpable Negligence.—The reckless carelessness with which poisons are left lying about has lately been exemplified by several fatalities that have occurred through want of care on the part of persons in the habit of using them for particular purposes. The most recent instance of this kind was disclosed at an inquest on the remains of a little boy, four years old. It appeared that the mother had just removed to a new residence at the East-end, and had scarcely been in the house five minutes when the child took up what seemed a ginger-beer bottle, and drank some of the contents. It proved to be spirits of salt, which had been left in a room by a plumber who had been at work in the house. The child died from the effects of the poison. Verdict—Death by misadventure.

A Home for Scarlet Fever Convalescents.—The scheme initiated some time ago by Miss Mary Wardle to establish this institution has just taken a practical shape, the Committee having acquired a house situated on Brockley-hill, about ten miles from town. The house stands in four acres of ground, and is in an isolated position between Edgware and Elstree. It is hoped that the home will be ready for the reception of inmates in the spring or early in the summer. At present it is capable of containing from thirty to forty patients, but considerable alterations are contemplated.

Dr. Campbell.—Brighton owed much of its repute to the recommendation of Sir Lucas Pepys, Bart., who often resided there. He was physician to George III.; he married the Countess of Rothes, a Scotch peeress in her own right. He was one of the founders of the National Vaccine Board. The honorarium of £100 per annum, formerly granted to the Presidents respectively of the Royal Colleges of Physicians and Surgeons for attendance at the Vaccine Board, has been abolished.

A Coincidence.—The number of deaths registered in Liverpool during the week ending the 3rd inst. was 388, being the exact average of the last ten years.

Quaker Longevity.—The report has only just been published, from which it appears that the annual obituary of the Society of Friends for 1882 shows, concurrently with the growing prosperity of the Friends' Provident Institution, the steadily lengthening average of life among that body. The average life of those dying in the recent successive triennial periods was as follows:—In the three years ending 1850 it was fifty-two years; in 1860 it was fifty-three; 1870, fifty-two; 1875, fifty-four; 1879, fifty-eight; and 1882, fifty-eight years.

The Vindication of the Law.—The Plymouth Board of Guardians has resolved to prosecute a large number of persons in respect of neglect of vaccination.

F.R.C.S. Exam.—There are four members of the Council of the College of Surgeons now residing in the provinces, viz.:—*Mr. G. M. Humphry, Cambridge; Mr. L. Holden, Ipswich; Mr. E. Lund, Manchester; and Mr. W. Cadge, Norwich. The following recognised metropolitan hospitals are represented on the Council:—University College—Messrs. J. Marshall (Vice-President), J. E. Erichsen, and *C. Heath; Guy's—Messrs. *J. C. Forster (Vice-President), J. Birkett, and *T. Bryant; St. Bartholomew's—Sir James Paget, Bart., Messrs. *W. S. Savory, *H. Power, and T. Smith; St. George's—*Mr. T. Holmes; King's College—Messrs. *J. Wood and J. Lister; London—*Mr. J. Hutchinson; Middlesex—*Mr. J. W. Hulke; and St. Thomas's—*Mr. J. Croft. (Those marked with an asterisk are also members of the *Court* of Examiners.) On the *Board* of Examiners the following hospitals are represented:—St. Bartholomew's by Messrs. H. Power (Chairman), W. M. Baker, and J. Langton; St. George's—Mr. T. P. Pick; London—Messrs. W. Rivington and J. McCarthy; Middlesex—Mr. B. T. Lowne; and Charing-cross—Mr. E. Bellamy.

American Journalism: a Novelty.—The inmates of the "Insane Asylum" on Ward's Island are about to publish a weekly newspaper entitled the *Moon*. A cut of the Asylum and its name are to appear on the title-page—in fact, it is to be a "thoroughly insane newspaper, produced by self-confessed lunatics." The "self-confessed" part is the only novelty.

Inspection of Drains, etc., Edinburgh.—The annual report of the Burgh Engineer for Edinburgh, regarding the inspection of drains and cesspools in connexion with houses and tenements throughout the city, shows that, during the year 1882, 154 inspections were made. Defects were in most instances discovered, and in some, entire reconstruction or general repairs were required. In all, thirty-seven built tanks or cesspools had been done away with, and 857 yards of new pipe drains were laid, involving to the property-owners an outlay of £1000. It had generally been found that the public were not unwilling to adopt the recommendations made. Since the inspections were commenced in 1872, the cost of the work executed in necessary repairs, etc., and defrayed by the owners was £16,471.

Drayson.—Under the new Off-Licensing Act the Darwen magistrates have weeded the town of some thirty-four out of a total of seventy-two houses holding licences of this description.

Flogging in Irish Schools.—From the report of Mr. Alexander, the Government School Inspector for Omagh, it appears that the practical abolition of the rod in the Irish national schools has been attended with complete success. Mr. Alexander quotes on this point what he describes as "the valuable testimony of a sub-inspector," who says: "To those who remember the *régime* of most of our elementary schools some forty years ago, the severity of many of the masters, and the chronic disaffection of their pupils, the change is most gratifying. At a 'results' examination, where the failure of a pupil on any subject implies the loss of hard cash to their teachers, and chagrin on their part would be only natural, the inspector seldom hears a word of censure to the pupil. Natural dulness is no longer treated as a crime, but rather as a claim on the teachers' patience, forbearance, and sympathy."

Proposed Spoliation withdrawn.—The Eastern and Midlands Railway Company have withdrawn so much of their Bill as sought powers to construct a railway across Mousehold Heath, the valuable recreation ground immediately outside Norwich.

Our Milk-Supply.—The "milk farmers" of England have had a meeting in London to make public their complaints. The traffic in milk for London alone is estimated at nearly thirty millions of quarts annually, representing a very large sum of money. The statement was made that there is a difference of 100 per cent. in the prices paid to the producer and those paid by the consumer; moreover, that barely 10 per cent. of the produce is sold pure. Adulteration is profitable, and so it will flourish.

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Dixon.—The net total of £4300 from the receipts of the recent musical festival at Birmingham has been handed by the chairman of the festival to the General Hospital Committee. The next collection of the Hospital Saturday Fund in the town is fixed for Saturday, April 28.

A Lay Opinion on "Division of Medical Responsibility."—A lay contemporary writes:—"Mr. Roussel brings out the difficulties of the attending physicians clearly when he says that the responsibility of physicians is known to be the greater in proportion to the high social position of the patient, for which reason the physician first called in wished to diminish the individual amount of it by dividing it among ten or twenty persons. In such cases, however, the patient is not benefited, but rather the contrary, as no one stirs himself up to a decided step, no one carries out an operation, in consequence of which he might be publicly accused in case it failed to save the patient. If Gambetta had been a wounded labourer simply, brought into hospital, placed under the charge of a single surgeon, he would probably have recovered. He would then have been compelled to follow the directions of his physicians—he would have been obliged to submit to nursing, treatment, or operation without a voice in the matter. Now, however, the patient is dead, perhaps simply on account of the reasons that rendered the treatment difficult—that he was Gambetta, and that he was treated by a dozen medical authorities from Paris."

Sanitary Certificates, Brighton.—The Brighton Town Council has approved of the decision by one of their committees to refer to the town clerk and solicitor a suggestion laid before them by a firm of house-agents. With the view of giving impartial evidence on the sanitary state of the houses visitors to the town may wish to hire, the firm has suggested that an official should be invested by the Corporation with authority to issue certificates of the wholesomeness of such houses as may have been inspected and found in proper condition.

Unswerving.—The question of supplying alcoholic drinks to the workhouse inmates was discussed by the Leek Board of Guardians at considerable length, and it is said the medical officer, in reply to a resolution requesting him to permit the use of spirits in very urgent cases, promised to use them only when withholding them would shorten life or retard convalescence.

The National Smoke-Abatement Institution.—The elaborately detailed report of this Institution clearly evidences the public interest on the question of smoke abatement, attested by the fact that 116,000 and 32,000 persons respectively visited the exhibitions at South Kensington and Manchester. The Committee which organised these exhibitions has now formed itself into the permanent Institution, as designated under the above title. In 1845 the investigations of a Select Committee of the House of Commons resulted in legislation with respect to factories, bakehouses, and other businesses, which has materially lessened the nuisance. Voluntary action has already, and to some extent, been taken by the introduction of domestic grates and kitchen stoves which consume their own smoke. The report alludes encouragingly to the prospects of gas as a heating and cooking agent, of the possibility of further legislation on the question, and of the advantages of the use of anthracite coal. The problem proposed to be solved is, no doubt, a difficult one; but science makes such rapid strides, that by steady, continuous, and well-directed efforts the nuisance may reasonably be expected to be reduced in time to a minimum, if not entirely removed.

Grocers and Licensed Victuallers: a Legal Point.—The Congleton Licensed Victuallers' Association are about to obtain an opinion from the Attorney-General as to a doubt whether the limit of strength at which spirits can be sold under the Food and Drugs Act applies to grocers as well as to licensed victuallers.

Extraordinary Mortality from Whooping-cough and Measles.—It was stated at a meeting held at Manchester last week, in connexion with the Children's Hospital and Dispensary, that during the last year 500 children had died of measles or its complications in Manchester and Salford, and that during the last two years 855 children in the same city and borough had died of whooping-cough. Nearly two hundred cases of scarlet fever had been under treatment at the Hospital alone in the past year. In the space of fourteen months 680 cases of whooping-cough had been dealt with at the Hospital. The medical staff of the Hospital report that the poorer classes in Manchester and the surrounding districts are lamentably deficient, both in knowledge and means, in the matter of bringing up their children.

The Folly of being one's own Doctor.—A cabman, convicted at the Marlborough-street Police-court for being drunk and incapable while in charge of his cab, and fined 20s., assured the magistrate, in his defence, that all arose through the folly of attempting to be one's own doctor. He thought the remedy for the complaint he was suffering from was stimulants, but he no doubt had prescribed for himself too much.

The Public Health Act.—On behalf of the Board of Health for Dalton-in-Furness application was made at the new Courts of Justice for a rule *nisi* for an order directing the Justices of Lancashire to hear and determine a summons against an inhabitant for a nuisance under the Public Health Act. The Justices had declined to hear the summons on the ground that the Clerk of the Local Board had no authority to proceed on his own responsibility against the defendant for disobedience to an order of the Justices. The rule was granted.

A Prudent Precaution.—Dr. J. B. Russell, the Medical Officer of Health, Glasgow, in consequence of an outbreak of small-pox at Cathcart, which had originated among the workers at a paper-mill in the district—the infection had been traced to a quantity of foreign rags which had been worked up at the mill—has recommended (to prevent the recurrence of the disease) that the *employés* shall be revaccinated.

Inquests for the Westminster Division of the County of Middlesex.—During the year 1882 for this division there 979 cases for inquests reported. In 234 cases, after investigation, the Coroner, Dr. Diplock, did not consider an inquiry necessary, and he held in the year 765 inquests, which were classified, in his annual return to the Home Office, as being 291 on persons under one year of age, 29 above one year and under sixteen, and 434 above that age. The average cost of each inquest was £1 18s. 2d.

New Infirmary, Rochdale.—This building, which has just been opened, comprises very commodious accommodation, and is the gift of Mr. Thomas Watson to his native town, and has been erected at considerable expense.

The London Water-Rates Question.—The St. Pancras Vestry has resolved to indemnify Mr. Dobbs to the extent of one hundred guineas against any costs which he may incur in the appeal to the House of Lords in the case of Dobbs *v.* the Grand Junction Waterworks Company; and further, the Vestry will indemnify him to the extent of one hundred guineas against any costs which may be incurred in such appeal.

"A Vaccination Inquiry," Derby.—With regard to this inquiry, lately noticed in these columns, it will be remembered that the Local Government Board, in consequence of their inspector's report touching a case of vaccination, recommended the Board of Guardians to call upon the vaccination officer to resign. A public memorial against the inspector's decision was subsequently forwarded to the central authority, but the latter have replied that they have no alternative but to repeat their recommendation.

A Public Mortuary, Paddington.—The Vestry has decided to erect a public mortuary for the parish, either on the site of the present deadhouse or elsewhere in the disused churchyard. The new building is to be provided with accommodation for the reception of infectious and non-infectious cases, a room for post-mortem examinations, and a coroner's court, waiting-rooms, and lavatory. The estimated cost is £1200.

COMMUNICATIONS have been received from—

Dr. Crichton Browne, London; The Registrar of the Apothecaries' Hall, London; The Secretary of the Royal Institution, London; Dr. A. T. Thomson, Glasgow; Messrs. C. Griffin and Co., London; Dr. Maclagan, London; Dr. Neale, London; Dr. Irwin, Liverpool; Dr. Horace Dobell, Bournemouth; Dr. F. W. Pavy, F.R.S., London; Mr. F. Sheblock, London; Messrs. H. and J. Cooper, London; The Secretary of the Obstetrical Society, London; The Secretary of the Australian Wine Company, London; Mr. J. T. W. Bacot, Seaton; Rev. J. H. Timins, West Malling; Mr. J. Chatto, London; The Honorary Secretary of the Medical Society of London; The Honorary Secretary of the Pathological Society, London; The Secretary of the Royal National Hospital for Consumption, Ventnor; The Registrar-General for Scotland, Edinburgh; Mr. Shirley F. Murphy, London; Dr. Sidney Coupland, London; Dr. W. Alexander, Liverpool; Dr. J. Hosack Fraser, Birmingham; The Secretary of the National Provident Institution, London; Dr. W. H. Pearce, Plymouth; Dr. Robert Saundby, Birmingham; Dr. J. W. Moore, Dublin; The Honorary Secretary of the Poor-Law Officers' Association, London; Brigade-Surgeon Alfred Clarke, M.D., Sandhurst; Mr. W. Winslow Hall, Elgin; Mr. Augustus J. Harvey, London; The Secretary of the Napper Testimonial Fund, London.

BOOKS, ETC., RECEIVED—

Report on the Health, Sanitary Condition, etc., of Kensington—The New Sydenham Society's Lexicon of Medicine and the Allied Sciences, by Henry Power, M.B., and Leonard W. Sedgwick, M.D., part vii.—The Works of the late J. Warburton Begbie, M.D., LL.D.—History of Rome and of the Roman People, by Victor Duruy—Traité Pratique des Accouchement, par le Dr. A. Charpentier—The Principal Southern and Swiss Health Resorts: their Climate and Medical Aspect, by William Marcet, M.D., F.R.S.—Annual Report of the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster—Notes from a Sunbeam, by W. A. Hollis, M.D.—Annual Report of the Torquay Local Board for 1882—Official Report of the Smoke Abatement Committee for 1882—Rice, by H. B. Proctor—Clinical Observations on Two Fatal Cases of Enteric Fever, etc., by R. S. Archer, A.B., M.B., M.Ch.—Rheumatism, Gout, and some Allied Disorders, by Morris Longstreth, M.D.—Diseases of the Rectum and Anus, by Charles B. Kelsey, M.D.—Proceedings of the Royal Medical and Chirurgical Society of London—The Treatment of Acute Rheumatism, by Isambard Owen, M.D.—Prevention of Insanity, by Nathan Allen, M.D., of Lowell—Experimental Research upon Animals, by F. Royston Fairbank, M.D.—Knight's Annotated Model By-laws.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Deutsche Medicinal-Zeitung—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Medical News—Alienist and Neurologist—Philadelphia Medical Times—North Carolina Medical Journal—Archives of Medicine—Journal de Médecine—Practitioner—Veterinarian—Boston Journal of Chemistry—New York Medical Journal—Physician and Surgeon—Sanitarian—Australasian Medical Gazette—Lavoz de Hipocrates—Nottingham Journal, Feb. 14.

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ORIGINAL LECTURES.

GULSTONIAN LECTURES ON STERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London, February, 1883.

By J. MATTHEWS DUNCAN, M.D., F.R.C.P.L.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, etc.

LECTURE I., PART I.—ITS NATURE AND AMOUNT.

MR. PRESIDENT, VICE-PRESIDENT, AND GENTLEMEN,—Sterility is generally considered to imply the condition of a woman who, under ordinary favourable circumstances for reproduction, does not bring forth a living and viable child. But the term is used with many other meanings, and I shall not state a definition, because I have no right or power to enforce adherence to it, and because, meantime, it is indispensable to have the word for various uses, and with the use of appropriate qualifying words ambiguity may be avoided.

Fecundity is a condition unique in gynæcology in this respect—namely, that it requires the combined matter and forces of two duly developed individuals to produce it. Sterility, therefore, may depend on error in one or in other, or in both.

The sterility of man as compared with that of woman is a simple matter. It depends on failure to produce semen, the production of semen more or less incomplete or imperfect, or of morbid semen (that is, semen conveying disease), or on failure to deposit the semen properly. With a view to investigation, the semen can be subjected to chemical and microscopical analysis, and the depositing organ can be examined and the conditions of deposition can be to a great extent ascertained. In woman the co-ordinate substances and functions are hidden and much more complex, and in her there are great organs and functions which have in the male no equivalent representative.

In the present lectures the sterility of man is not a subject for consideration, but one point in it cannot be passed over without some discussion and estimation—namely, its numerical amount. Much of our knowledge of the sterility of women consists in numerical statements of amount under various circumstances, chiefly in marriages; and all such statements have a positive value for the physician, and still more for the political economist. But it is plain that, inquiring into the amount of sterility due not to unions but to women, we must exclude what is due to the male. Some good notion of the amount of this latter sterility is therefore indispensable.

Several investigators have attempted the solution of the question in recent times; but I refer only to the new work of Gross on Male Sterility. "It is not at all uncommon (says he) for physicians to assume that a man who is potent, and who is able to ejaculate, is capable of procreating. As a result of the omission to examine the emitted fluid, and carefully to explore the male organs, little is known of the relative frequency of sterility in the two sexes; and gynæcologists, with the exception of those mentioned below, do not appear to have made any contributions to the solution of this important subject. I have been able (he continues) to collect 192 cases in which examination of both the husband and the wife demonstrated that the former was at fault in thirty-three, or in 17 per cent. Of this number Manningham records one in thirty; Pajot, seven in eighty; Mondot, one in ten; Kehrer, fourteen in forty; Courty, one in ten; Noeggerath, eight in fourteen; and I myself have found that the male was deficient in one example in eight. The cause of the sterility was azoospermism in thirty-one, and aspermatism in two. These facts show that the husband is at fault in about one case out of every six."

The matter is, however, still in a very insecure state, as may be shown by the statement of facts and considerations which must have important bearings on the question, but which have, so far as I know, been entirely neglected. Thus, it is assumed that by examination of the male and female we can decide whether one or other or both are at fault. Now, no doubt impediments or complete barriers to reproductiveness may be found in individuals of either sex; but in the great majority of cases of sterility no impediment or barrier can be discovered by the most careful and minute investigation; and this is verified by comparative observations in animals and in plants, wherein such inquiries can be carried to a completeness not attainable in the case of men and women. It is held that the man is not at fault if he duly ejaculates microscopically perfect semen, but this is certainly not a warranted conclusion, as facts in human and comparative physiology, to be hereafter stated in these lectures, will show. In making estimates of male sterility, no account is taken of the fact that the faulty condition of a man's semen may be only temporary. It is forgotten that sterility may be due to faults in the semen, even though conception has taken place, and pregnancy been established; the fœtus fading and dying prematurely from inscrutable causes, or being monstrous and not viable, or perishing from disease implanted in it by the male. It is forgotten that both parents may be simultaneously at fault, and this with or without discoverable cause, generally without discoverable cause.

Speaking of the sterility induced by domestication and that of hybridity, Darwin remarks that in both the sterility occurs in various degrees, and in both the male element is most liable to be affected, but sometimes the female more than the male. In another place, speaking of the liability of plants to be affected in their fertility by slightly changed conditions, he says it is the more remarkable, as the pollen, when once in process of formation, is not easily injured; a plant, he adds, may be transplanted, or a branch with flower-buds be cut off and placed in water, and the pollen will be matured. Pollen also, when once mature, may be kept for weeks, or even months. The female organs are more sensitive, for Gärtner found that dicotyledonous plants, when carefully removed so that they did not in the least flag, could seldom be fertilised; this occurred even with potted plants if the roots had grown out of the hole at the bottom.

Whatever may be the causes of sterility in women, there is a universally prevalent belief, which no investigations have shaken, that in the human species the paramount source of sterility is in the female. I know no scientific statement worthy of confidence as to the comparative influence of the two sexes; and the data of Gross, which I have quoted, contributing as they do towards the settlement of this question, are of importance and value in themselves, though they are far from substantiating the conclusion as to the amount of male sterility which he enunciates.

Of the sterility of women in whom, from gross and well-known causes, conception is impossible, these lectures take no account. Among such are cases of absence of uterus, and of imperforate vagina—conditions so rare that, in the present imperfect state of our knowledge, they do not affect statements as to women generally.

In describing sterility it is common to qualify it as absolute or as relative. No author on human sterility uses the term, without qualification, as including relative sterility. But when used without qualification it includes at least absolute sterility.

Absolute sterility, sometimes called congenital, including all cases where there is no child, no miscarriage, no abortion however early, comprises two sets: first, those where there is no conception; and, second, those where the impregnated ovum disappears in the tube or in the uterus without leading to what is recognisable as an early abortion. Some cases of women aborting every month are known; there is discharge of a highly developed decidua vera every four weeks, and there may be no trace of an ovum in it; and this monthly discharge is arrested by suspension of cohabitation. But there may be many abortions earlier than this without these conditions, and of such practically nothing is known; they are classed along with those cases of absolute sterility where it is supposed that no conception takes place. In cases where there is no conception there may be no possibility of conception from the failure of the ovary to prepare and mature an ovum.

These varieties of absolute sterility are well illustrated

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and easily made out in the history of animals, and still more of plants.

Sterility, not absolute, implies the failure to produce a viable child, while there may be evidence of conception—that is, of the commencement of the production of an embryo. A woman may be sterile because the ovum perishes in utero or becomes unnaturally developed, as in myxoma of the chorion and some monsters; and this premature death or unnatural production may be owing to ovuline imperfections derived from the male or from the female. A woman may be sterile because the womb does not afford to the ovum due accommodation or nourishment, or either; or because the womb ejects it prematurely from its cavity; and these unnatural conditions and events may arise from either local or constitutional causes.

In absolute sterility and in sterility not absolute there is no production of a viable child, no addition made to the population; and all such sterility is sometimes, especially by economists, considered absolute; for indeed, in the point of view of population, it is so. But it appears to me desirable to restrict the term absolute sterility to those cases where there is no evidence even of conception. Sterility indicates a larger group, including that of absolute sterility, and all those other cases where no addition is made to the population.

There is another great department of sterility no less important than the kinds just mentioned, where a woman may produce one or even several living children, but in number not according to her conditions of age and length of married life. This is called relative or acquired sterility. The gardener may have a plant producing not a single flower, absolutely sterile; or producing flowers and setting seeds, but bringing none to maturity, or if to maturity not to perfection—a sterile plant which cannot continue its species; but he may also have a plant which produces flowers and matures perfect fruit, but in such small number as not to save it from the charge of sterility—and this is relative sterility. In woman it is often seen in cases of production of a single child—an only-child sterility, if such a seeming contradiction in terms can be permitted, of which we often hear. A woman may be relatively sterile from producing, according to her age, only a small number of children with ordinary intervals between successive births, or from the number being rendered small by the extraordinary delay or loss of time between successive births, and in other ways.

All kinds of sterility may be congenital or may be acquired. It is therefore undesirable to use these terms as indicative of distinctions. For instance, an absolutely sterile woman, one who never conceives, may be so not merely from congenital causes, but also from disease acquired in advanced life; or, again, a relatively sterile woman may be so not from an acquired cause, but from conditions which were congenital in her.

The amount of sterility in women (including the relative kind) is found by counting the number of productive and of unproductive marriages of women within the reproductive age, or from fifteen to forty-five. Lever, giving no numerical details, says that 5 per cent. of married women are wholly unprolific. West found the average of sterile marriages among his patients at St. Bartholomew's Hospital to be 1 in every 8·5. Hedin, a Swedish minister, noticed that in his parish of 800 souls one barren woman is not met with for ten fertile. Frank and Burdach roughly state that only one marriage in fifty is unproductive. Simpson made an inquiry into the sterility of married women in Grangemouth and Bathgate. Of 210 marriages in Grangemouth 182 had offspring; 27 had none; or about 1 marriage in 10 was without issue. Of the 27 unproductive marriages all the subjects had lived in wedlock upwards of five years, and in all the female had been married that period before she reached the age of forty-five. Of 402 marriages in Bathgate 365 had offspring; 37 had none; or about 1 marriage in 11 was unproductive. There were at the same time living in the village 122 relicts of marriages, and of these 102 were mothers; 20 were not mothers; or about 1 in 6 had no family. In all, of 467 wives and widows 410 had offspring; 57 had none; or about 1 marriage in 8 was unproductive. Of these last 57, 6 had not been five years married, and there were other 6 above the age of forty-five when married. If we subtract these 12 we have of 455 marriages 410 productive, 45 unproductive, or 1 in 10⅛ without issue. Simpson found that among 495 marriages of British peers which had lasted five years or more, and in which the husbands were under fifty-seven years of age, 81 were unproductive, or 1 in 6⅛. Ansell found that among 1919 marriages of spinsters in the upper classes at an average age of twenty-five years, and not counting as childless those who had merely stillborn children, there were 152 without issue, or 8 per cent., or nearly 1 in 12. In this collection all the parents survived the childbearing age, and he considered that there was no further chance of childbearing if the female was

Over 48	and had had no child for	2	years.
„ 47	„ „	3	„
„ 46	„ „	4	„
„ 45	„ „	6	„
„ 44	„ „	8	„
Under 44	„ „	10	„

I have taken the registers of Edinburgh and Glasgow for 1855, and have found the number of first living children in that year. With this I compare the number of marriages in that year. It is evident that the number of first children only should be counted, for they indicate all the wives who are not sterile. If one living child is born to a marriage, that marriage is not sterile. Further, it is evident that, although the first births in 1855 will not all pertain to the women married in that year, it may be assumed that if the marriages be nearly the same in number for a few contiguous years, the first births in one year will give the fertility very accurately of any of the contiguous years. From this fertility the sterility can be easily computed. Now, in 1855 there were, in Edinburgh and Glasgow, 4447 marriages, and 3722 first deliveries of living children, leaving 725 marriages sterile, or 1 in 6·1. But in these figures are included 75 marriages which did not take place till after the women had passed forty-four years of age, and these will damage the physiological value of the statement, as these 75 women could not be expected to be fecund. Of women between the ages of fifteen and forty-four inclusive there were married 4372; among women of the same ages 3710 had first living children, leaving 662 marriages sterile, or 1 in 6·6. In other words, 15 per cent. of all the marriages between fifteen and forty-four years of age, as they occur in our population, are sterile. But this final estimate from the Edinburgh and Glasgow data has to be corrected for the dead born, these being not counted.

We have thus fairly good statements of the amount of sterility which are not very different from one another:—

Patients in St Bartholomew's Hospital	1 in 8
Inhabitants of Grangemouth	1 „ 10
Inhabitants of Bathgate	1 „ 10
British peers	1 „ 6⅛
Upper classes (Ansell)	1 „ 12
Inhabitants of Edinburgh and Glasgow	1 „ 7

Omitting that of British peers, the highest estimate is the last, and it is probably the only one in which living children are used, to the exclusion of dead, as the index of fecundity. Were dead children included, there would be a great reduction—at least 4 per cent. The lowest estimate of sterility is that of Ansell. In it a woman having a stillborn child is held as fertile, and the women are the very best in the community, those living in easy circumstances and making use of the protection of life insurance; were it otherwise, the estimate of sterility would no doubt be higher. We have thus estimates of sterility varying from one in seven to one in twelve, and may have considerable confidence in laying down one in ten as very nearly the true amount.

I know no estimate of those who are absolutely sterile—that is, who do not conceive, or who, if they do conceive, give birth to not even an abortion. But there are a large number in the better classes, for within the last five years there have consulted me at my house, mostly on account of sterility, 504 absolutely sterile women, married between the ages of fifteen and forty-five, and of these 337 were more than three years married. Though this shows a large number in existence, it gives no ground for an estimate of frequency among the married. The following table gives a classification of these 504 married and absolutely sterile women, according to age at marriage and number of years married:—

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TABLE I.—*Case-Book Table of Sterility.*

Age at marriage.	Years married.							Totals.
	Und. 3.	4 to 8.	9 to 13.	14 to 18.	19 to 23.	24 to 28.	29.	
15-19	12	19	15	4	7	2	1	60
20-24	70	66	37	24	18	9	...	219
25-29	47	51	20	8	8	...	...	134
30-34	26	20	8	4	1	...	...	59
35-39	6	13	4	...	...	...	...	23
40-45	6	3	...	...	...	...	...	9
Totals ...	167	172	84	40	29	11	1	504

It is certain that all populations are relatively sterile; and the economist makes many estimates—such as the deficiency of offspring of the actual marriages, or the deficiency of the actual births—below what they might have been had all the women in the population been married at the most favourable time for child-bearing. The solution of these and similar questions is an object of greater interest to the statesman than to the physician. They demand, for their solution, much calculation, and need not be entered on here.

The degree or amount of relative sterility of the average individual varies, of course, according to the age at marriage, and it is not to be estimated by the deficiency below what is possible in child-bearing, but below the average amount of fertility in marriages at the various ages, or below what is not excessive, what can be done without injury to the average mother's health.

The average individual woman must be found and considered, for individuals vary extremely. It is not a rare observation, and I have one before me, where the easy birth of a single child exhausted the fecundity of a healthy woman of twenty-five years of age at the time of the birth, and completely ruined her general health during the remaining child-bearing period of life. This woman was examined by many physicians, and all concurred in finding no cause of the weakness and inability but the child-bearing. On the other hand, Ansell records the case of a woman married at twenty-one, who in twenty-seven years gave birth to twenty-five children, who all reached adult age, and the mother died of old age at eighty-eight.

Only-child fertility or one-child relative sterility occurs in two forms: as an exhaustion of the fertile energies, leaving the general bodily health vigorous; or as an exhaustion of both sexual power and general constitutional strength. It is a relative sterility which is familiar to the public from its frequency and its importance in social respects. Ansell, in 1767 fertile marriages, with a mean age at marriage of about twenty-five years, and allowing ample time for the exhibition of fecundity, as we have already stated, found 131 cases of one-child relative sterility, or one in every thirteen fertile marriages. The degree of this relative sterility may be approximated by comparing it with the average fertility of the same women, which was nearly six; or, in other terms, the relative sterility of these 131 only-child fertile women was 655. Instead of having 131 children, they would have had 786 children if they had even reached the average fertility of their 1636 sisters, and they would have had still more if they had reached a normal fertility instead of this average fertility, meaning by normal fertility what they might have had without injury to health, judging them by other women.

EXTIRPATION OF THE LARYNX.—Surgeon-Major Dr. Macleod brought under the notice of the Calcutta Medical Society (*Indian Medical Gazette*, January) an important case in which, a month before the meeting, he had extirpated the larynx of a Hindoo, thirty-five years of age, on account of a growth springing from the right side of the larynx, and filling up the rima glottidis. The chief difficulty lay in the after-treatment of the case, which was ably managed by Assistant-Surgeon Devendra Nath Dey and relays of medical students. Full details of the progress of the case are given in the report, showing this to have been thus far satisfactory. The microscopical examination of the tumour rendered its malignant character doubtful; for while the nucleation of the cells in the main would indicate its benignancy, their large size, evidence of rapid growth, and their tendency to form circular nest-like bodies, suggest malignancy.

THE HUNTERIAN ORATION.

Delivered at the Royal College of Surgeons of England, February 14, 1883.

By T. SPENCER WELLS,
President of the College.

(*Concluded from page 177.*)

I MUST now obey the other direction in the trust deed, and endeavour to express something as to the "merits in comparative anatomy, physiology, and surgery" of John Hunter. The direction seems a happy one, for Hunter based his surgery upon physiology, and his physiology upon comparative anatomy. What can more strikingly illustrate this than his greatest improvement in practical surgery?—the abolition of amputation for popliteal aneurism, and the practice of tying the artery in a sound part at a distance from the seat of disease. This has already saved thousands of human lives; and it has been well said that if Hunter had done nothing else, "on this account alone he would have a right to be classed among the principal benefactors of mankind."

One who perhaps more than any other of our contemporaries resembles Hunter in completing the union of thought with action—the wisdom of the philosopher with the skill of the surgeon—Sir James Paget—says: "It was really a splendid achievement; and its utility is not half told by counting the thousands of lives that it has saved. Its higher value is that it still abides as a great testimony of the power of the scientific mind in surgery. I think it has done more than any other of Hunter's works to make not only surgeons, but surgery, scientific." And observe how comparative anatomy and physiology led to surgery—how thought and experiment prepared the way for action. It was probably without any idea of surgery that Hunter was first led to investigate the phenomena of the annual growth and shedding of the antlers of the stag or buck. But he did so, and tied the artery which supplies the growing antler and the soft covering called the "velvet," which conveys the vessels supplying the material of growth. Pulsation in the vessels in the velvet ceased, and the antler soon became colder. A week afterwards the vessels were again pulsating, the velvet was warm, and the antler growing. The buck was killed, the tied artery found to be obliterated, but the circulation was carried on by vessels above and below the ligature, ordinarily very small, but enlarged under the new conditions.

Now, I am well aware that some modern misanthropical zoophilists have said that Hunter had no right to make this experiment—that human morbid anatomy had taught him that when the current of blood ceased to flow into an aneurismal sac, the blood clotted and was absorbed. But it was quite indisputable that Hunter was doubtful whether, after the supply of blood to a part had been cut off by obliterating the main arterial trunk, the circulation would be kept up by other vessels, or the part would die. And it is certain that his experiment on the deer removed his doubts, for, as Professor Owen tells us—there was a coachman in St. George's Hospital, with popliteal aneurism, who had consented to amputation. But Hunter thought that if the anastomosing vessels in the man would carry on the circulation after obliteration of the femoral artery, as they did in the antler of the buck after obliteration of the carotid, he could cure the aneurism and save the limb. Professor Owen emphatically says that Hunter explained to his assistant and pupils the results which he believed would follow a repetition on the man of his experiment on the deer. And, just as he predicted, there was the same stopping of pulsation, the same cooling of the part from which the supply of blood was cut off, the same return of natural warmth, and in six weeks the man walked away cured. This account, Professor Owen tells me, was given to him by Mr. Clift.

In this and two subsequent cases artery and vein were both tied; but in his fourth case Hunter tied the artery only, not the vein. This was in the year 1787. The patient was then thirty-seven years old. He lived till he was eighty-six, and died in 1837. At his death, Mr. Wormald obtained the limb from his widow, and found the femoral vein pervious,

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the artery obliterated, the tortuous anastomosing vessels as you see them in this specimen which Mr. Wormald presented to our museum, and the aneurism represented by the small calcareous body not larger than a filbert.

This association of surgery, physiology, and comparative anatomy is manifest in the leading idea or plan of Hunter's museum, which is to show each step from the most simple conditions in which life can be traced upwards to man himself. We are told that, observing that in the advanced stages of successful incubation eggs did not putrefy, he was first led "to recognise *life* as a *power*, and *organisation* as the mechanism by which life operates." Observing some snails drowning, and noticing the effects produced upon lizards if they were brought too early in winter out of their lurking-places, he ascertained some of the facts "which guide and encourage us in our attempts to restore suspended animation." Here we see the man who both observes and thinks. "For one person who can think," says Buckle, "there are at least a hundred who can observe: an accurate observer is no doubt rare, but an accurate thinker is far rarer." Can anyone look up to this portrait of Hunter by Reynolds, and not agree with Lavater, who, when he saw it, said, "This man thinks for himself"? Hunter used to say that "he delighted in thinking"; and the great artist, who is said to have peculiarly excelled in *painting the mind* of his sitters, has caught Hunter in the attitude of meditation. In that absorbed and upward gaze "from earth to heaven," "as imagination bodies forth the forms of things unknown," we can trace the hoped-for explanation of some of the mysterious phenomena of nature by the application of some great leading principle, the elucidation of some physiological problem, the unravelling of some as yet unfolded revelation. Home, and others who knew Hunter, have said that this portrait gives a very faithful representation of his countenance, person, and manner. While painting the portrait, Reynolds induced Hunter to have a cast taken from his face. From this cast, which has been preserved in our museum, and is here before you, Flaxman's marble was sculptured. He and Chantrey studied both cast and portrait, for the College is fortunate in possessing two busts of our great master, as well as the full-length sitting figure in the museum by Weekes. And we have a second portrait, by Sir Nathaniel Holland, which was said by Mr. Clift, and by Sir John Dorat, Hunter's last surviving pupil, to be better as a mere likeness than the idealised portrait by Reynolds. Perhaps Reynolds's portrait is more suggestive of the man who thought, and Flaxman's bust of the man who observed, experimented, acted.

Though Hunter loved to think, he followed Bacon in insisting on observation and experiment as the only foundations of true science. "If you check experiment you stop discovery" is one of his aphorisms. And he once wrote to a friend, "I think your solution is just. But why *think?* Why not try the experiment? Repeat all the experiments as soon as you receive this, and they will give you the solution." Thus in Hunter we find the mind which investigates the laws of disease, and the hand which improves the art which cures disease; not only philosopher and pathologist, but surgeon—as rare a combination as that of a profound jurist and an eloquent advocate—an agricultural chemist and a farmer—an astronomer and a pilot. We have a combination of Faraday investigating the laws of electricity and magnetism, and Swan or Edison applying the knowledge in the electric lighting of towns.

It is unnecessary to repeat now what Mr. Wormald proved in this place twenty-five years ago, that Hunter was well aware of the possibility of curing aneurism by pressure on the artery as well as by tying it—in this, as in so many other instances, anticipating recent improvements in practice supposed to be new. Just as we find that modern views of phlebitis and pyæmia had been advanced by Hunter; and Burdon Sanderson, in his lectures on Inflammation, asknowledging that "we find ourselves once more coming back to the notions, which at one time were thought obsolete, of the great father and founder of physiological pathology"; so we may be certain that Hunter foresaw much of that progress in abdominal surgery in which it has been my own pride and pleasure to assist. In 1762, William Hunter distinctly suggested that it might be advisable to expose an ovarian cyst by a small incision—"tap the bag and draw it out." In 1785, John Hunter said, "I cannot see any reason why . . . . we should not make an opening into the abdomen and extract the cyst itself. Why should not a woman suffer pain without danger, as well as other animals do?" The influence of Hunter's teaching upon John Bell, of Bell upon McDowell, and the history of ovariotomy since McDowell's first operation, is a theme which I have treated at length in this theatre and elsewhere; and however strongly tempted to enlarge upon it, and upon the more recent extensions of peritoneal surgery—the removal of uterine tumours, of the spleen, of one kidney, of hydatids, of gall-stones, of omental and mesenteric tumours, of fibroplastic and fatty tumours of various origin from the abdomen, of the entire uterus, or of part of the uterus with the fœtus of an extra-uterine fœtation, of the pylorus, and of portions of diseased intestine—all operations which have been performed with increasing success. I regret very much that I have not time to do more than point to the preparations on the table, which show how our younger hospital surgeons are assisting the most recent advances of abdominal surgery. Mr. Treves's specimens show how perfectly union between two portions of intestine may be effected after the removal of an intervening diseased portion; and the three large gall-stones removed from the gall-bladder of a woman in the Samaritan Hospital by Mr. Meredith, are gratifying evidences of boldness and skill. Both Mr. Treves and Mr. Meredith, at my suggestion, were desirous of experimenting on some of the lower animals as to the best mode of uniting divided edges or surfaces of peritoneum. But the trouble and delay of the present system of licensing has hitherto restricted these operations to men and women. I wish I could say more of this; but I am compelled to devote the very few minutes allotted to me to a hasty sketch of what we hope may be gained in the not very distant future by combined association for the advancement of medicine, in its higher sense, by research.

And first let me say with how much pleasure I can state that the Association lately founded under the auspices of all the leading men in our profession in the United Kingdom has already begun useful work. On the part of the Association, Mr. Watson Cheyne visited Dr. Koch at Berlin, and Professor Toussaint at Toulouse, and has since carried on investigations, the results of which enable him to explain their opposite statements with regard to the micro-organisms associated with tubercle. Mr. Cheyne has also made experiments with reference to the specific nature of tubercle, which tend to confirm the view of the specific nature of tubercle first promulgated by Villemin, and so strongly supported by Koch's observations. Mr. Cheyne's further observations lead him to the conclusion that the bacilli of tubercle multiply by preference in the epithelium of the alveoli of the lungs, and lead to inflammatory exudation in the walls of the alveoli. According to the number and rapidity of growth of the bacilli in the alveoli, we have the two conditions of fibroid phthisis or caseous pneumonia, which by many have been looked on as different processes. On this view is also explained the difference in the effects produced by these organisms in man and rodents. Rodents, when inoculated subcutaneously, always develope general acute tuberculosis. That disease is extremely rare in man when compared with the frequency of pulmonary tuberculosis; because in man the bacilli are not inoculated, but are received into the bronchial tubes by inhalation, and their entrance into the circulation is prevented in the first instance by the inflammatory changes which occur around the alveoli in which the bacilli grow. If man were inoculated as we inoculate rodents, all analogy would lead to the conclusion that acute tuberculosis would probably be developed. Mr. Cheyne is carrying on these researches, the animals experimented on being kept under exceptionally favourable hygienic conditions, and it is not too much to hope that they may lead to a successful mode of treating phthisis. However strongly tempted to say more on this immensely important subject, I must leave it for a future Hunterian Orator, and pass from tubercle and its bacilli to other diseases, more commonly classed as contagious or infective.

Of all the discoveries of modern times, perhaps the most important is that of the dependence of fermentation and putrefaction upon microscopic organisms; and of a number of communicable diseases upon specific *microbes*—a convenient word to include the micrococcus, the bacterium, the bacillus, the vibrio—microzoa or microphytes, whichever they may be.

At Cambridge, eighteen years ago, I attempted to show the relation between the work of Davaine and Pasteur, and

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the causes of excessive mortality after surgical operations. Allow me to read one sentence from my address in 1864, partly to allude to advances gained since that year, and partly to point out some lines of future research. I said: "Applying the knowledge for which we are indebted to Pasteur of the presence in the atmosphere of organic germs, which will grow, develope, and multiply, under favourable conditions, it is easy to understand that some germs find their most appropriate nutriment in the secretions from wounds, or in pus, and that they so modify it as to convert it into a poison when absorbed—or that the germs, after development, multiplication, and death, may form a putrid infecting matter—or that they may enter the blood and develope themselves, effecting in the process deadly changes in the circulating fluid."

In the history of this discovery we find Davaine discovering bacteria in the blood of animals suffering from charbon. Then, having studied Pasteur's researches on butyric fermentation, Davaine found that he could propagate a fatal disease, not only by a purulent virus, but by a drop of infected blood. It was left for Pasteur to separate and identify the microbe, to propagate it through successive generations, and to arrive at a general law that a whole series of contagious diseases could be produced artificially, and that the microbe which was the cause of each disease could be so modified by successive cultivation, some with, some without access of oxygen, as to be rendered almost inert—nay, more, even to protect the recipient for a time from a second invasion, and secure immunity to the offspring of infected mothers.

I must not go back to the history of vaccination as a protective against small-pox, nor remind you that Jenner was a pupil of John Hunter, nor refer to many of the letters which passed between them; but I may notice a resolution of the Council of this College carried sixty years ago—"not to inoculate small-pox, but to pursue, and to the utmost of our power promote, the practice of vaccination." We persevere in this course. We require every candidate for our diploma to produce proof of practical knowledge of vaccination. We support the law which protects the many from the danger to which a few ignorant opponents of compulsory vaccination would expose the whole population. And as we glory in the life-saving work of our countryman, Jenner, so we welcome the teaching of the illustrious Frenchman, Pasteur, and his extension of the protective influence of vaccination to other diseases—every year adding to the list of new vaccines which protect man and animals against virulent diseases.

When I first thought of the subjects for this oration, I had a very exaggerated idea of what it might be possible to do in sixty minutes. I hoped that (in addition to what I must say of our deceased brethren, and of John Hunter himself, of recent additions to our museum, and of the new Pathological Catalogue) I might be able to indulge in a review of the progress of modern surgery, and perhaps compare the present state of medical practice in London with that in Hunter's time, or even to take a hasty review of the progress of the nation since his death, and refer to the rapid increase of population and wealth, the discovery of steam, the influence of railroads and steamships, the use of gas, of the electric telegraph, the spread of education, the effects of newspapers and cheap literature, of reforms in our laws, improvements in our habits, and many other things which tend to make a people wiser, happier, and better. I even thought it might be possible to sketch very rapidly the share which the Medical Art, in its larger and wider sense—not only as curing, but as preventing disease—has had in assisting national progress, and to prove that neither medicine nor surgery has lagged behind the general advance. I hoped I might be able to prove beyond dispute that since active sanitary work has been undertaken in this country, death-rates have fallen very greatly, and fallen most in those places—the great towns—where sanitation has been most active.

I was very anxious to show how the knowledge gained by the statistical work begun by Dr. Farr, and since carried on by Dr. Ogle at the General Register Office, had led to sanitary legislation; and how sanitary work has been followed by a lower general death-rate and smaller mortality in single forms of disease, as in typhoid fever, as well as after wounds, injuries, and surgical operations. I wished also to show how statistics lead to the saving of life by throwing light on the natural history of disease, on the prevalence of various zymotic diseases at different seasons, and on the indisputable proofs that small-pox has declined considerably with the extended use of vaccination; that it is false to attribute that decline to general sanitation exclusive of vaccination, and, what is a more novel or less generally known fact, that we have statistical proof that the preservative effects of vaccination wear out more rapidly and surely than the preservative effects of small-pox itself. I imagined also that I might be able to sketch what the nation might gain if State-medicine were really administered by a well-organised department of the Government, if politicians of both parties could be roused from their indifference to social or domestic legislation, and give some small share of their attention to the health-interests of the people—to their food, drink, occupations, house accommodation, care of infants, prevention of infective diseases, local sanitary administration, and many details of sanitary reform, such as a permission or encouragement of cremation as a substitute for the present mode of burying the dead.

My intentions, sir, may have been good, but their fulfilment is impossible; and in conclusion I can only refer to the prospect which expands before us as we are shown that more than thirty destructive diseases, including tubercle and typhoid fever, ague and yellow fever, scarlatina, diphtheria, erysipelas, syphilis, and septicæmia in man; in the lower animals, splenic fever, fowl cholera, cattle plague, glanders, hydrophobia—all depend upon specific microbes. In many of these thirty diseases the specific microbe has been identified beyond dispute. In some, the process of attenuative culture has transformed a poisonous virus into a protective vaccine. In others, we may confidently hope that the same happy result will soon be reached; and as we have already acquired the knowledge of certain specifics, it is not illogical to infer that if we can in one instance command the good results we see with mercury, in another with sulphur, and in a third with quinine, we may before long obtain such a knowledge of the various microbes which are the cause of communicable diseases, as may teach us how to destroy these organisms, or to arrest or mitigate their morbid influence, and so check, if not stamp out, some of the diseases which are now our most formidable difficulties. We may then congratulate mankind that the science of our own time has conferred not only upon man, but on the whole animal kingdom, benefits equalling any which it owes to the lucky empiricism of past ages, or to the philosophic genius and marvellous industry of John Hunter. And we, his followers, may be encouraged by the conviction that we so cultivate our science and our art (devoted as they are to the public good) as to justify us in keeping our old motto,

"QUÆ PROSUNT OMNIBUS ARTES."

CARBOLISED SOAP-SHEETS.—The *New York Medical Journal* (January 27) gives an account of Buczkowski's patented carbolised soap-sheets, prepared by Reithoffer and Neffe, Vienna. They are arranged in the form of a very portable little book. The leaves consist of very thin paper, coated on both sides with a layer of carbolised soap. "We have kept the specimen about two months, and are unable to perceive that during that time the percentage of carbolic acid has sensibly diminished, although the book has remained open in a warm room. The makers prepare also little books with their leaves impregnated with other medicinal substances. The method of using the device is to tear out a leaf and rub it in the wet hands. The saponaceous coating dissolves at once, leaving a mere pellet of paper. The convenience to physicians of carrying one of these little books in the pocket rather than any liquid disinfectant need scarcely be mentioned. They will also commend themselves to travellers, since they can thus avoid the conventional cake of soap that has been used by they know not how many persons before them."

IODOFORM MIXTURE.—Dr. Beck gives a very useful formula for the solution of iodoform and iodide of potassium, which may be given internally (fifteen drops three times a day in sugared water), or employed externally to tumours of various kinds and to inflamed glands. ℞. Iodoform 8 grammes, balsam Peru 3 grammes; dissolve in spt. vini rect. 20 grammes, and add 70 grammes of iodide of potassium dissolved in distilled water, and glycerine, of each 35 grammes.—*New York Med. Record*, January 6.

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ORIGINAL COMMUNICATIONS.

REMARKS ON DIPHTHERIA.(a)

By W. E. STEAVENSON, M.B. Cantab., S.Sci.Cert Camb.,

Electrician to St. Bartholomew's Hospital; formerly a Resident Medical Officer to the Hospital for Sick Children, Great Ormond-street

In choosing a subject for this evening, I have selected one which affords ample material for discussion.

There are several difficulties connected with the subject of diphtheria, which I wish to bring before you in the form of questions; and if our consideration of it results in proving to us how ignorant we are of its nature, and how little is generally known about the subject, we shall have arrived at one of the first essential points necessary for the elucidation of any difficult question.

The definition given of diphtheria in the Nomenclature of Disease published by the Royal College of Physicians of London is: "a specific disease, with membranous exudation on a mucous surface (generally of the mouth, fauces, and air-passages, or occasionally on a wound)." And we may add, not unfrequently epidemic, accompanied by great prostration and marked evidence of blood-poisoning.

The first question I would ask you to consider is, Is it a blood poison? Is the membranous exudation a manifestation of the poisoned condition of the blood; or does the blood become poisoned at the seat of the exudation, as in pyæmia the blood becomes poisoned by the absorption of decomposing material at the seat of a wound?

Is there any such thing as a diphtheritic poison, or is diphtheria a form of inflammation associated with certain conditions of the constitution, which results in the formation of a false membrane? The Committee on Membranous Croup and Diphtheria appointed by the Royal Medical and Chirurgical Society in 1876 seemed to have started with the idea that there is such a diphtheritic poison, although they were unable to isolate it or suggest in what form it existed. There is evidence that when such a state of inflammation has existed as to produce a membranous exudation, such exudation is capable of reproducing itself in other individuals; as in cases of blood-poisoning following operations, when the blood has become poisoned to such an extent as to produce pyæmia, discharges from wounds in such patients are capable of producing pyæmia in previously healthy subjects.

I believe up to the present time there has been no characteristic organism discovered microscopically in the false membrane. Under the microscope it appears to be a fibrinous material of more or less density, with entangled epithelium and pus corpuscles. Some writers appear to believe it is due to a fungus, others to bacteria, but they have not proved the invariable presence of either. Some think it due to insanitary conditions; others deny that these have any influence on its causation.

The suggestions made by Dr. Thorne in some of his remarks on diphtheria appear to me to point to an explanation of the nature of the disease which is well worth considering. In some of the outbreaks of diphtheria which he has investigated the epidemic stage of the disease was preceded by a prevalence in the locality of what were considered as ordinary sore-throats. Speaking of an outbreak in Denbighshire, he says that in some villages there were worse sore-throats than in others; and in Reigate Rural District there was a prevalence of sore-throats for a month before ordinary diphtheria was developed. He appears to think that ordinary sore-throats are infectious, and that in process of time, by being transmitted from one subject to another, they attain a virulence which results in the formation of a false membrane, which is capable of reproducing itself. This tendency he designates by the term "progressive development of the property of infectiousness." These may not really be Dr. Thorne's views, but they are what I have been led to consider as his views from remarks I have heard him make on the subject.

Therefore, diphtheria may not be the result of a specific poison at all, but a definite series of symptoms following a train of circumstances which leads up to a condition analogous to pyæmia, which, when once developed, is capable of communicating itself to others.

This idea seems to have suggested itself to the Committee on Diphtheria I have before alluded to, for on page 90 of their report occurs the following:—

"The similarity of the appearance, relations, and mode of formation of the false membrane under the various conditions in which it is found, lead to the belief that if 'diphtheria' is a distinct and well-defined specific disease, the power of production of false membrane in the larynx and trachea is not peculiar to it, but that its poison shares the power of giving rise to it with other poisons and irritants; and that its distinctive characters must be sought, not in the presence of false membrane, but either in some peculiar characters of the membrane or in other and independent conditions. In fact, it appears to us that the formation of false membrane in the larynx and trachea is merely a mode of reaction of the mucous membrane which may be set up by a variety of conditions."

The next question I would ask you (if there is such a thing as a specific diphtheritic poison) is, What is its source and how is it conveyed?

We have been struck at the Children's Hospital with the number of cases of diphtheria which we have received from mews, occurring in families inhabiting rooms over stables; and in several cases we have had reason to believe that the dogs and cats belonging to the mews have had diphtheria, but we have not heard of the horses being similarly affected.

It is maintained by some that diphtheria is a filth-disease. That it is not always due to stable emanations I think can be inferred by its frequent appearance in the houses of the well-to-do with no stables in the vicinity. It is said to occur more frequently in the rural districts than in towns, and of course in those localities stables are more distributed among and near to the houses. Farmhouses often open into the stable- or farm-yard, and cottages are often in close proximity to pigstyes, where there are decomposing straw and ammoniacal vapours from decomposing urine. There is also the theory that it is produced by sewer-gas, but in these rural districts there often are no sewers.

In Paris it was supposed to originate from the proximity of graveyards to the houses.

Were the infection derived from any of these sources, it would appear that the poison was carried by the air in the shape of fomites; but many pamphlets have been written, and reports made by medical officers of health, to prove that the poison is conveyed by water or by milk.

I think there are good reasons for believing that the poison may lie dormant for some time, and then, after disturbance, manifest itself by causing an outbreak. In these cases it would appear to be carried by the atmosphere.

When I was at the Children's Hospital we had a serious outbreak of diphtheria, and we asked for an inspector from the Local Government Board to be sent to investigate it. After a most minute inquiry the only cause for the outbreak that suggested itself was the demolition of four or five old houses on the opposite side of the street, the dust from which was blown into the hospital.

And again, we admitted several cases from the west side of Brownlow-street, Holborn, when that large block of houses was pulled down previous to the erection of the First Avenue Hotel, which is not yet completed; and at that time I sent several cases down to this hospital from the same street, which were admitted here, as the patients were too old to be admitted into the Children's Hospital.

Diphtheria can also be produced by inoculation; many medical men have contracted it, and some have lost their lives, by having pieces of diphtheritic membrane coughed into their faces by patients suffering from the disease; but Trousseau tried to inoculate himself by placing some diphtheritic membrane in contact with the mucous membrane of his mouth, and failed to produce the disease. I have on numerous occasions had membrane coughed into my face and eyes, without ever having contracted the disease.

But that the membrane itself is infectious I think there is no doubt; but in what other stages of the disease is it infectious? Children who have been isolated for two or three weeks after the disappearance of the disease have been said to have communicated it to others when again allowed to mix and play with them. Therefore it is a most important point to determine when a child ceases to be infectious. The incubation stage of the disease is also a point which is not yet determined.

(a) On opening a discussion upon the subject by the Abernethian Society at St. Bartholomew's Hospital, February 1, 1883.

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There are also some difficulties with regard to the diagnosis of diphtheria to which I should like to draw your attention.

The former ideas of the distinction between diphtheria and croup are entirely thrown aside, and the word "croup" is now used by many of the best authorities as only expressing a symptom—viz., a difficulty of breathing accompanied by a peculiar noise at each inspiration. And the definition of diphtheria—that it consists of an infectious disease with a deposit of false membrane upon the pharynx, soft palate, and tonsils, which can be stripped off, leaving a raw and bleeding surface, and the presence of albumen in the urine, is found totally inadequate to include all the conditions which are now called diphtheria. The reason why the diphtheritic membrane can be stripped off the air-passages more easily than from the mucous membrane of the fauces and tonsils is because of the difference in the epithelium; the epithelium of the larynx and trachea being ciliated.

Croup by some is said to be an inflammation limited to the larynx, accompanied by the exudation of coagulable lymph. This is simply a difference in terms. What is the difference between "an exudation of coagulable lymph" and "an exudation of false membrane"?

The further differential characters of the two diseases are said to be as follows:—

Diphtheria.	*Croup.*
1. Is a local inflammation commencing in the fauces, and is liable to extend to adjacent parts.	Commences in the trachea or larynx, and does not affect the pharynx.
2. Begins as a fever.	Begins as a catarrh and cough.
3. Epidemic.	Sporadic.
	Occurs during the first dentition up to the seventh or tenth year.
	Increases in severity towards night.
Attended by extreme and rapidly increasing debility.	

It has also been said that it is not improbable that scarlet fever and diphtheria are products of the same poison, but their manifestations differ in:—

Diphtheria.	*Scarlet Fever.*
1. Absence of rash followed by desquamation.	Presence of rash.
2. Insidious.	Rapidly developed (seventy-two hours).
3. Inflammatory affection of throat has a tendency to spread.	Not so in scarlet fever; generally confined to tonsils. No membrane in larynx.
4. Sequela, paralysis. The albumen in diphtheria is not a sequela, but occurs early in the disease.	Albuminuria and dropsy.
5. One attack produces a predisposition to subsequent attacks; or a constitution which can be affected by the diphtheritic poison retains the same characteristic after an attack.	One attack is generally protective.

A young man aged eighteen was admitted into this hospital with scarlet fever in 1881 from a house in which he was a lodger; and from the same house we admitted two children into the Children's Hospital with what we considered diphtheria. The children developed no rash, nor had any been noticed upon them.

A child at present in Radcliffe, under the care of Dr. Gee, was admitted for albuminuria, and supposed to have some form of kidney disease; this was followed by well-marked diphtheritic paralysis, and there was a history of the child having had a sore-throat previous to her admission, but it had not been taken much notice of. After she had been in the hospital a fortnight she had a well-marked attack of scarlet fever, accompanied by a bad sore-throat and a large amount of false membrane. There would have been no means of distinguishing the sore-throat from diphtheria except for the accompanying scarlet-fever rash. The amount of albumen in her urine was not increased at the onset of the scarlet fever, but, in fact, was less than on her admission into the hospital; but she had a subsequent attack of nephritis as a sequela of the scarlet fever, and a large increase of the amount of albumen in her water. The peculiarities of this case are, that the albuminuria *followed* the diphtheria, and persisted, and did not appear mainly at the height of the disease, and was not accompanied by any sign of dropsy. The albumen was not increased at the outbreak of the scarlet fever, and she had an ordinary attack of nephritis following the scarlet fever. I have been allowed to refer to this case by the kindness of Dr. Gee; and his House-Physician, Mr. Browne, has allowed me the use of his notes.

Albumen is not found in the urine in numerous cases which are called diphtheria, but occasionally in very bad cases the urine is loaded with it. The appearance of albumen in the urine takes place at an early stage of the disease. The urine is never smoky, and very seldom contains any blood-corpuscles, and there is no anasarca.

This presence of albumen in the urine takes place in about one patient in every four, and, as a rule, soon passes off; but in Dr. Gee's case, to which I have referred, the albuminuria, probably after diphtheria, has persisted for months.

Of the ninety-one cases of diphtheria recorded by Dr. Abercrombie, most of which occurred at the Children's Hospital while I was one of the resident medical officers, twenty-four had albuminuria; of these fourteen died. Of the seventy-six in whom there was no albuminuria, only eight died. Most of the cases with albumen had laryngeal symptoms, which necessitated the operation of tracheotomy, but in none of those which recovered after the operation was there at any time any albumen in the urine.

From the above facts I should argue that, speaking of the disease as a progressive one, it has arrived at a more virulent stage when albuminuria is present.

As a result of the inquiry instituted by the Royal Medical and Chirurgical Society, the Committee came to the conclusion that the presence of albumen depended upon the severity of the cases, evidenced by the amount of false membrane, and generally in those cases where the fauces were implicated; and also more frequently it followed those cases which were distinctly traceable to infection.

That is, the poison, which had arrived at such a condition as to be communicable, had also arrived at such a condition as to affect the system so seriously as to produce albuminuria.

Is the presence of albumen in the urine a distinctive feature? and have all cases in which it is absent not arrived at such a stage as to warrant the name of diphtheria?

Does paralysis follow in any case when albumen is absent from the urine?

In the eighteen cases of paralysis following diphtheria related by Dr. Abercrombie before the International Medical Congress in 1881, he was unable to determine whether or not they at any time had albuminuria.

This appears to me to be a very important fact to discover in all cases of diphtheritic paralysis. Supposing, for instance, that only those patients have diphtheritic paralysis who have albumen in their urine during diphtheria, and only about 10 per cent. who have albumen recover, the rarity of diphtheritic paralysis is not to be wondered at. The same degree of poison that produces the nephritis may lead to the paralysis.

The next point I wish to bring before you is: Is it possible to distinguish sore-throats connected with other diseases, or due to other conditions, from those due to diphtheria when there is an exudation of false membrane and no other pathognomonic sign? Such a difficulty was experienced recently in the case of the Postmaster-General, Mr. Fawcett, who was at first said to have diphtheria, but when the characteristic signs of typhoid fever showed themselves, it proved that he had not diphtheria at all, but a bad form of sore-throat, which occasionally accompanies typhoid fever, and has often before been described.

Sore-throats produced by the action of some poisons are indistinguishable from diphtheria, except by their history. An ordinary hospital sore-throat may prove to be diphtheritic. Nurses with such sore-throats should be kept out of the wards, and certainly not allowed to attend upon children.

If it were not for the history, sore-throats due to the dissecting-room in many cases could not be distinguished from diphtheria, and persons so suffering should not asso-

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ciate with children. (I know that a great many hospital sore-throats and dissecting-room throats are simply attacks of quinsy.) Children appear to be most obnoxious to the infection of sore-throats and to the development of diphtheria; and a sore-throat which in an adult might be due simply to the dissecting-room, when transmitted to a child might become diphtheria. The evidence collected by the Committee I have before alluded to is conclusive that diphtheria is prevalent with tonsillitis and all other varieties of sore-throat.

Should you isolate a patient with an ordinary sore-throat with yellow exudation on the tonsils? I think you most certainly should, especially when there are children in the house. Not that I think they are all cases of diphtheria, but because you have no means of telling whether they are diphtheria or not. If this became the rule many more patients would be isolated than are so at present, and, I think, many people isolated who are not infectious. The stage which we have reached in the investigation of the disease has led us to include under the name of diphtheria many affections of the throat, really distinct diseases, which have many features in common, but the distinguishing features of which we have not, up to the present time, been able to point out or determine.

I fancied, when I was at the Children's Hospital, that I was able to distinguish at once a case of sore-throat which was or was not a case of diphtheria by the aspect of the patient, the smell, and the appearance of the throat. Often when the patient did not look very ill, as if thoroughly poisoned, and had patches of yellow exudation only on the tonsils, with enlarged glands, I could say positively that it had not what I considered diphtheria, but I was unable to say in what the distinction consisted.

One physician at the Children's Hospital would say it was not a case of diphtheria; and another physician would call every such case a case of diphtheria, and say that he knew of no sign by which he could differentiate them. But I knew them myself so well, that I knew whether to call them diphtheria or tonsillitis, according to the physician under whose charge they were to come. There were certain cases which every one considered as diphtheria, and several of the cases which would have been considered doubtful came from houses where there had been undoubted diphtheria: of course with such a history we isolated them and treated them as diphtheria, no matter what physician they came under. In my opinion the best explanation of such a state of things at present offered is the theory I have before quoted as that of Dr. Thorne Thorne's.

The subject of diphtheria is considered of such importance and of such obscurity, that it has been selected by the British Medical Association as one of the subjects to be investigated by its Collective Investigation Committee. Some of the cards issued for that purpose I have with me, and will pass round. You will see that several of the points I have brought forward this evening for your discussion are points upon which the Association seeks to collect information.

To conclude, I will recapitulate the questions I have proposed for your discussion. They are the following:—

1. Is diphtheria due to a specific blood-poison?
2. Is the membranous exudation a manifestation of the poisoned condition of the blood, or does the blood become poisoned at the seat of the disease?
3. Is there any such thing as a diphtheritic poison; or is diphtheria a form of inflammation, associated with certain conditions of the constitution, which results in the formation of a false membrane?
4. If there is such a thing as a specific diphtheritic poison, what is its source, and how is it conveyed?
5. In what stages of the disease is it infectious?
6. What is the duration of the period of incubation?
7. Is the presence of albumen in the urine a distinctive feature? Have all cases in which it is absent not arrived at such a stage as to warrant the name of diphtheria?
8. Does paralysis follow in any cases in which albuminuria has been absent throughout the attack?
9. Is it possible to distinguish sore-throats with an exudation of false membrane, due to other diseases or other conditions, from those due to diphtheria, without taking into account the history of the cases and any accompanying symptoms?
10. Ought we to isolate a patient with a sore-throat and yellow exudation on the tonsils?

RHEUMATIC ENDOCARDITIS.

By T. J. MACLAGAN, M.D. Edin., M.R.C.P. Lond.

THERE are one or two points in connexion with the above subject, touched on in Dr. Sansom's Lettsomian Lectures, published in recent numbers of the *Medical Times and Gazette*, to which I would wish to direct attention.

In speaking of rheumatic endocarditis, Dr. Sansom quotes and endorses the two practical reasons which I give for the failure of the salicyl compounds to control the cardiac as they do the arthritic inflammation—first, that the cardiac inflammation has generally commenced before the patient comes under observation; and second, that rest, which is so essential to the recovery of an inflamed organ, and which is so easily got in a joint, is unattainable in the heart. The first makes prevention impossible; the second is a bar to successful treatment.

But, though this is true, it does not express the whole truth. That a joint generally recovers from rheumatic inflammation, and that the heart does not, is a statement which expresses the broad results of clinical experience, but expresses them in a manner which, from a pathological point of view, is bald and misleading. The truth is—and, striking as the statement may appear, it is absolutely correct—that *everything which recovers in a joint recovers also in the heart*. The one structure in the heart which does not recover (the endocardium) is also the one which has no analogue in any of the structures of a joint.

In studying the pathology and treatment of rheumatic endocarditis we must keep this point before us if we would avoid falling into error. The parts which suffer in a joint in acute rheumatism are the fibrous ligaments and tendons, and the synovial membrane. The parts which suffer in the heart are the fibrous rings and valves, the endo- and pericardial linings, and occasionally the muscular substance.

The fibrous rings and valves are similar in nature and function to the fibrous structures of a joint. Each is apt to be the seat of rheumatic inflammation, and in both this inflammation is generally recovered from.

The pericardium finds its analogue in the synovial membrane. Each is very vascular; each secretes a lubricating fluid; and each has for its function the facilitating of the movements of a solid body. Each too is apt to be the seat of rheumatic inflammation; in each the inflammatory process tends to spread; and in both the tendency is to recovery.

The endocardium has no analogue in a joint. There is nothing in a joint which bears the least resemblance to it, anatomical or physiological. It is a non-vascular membrane, in which inflammation cannot, and as a matter of fact does not, spread. In nature and function it is identical with the lining membrane of the bloodvessels with which it is structurally continuous. When it is affected in acute rheumatism there is no general inflammation of its surface, such as is found in the pericardium and synovial membranes; the mischief is limited to a small portion of one surface of the affected valve. I have elsewhere(a) shown that the occurrence of the lymphy deposit which constitutes the endocardial lesion in acute rheumatism, and its limitation to a particular portion and to one surface of the valve, are to be explained not by the direct action of the rheumatic poison on the endocardial lining, but by the mechanical rubbing against each other of valvular segments whose deeper fibrous structures are the seat of rheumatic inflammation and thickening. This thickening of their fibrous structure it is which makes the valves rub; and the rubbing it is which irritates and roughens the membrane that covers them externally. The inflammation and thickening of the fibrous structure of the valve may be recovered from. What is not recovered from is the roughening of, and lymphy deposit on its non-vascular endocardial covering. This is not recovered from because the continued action of the valve keeps up the rubbing and mechanical irritation, and because the want of bloodvessels in the endocardium prevents absorption. This is a condition over which no drug can possibly exercise any control. It is directly of mechanical, and only indirectly of rheumatic, origin.

But it is by no means certain that we may not, in some cases, by the early and free administration of the salicyl

(a) "On Rheumatism: its Nature, its Pathology, and its Successful Treatment," by T. J. Maclagan, M.D. Pickering and Co. 1861.

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compounds, prevent the inflammation and consequent thickening of the fibrous texture of the valve which is the origin of all the mischief. If we see a case early enough, and give these compounds freely enough, we may prevent the heart from suffering, as we undoubtedly do prevent joints from suffering. In no given case can we be sure of having got this result—for the absence of heart-mischief can never be demonstrated to be due to the treatment. The possibility of such a result, however, is worth striving for, especially as the means of attaining it are also those called for in the interests of the joints. What is wanted is the speedy arrest of the rheumatic process. This object can be attained only by giving one of the salicyl compounds in large and frequently repeated doses.

This leads me to remark that my recommendations on that point have not been acted up to. What I recommend is that from twenty to forty grains should be given every hour for six hours, or until pain is relieved (which it generally is within that time); that the same dose should then be given every two hours till pain is gone, and the temperature at or near the normal (which is generally the case within twenty-four hours); after that the same dose should be given at widening intervals of three, four, and six hours for ten or twelve days. But instead of giving it thus freely and largely, most observers are content to give only from fifteen to twenty grains every three or four hours. That is quite an inadequate dose, and not nearly enough to get the full curative effects of the drug. I would again urge the giving of the dose which I recommend. I do not exceed my right in asking that my treatment should be carried out in all its details before its results are subjected to criticism. Salicin is the preparation to which I give preference, not because I regard it as superior to salicylate of soda as an anti-rheumatic, but because it may be given in large and frequent dose without causing such disturbance of the system as not unfrequently follows the use of the salicylate and necessitates its suspension. My experience, too, is that those treated by salicin (which is a bitter tonic) convalesce more rapidly than those treated by the salicylate. There is an impression abroad that it is very expensive. It is not so. Two of the chief English manufacturers of it have told me that they are prepared to supply it to hospitals and dispensaries at 10s. 6d. per lb. Convalescence is so much more rapid under its use that I am not sure that it would not in the long run prove cheaper than salicylate of soda. But whichever is employed, let it be given in large and frequent dose. I make this appeal in the interests of the heart as well as of the joints. Let every case of acute rheumatism be regarded and treated as one in which heart complications may possibly be prevented, and it is probable that in some cases they will be prevented. But every hour is of importance, for it needs no argument to show that the danger to the heart is less in a case in which the course of the disease is arrested within twenty-four hours than it is in one in which three or four days are expended in the process.

The fact has never been accepted by the profession that the course of acute rheumatism may in many cases be arrested within twenty-four hours of the time that treatment commences. The recognition of that fact (for fact it is) is the keystone to all possible success in the prevention of cardiac complications.

LEGALISED BOGUS-DIPLOMAS AT BOSTON.—Some of the corporation and officers of the Bellevue Medical College, of Boston, having been arrested on a charge of issuing bogus-diplomas—and uncontroverted testimony having been offered by the prosecution that the concern had granted diplomas to persons grossly ignorant of medicine, and after a so-called course of instruction of a few weeks or less—the defendants simply maintained that the laws of the State allowed all this. The worst of it is, that this defence could not be overthrown, and so the accused were discharged. This is an unusually flagrant case of imposition, in that the College bears a title calculated to lead the uninformed to look upon its degrees as having been conferred by one of the great medical schools of New York. In all other respects it can be matched in almost any of our large cities. How long will it take the public to learn that protection of the medical profession means their own protection?—*New York Med. Journal*, January 13.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.

SOLID OVARIAN TUMOURS.

(Under the care of Mr. KNOWSLEY THORNTON.)

(*Continued from page 548, vol. ii. 1881.*)

Case 3.—Removal of Large Cancerous Tumour involving both Ovaries. (No. 229, Ovariotomy Tables—not yet published.) R. M. L., aged fifteen, was placed under my care at the Samaritan Hospital by Mr. Birkett in March, 1881. She was a delicate-looking girl, but had some fresh colour in her cheeks, and, though thin, was not markedly emaciated.

History.—Always delicate. Seven years ago had some inflammatory attack in left side of abdomen. "Before this was *quite* blind for three months from weakness." Catamenia appeared in May, 1878; were scanty, and ceased in following September. In the autumn of 1879 first noticed some general hardness of the abdomen; and in October, 1879, she was seen by a medical man, and a tumour was discovered. Increase of size has only been rapid since January, 1881.

Condition.—Bright and cheerful; appetite good; tongue clean and moist; bowels constipated; general tenderness over abdomen, more marked in left iliac region, but nowhere excessive. The abdomen irregularly distended with a hard nodular tumour, chiefly in the left side, but extending across the right some distance beyond the median line. The tumour can be moved from side to side, but is absolutely fixed below, and the bladder appears to be drawn up in front of it.

The diagnosis lay between dermoid and malignant ovarian tumour, and the comparatively slow growth and condition of the patient inclined me to take the more hopeful view, especially as Mr. Spencer Wells, who had also seen the patient, believed the tumour to be a dermoid ovarian. The vagina was large, and the tumour could be felt occupying the pelvic inlet, but though every part of the vaginal wall could be readily swept by the finger, no os or cervix could be found, and no uterus could be defined separate from the tumour.

I performed ovariotomy on March 19, and found a solid tumour everywhere covered in front with adherent omentum, in which large vessels were ramifying, and behind adherent to the intestines wherever it was in contact with them. The appendix cæci was so grown into the mass that I had to ligature it close to the cæcum and remove it with the tumour. The sigmoid flexure was also so involved that I had literally to carve it out of the tumour, leaving a portion of the latter round it. The mass involved both ovaries, and I had to dissect the uterus off its anterior surface; it was also adherent to the whole pelvic floor. The operation was necessarily a long one, and much blood was lost. Nearly the whole of the omentum was removed along with the tumour.

The patient did not do well from the first, the lungs acting badly and mucus accumulating, which she was, from extreme weakness, unable to expectorate. She died on the second day after operation. The tumour weighed seven pounds and a half. My colleague, Mr. Doran, kindly examined it for me, and also gave me some sections to examine, and it stands alone in my experience as a case of true cancer of the ovary; all the other solid tumours of this organ which I have seen being sarcomata.

Case 4.—Removal of Cysto-Sarcomata of Ovary and Omentum, and Solid Sarcoma from Cæcum. (No. 236, Ovariotomy Tables—not yet published.)

This case does not strictly belong to the class now under consideration, but the ovarian tumour contained an unusual quantity of solid sarcomatous tissue; and the other tumours, which were apparently secondary, were practically solid, though the omental one contained a small cavity in its centre.

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E. A., aged forty-seven, married twenty-seven years, and mother of three children, of whom the youngest is now twenty, was sent to me by Dr. Visick, of Malaga, in April, 1881. She was a native of Newfoundland, but long resident in Spain.

History.—Has always enjoyed good health till three years ago, when she noticed a swelling low down in the left iliac region. Menstruation began at sixteen, and was always regular, but excessive and accompanied by much pain. The swelling caused her to consult Dr. Visick, and I take the following from his letter to me:—"She seemed in a dying state and absolutely blanched. The sound passed four inches and a half; uterus enlarged, but freely mobile. After dilating with laminaria and sponge-tents I found the cavity filled with a mass of hardened clots, some passing into a fibrinous condition, and of a hard whitish colour. With fingers and wire écraseur I removed a mass of the size of a hen's egg, and, by scraping, a good deal more, and then applied liq. iodini freely. The hæmorrhage ceased, she menstruated regularly, and slowly recovered her health. This was in 1877. In January, 1880, I was again called in, and found a large firm tumour occupying the left iliac fossa and extending nearly as high as the umbilicus. Examination per vaginam showed the uterus to be drawn up and fixed. In November of same year fluctuation became apparent in the tumour."

Condition on Admission.—Emaciation extreme; skin dry and sallow; pulse fair, 88; temperature normal; tongue clean; appetite good; bowels constipated, much troubled with flatulence; urine free, clear, and pale, faintly acid, specific gravity only 1010, and no albumen. Abdomen: Skin tense, dry, and glazed; large distended veins all over it. Left side, from pubes to border of ribs, occupied by a fluctuant tumour, with crepitus over its lower portions. Low down in the right groin there is a separate solid mass, which may be the uterus. Vaginal examination gives but little help to the diagnosis. The uterus is somewhat enlarged and fixed, and the tumour cannot be felt in the pelvis.

My diagnosis was "Multilocular ovarian tumour, with large fibroid uterus. Is the general condition of the patient due to hæmorrhage, or is the growth malignant? I fear the latter."

I performed ovariotomy on April 20, and removed a very multilocular tumour of the left ovary. It was completely encapsuled by broad ligament, and so universally adherent to omentum, mesentery, intestines, and pelvic organs, that I was at first inclined to give it up. I, however, succeeded by careful enucleation in clearing a pedicle for transfixion; an immense number of fine ligatures being used on adhesions and capsule. While enucleating the tumour I was puzzled by the presence of masses of soft brain-like material external to the tumour, which kept coming up on the sponges used in the right iliac forsa. After removal of the tumour, I found that these fragments were parts of a large solid brain-like sarcoma growing from the head of the cæcum. The connexion of this tumour with the peritoneal coat of the cæcum was so little vascular that I used no ligatures, pressure forceps having completely stopped all hæmorrhage. When performing the final sponging preparatory to closing the incision, I found a third tumour, as large as a cocoanut, lying just below the liver, on the right side. It was attached to the omentum by a very vascular pedicle, which I transfixed and tied in the usual way. The ovarian tumour had unusually thick walls of sarcomatous tissue of the same colour and appearance as that of the other tumours; but the latter, especially the one attached to the cæcum, were much softer and more brain-like. The omental tumour, on being cut across, was found to have a small cavity in its centre, lined by a corrugated membrane, and containing two or three ounces of thick yellow fluid. The patient made a slow recovery, and gave Mr. Meredith, who kindly took charge of her during my absence through illness, much anxiety; and I am sure that her recovery was greatly due to his constant and watchful care.

The temperature at one time rose to 102·2°, and remained over 100° for some days, pulse also being quick and weak; but on the seventh day, after the bowels had been cleared by simple enema, the temperature was normal and the pulse 88, and neither rose again.

She left the hospital on the twenty-fourth day after operation, when I could find no symptom of any re-growth or glandular enlargement; but she looked very like a patient with malignant disease, and was very drowsy always. I have, however, just heard from her son that she has returned home to Malaga, "looking remarkably well, having gained flesh, and being apparently strong and in good health."

Case 5.—Removal of Solid Sarcoma of Right Ovary. (Case 249, Ovariotomy Tables—not yet published.)

A. C., aged nineteen, single, was placed under my care at the Samaritan by Dr. Clement Godson in July, 1881.

History.—Menstruation regular; never any serious illness. A few months back found some difficulty in walking, and then noticed a hard swelling at bottom and in the centre of abdomen. Patient's mother had a tumour of some kind removed from the breast seven years back, and remains in good health.

Present Condition.—Anæmic and emaciated. Abdomen occupied by an elastic but hard kidney-shaped tumour, which fills all the right side of the abdomen from pubes to ribs, and the greater part of the left side to the umbilical level.

I performed ovariotomy on July 8, and removed a solid tumour of the right ovary, weighing eight pounds. The outer part of the tumour was lobulated, pink, and fleshy; the central part was of soft yellow myxomatous tissue, stained in places by blood. The tumour had a very distinct capsule, as thick as a sheet of writing-paper.

There was nothing worthy of special note in the operation, except the long incision necessary to turn out so large a solid tumour. There was a good deal of free fluid in the peritoneum, but it appeared perfectly healthy, as did also the other ovary and the uterus. The patient had an unusually high temperature (103·4°) within four hours of the operation, but it fell as quickly as it had risen, and she made a rapid recovery, leaving the hospital on the seventeenth day after the operation. I saw her some weeks later, and she had put on flesh, and seemed in perfect health; but in a few months she began to complain of rheumatic pains in various parts of the body, and examination showed that these pains were due to enlarged glands; the largest mass appeared in the neck on the same side as the ovarian tumour, and rapidly extended across to the other side. Pressure on the œsophagus and windpipe, with inability to take food, and difficulty in breathing, causing exhaustion, which terminated in death on April 10, 1882. I am indebted to Dr. Rogers, who attended her, for particulars, and he also informs me that latterly the tumours in abdomen, etc., gave no pain or trouble.

Remarks.—The first of these cases is, as I have already said, the only case of true cancer of the ovary that I have met with. It is remarkable that a carcinoma of this size (seven pounds and a half), involving both ovaries, intestine, etc., should have grown with but little pain, and but little apparent effect upon the general condition of the child. The growth had also been comparatively slow; she had been known to have a hard tumour in the abdomen for fully eighteen months. The result of the operation was inevitable when once the abdomen had been opened, as it would have been impossible to close the incision over this large hard tumour, and it was equally impossible to remove it entirely, from the way the cæcum and sigmoid flexure had become involved in the mass. I do not think that it was possible to diagnose with certainty the nature of the tumour without making an exploratory incision. Such cases will occasionally present themselves, and will, I fear, prevent us from reducing the mortality after ovariotomy much below its present figure of four or five per cent.

I shall reserve my remarks upon the other two cases until I have recorded all the cases of sarcoma of the ovary with which I have met.

FORMULA IN HYSTERICAL COUGH.—Valerianate of quinine one gramme, extract of liquorice q. s., in twenty pills; take one at the beginning of each meal. These are suitable for women liable to hysterical disturbances, who complain of a dry and frequent cough—when the cough only returns at night, or at regular intervals, or at the same hours. When the patient has suffered from attacks of convulsive hysteria, these pills should be replaced by the following:—Valerianate of zinc half a gramme, extract of valerian q. s., in twenty pills; a pill at each of the two principal meals.—*Union Méd.*, February 17.

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The Medical Times and Gazette *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, FEBRUARY 24, 1883.

MEDICAL ADVERTISING.

The attention of the profession—especially of the profession in London—has lately been called to the subject of our article, by certain resolutions of the College of Physicians. By these resolutions the College expressed its disapproval of the practice of advertising medical works in the lay press—a practice which, before the publication of the resolutions, was extensively followed, and which has not yet become extinct. Little more than three weeks ago, indeed, a long advertisement (inserted, we need hardly say, by a firm of publishers) appeared in the *Times*, in which some of the names most honoured by the profession (including that of the President of the College of Physicians) appeared in juxtaposition to announcements concerning "Norton's camomile pills." Considered from the point of view of the determined wrong-doer, the passing of resolutions by the College is an obstacle in his path of the most shadowy kind. The College has no power, so far as we can find out, to inflict any kind of penalty upon those of its Fellows who advertise. The effect of the resolutions must be only that of an expression of opinion. Upon men of sensitive honour, to whom *laudari a laudato viro* is the best and highest reward that a professional career can bring, they will be imperative. But upon those less sensitive to blame they will have no binding effect. These, so long as they think advertising brings practice, will advertise; and, pocketing with satisfaction the solid pudding of pecuniary recompense, will regard with pitying wonder those who hunger also for "the bubble reputation." The immense sums which traders of the present day spend in advertisements is sufficient evidence that, in their judgment, advertising "pays." This is a good reason why publishers, who are men of business, should advertise their books. If medicine is a trade, success in which is to be measured by the amount of cash netted, it is a reason why medical men should advertise. Even without putting it in this brutal way, it may be pointed out that other professional men—*e.g.*, clergymen and lawyers—advertise their books in non-professional papers, and why should not doctors do the same? A thing is not wrong merely because tradesmen do it. Physicians have to provide for themselves and their families, and it is unreasonable to forbid them to take steps which will harm no one, and will help them in the struggle. Thus it may be with force argued; and if there were no graver objections to the custom than the feeling expressed by the use of such words as "undignified," "unprofessional," etc., we think we might predict that a rule based on such a weak foundation would be inoperative without the support of tangible pains and penalties. But are the objections to medical advertising purely sentimental? We hold not, and we will briefly state one or two of the grounds on which we think the advertising of medical books in popular periodicals is to be strongly deprecated. First, we think it desirable that a line distinct enough for public recognition should be drawn between quacks and legitimate practitioners. At present the majority of people go to the one as readily as to the other. They are of course generally guided in their choice either by the advice of friends or of the family medical man; but when independent of such advice, they know no difference between one person and another, who both alike profess to have medical knowledge. So long as books by the leaders of the profession are advertised in the daily newspapers, it is difficult to persuade a layman that he is acting foolishly in studying the advertisement columns to find out who has paid special attention to his particular disease or symptom. In those columns he has his choice among scientific men and charlatans of all sorts: and if he should choose wrongly who can wonder? If the leaders of the profession, and those who aspire one day to lead it, will cause advertisements of their books to be strictly confined to medical journals, their works will in this way be separated from quack productions; and the public will get to suspect that a medical work advertised in non-medical journals is not that of a practitioner of high repute. Secondly, we would urge the general observance of the College resolutions on the ground of economy. Advertisements, we suppose, sell books, and bring a few patients to their writers; but although they may thus be immediately profitable, yet we are convinced that the distrust which the profession feels towards an unblushing and continuous advertiser goes far to prevent such success from being great or lasting. This is as it should be. But let us suppose it otherwise: that free advertising were looked upon as a legitimate mode of getting practice, just as a tradesman uses it to get customers. It would then be a necessity for every aspiring physician to spend large sums in making himself known. It is a good thing that such expenditure is not necessary at present; and we hope the resolutions of the College of Physicians may go far towards making it not only unnecessary, but disadvantageous. Thirdly, in the graceful speech which Sir James Paget delivered at the Hunterian Banquet of the Royal College of Surgeons, he expressed a wish that the literature of the profession were not quite so voluminous; and we think few who have the higher interests of the profession at heart will differ with him. Medical books are of two kinds: those intended for the profession, and those intended for the public. The former are written to benefit mankind. They are only understood, for the most part only bought, and certainly only appreciated, by the profession; and to advertise them in other than professional journals is a wasteful expenditure. The latter, with few exceptions, are written to benefit the writer. The profession despises them, but they are purchased, studied, and too much believed in by the public. Such works would not fulfil their mission were they not well advertised in the lay press. It is highly desirable that the production of books of the former class should

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be aided, and of the latter checked; and we doubt if any better way can be found of accomplishing the last mentioned of these ends than by cutting off from works of this class the atmosphere which is necessary for their existence—the advertising columns of the daily press.

There is an old and wise saying, that whatever is worth doing at all is worth doing well. If we regard the present system of medical advertising from the point of view of one in whose eyes free advertisement is a proper way of attracting the notice and the favour of the public—from that of an advertising agent, for instance,—we must say that even the most vigorous advertisers to be found in the ranks of legitimate medicine (we mean by the latter phrase, those who, although they advertise their works, do try to make them good and useful to their brethren) are far inferior in enterprise and skill to the quacks whose announcements are displayed side by side with theirs. Such a person would give, we imagine, if consulted, some such advice as this: "If you advertise at all, advertise well; lay out capital in it; display more conspicuously that which you want the public to see, read, and remember. Look at the advertisements of quack medicines: their proprietors understand their business far better than you do; take a lesson from them; make up your mind whether you are going to get patients by advertisement or by other means; and if the former, don't be penny wise and pound foolish." And we think his advice would be based on sound business principles. We would venture to say to our brethren who advertise their books in the lay press, that if the object of advertising medical books is to bring them to the notice of the profession, it is enough to advertise in the medical journals. If it be to attract the public, then both object and method are the same as that of the quacks, except that they are pursued with less singleness of mind, and therefore far less vigour, skill, and enterprise; and we would counsel the abandonment of the unequal competition.

We have two words more to say, which we will do very briefly. The resolutions of the College of Physicians have theoretically no application to surgeons. We hope, nevertheless, and believe, that their moral weight will be felt by surgeons as well as by physicians. Lastly, the College of Physicians has at least this power—it can refuse to confer the honour of its Fellowship upon those who obtrude their names upon the public; and this we hope it will persistently do.

THE QUEEN'S SPEECH.

The gracious Speech from the Throne read at the opening of Parliament on the 15th inst. referred to many very important and weighty matters that are to be brought forward by Her Majesty's Government during the present Session. Bills are to be introduced for the Codification of Criminal Law; for the establishment of a Court of Criminal Appeal; for the amendment and consolidation of the laws relating to Bankruptcy and Patents; for preventing Corrupt Practices at Elections, and for perpetuating and amending the Ballot Act. A measure will be brought forward for the extension of Municipal Government to the whole of the metropolis; and, "if time should permit," this is to be followed "by other measures relating to reform of Local Government." Bills will also be introduced, dealing with the Conservancy of Rivers and the Prevention of Floods, with the Universities in Scotland, and with the Police in Scotland; and with Education in Wales. And Government will submit to the Houses of Parliament a measure to more effectually secure to tenants in England and Scotland Compensation for Agricultural Improvements. But the Queen's Speech does not refer to any measures founded on the Report of the Royal Commission on Infectious Hospitals, or on that of the Royal Commission on the Medical Acts. Nor have we found a clear and definite statement as to any Bills to be introduced on either of those subjects, or on any other matter especially affecting the medical profession in any of the speeches made by, or on the part of, the Government. The mover, in the House of Lords, of the Address in reply to the Speech from the Throne, did indeed, when speaking of the Bill to create a Municipality for the whole of London, recommend to that body the consideration of so reforming the University of London as to make it not a mere examining body, but a University in the strict sense of the word, "by organising the various colleges and courses of lectures—especially as regarded law and medicine—which already exist." And the Marquis of Hartington stated in the House of Commons, on the 19th inst., that several other Bills, not mentioned in the Queen's Speech, but of considerable importance, would be introduced in that House; and among such he named one "relating to the amendment of the law regarding medical matters." Should this Bill only provide that no person shall be admitted to the Medical Register without showing proof of having passed recognised examinations in medicine, surgery, and midwifery, and deal with the reorganisation of the General Medical Council, it may meet with little or no opposition; but any measure interfering seriously with the powers of the Medical Corporations or of the Scottish Universities in regard of medical degrees, will certainly be determinedly and vigorously resisted. It may be supposed that if Government introduce a Medical Bill at all, they will do so with a full intention of passing it if possible, for Ministers and members of Parliament must be somewhat weary of Bills to amend the Medical Acts. But looking at the number and weighty character of the Government measures already introduced or promised this session, it requires either a very sanguine reliance on the good fortune of Her Majesty's Ministers, or a firm conviction of their intention and power to bear down, by the new rules of procedure, all opposition of every kind, to enable one to believe that there will be any real prospect of the success of a Bill dealing fully with medical matters on the lines of the Report of the Royal Commission. At present, at any rate, it does not appear in the least likely that this year will see any legislative settlement of the long-continued agitation for medical reform. Meanwhile, the Royal College of Physicians of London and the Royal College of Surgeons of England wisely continue the work of quietly and steadily reforming and improving—the two words do not always (*pace* the reformers) mean the same thing—their own procedure and examinations. It is certain, we believe, that the joint Committee of the Colleges to consider the possibility of the best means of forming one complete pass examination board, "which shall be satisfactory to the profession, the Medical Council, and the Government," have agreed on a scheme; and this will shortly, no doubt, be submitted to the College of Physicians and the Council of the College of Surgeons.

It seems probable that private members will fare almost as badly in their attempts at legislation this session as they did in the last; but they are courageous and hopeful, and have therefore give nnotice of Bills and resolutions on many subjects, the list including many old acquaintances. Mr. Anderson wishes to amend the Cruelty to Animals Act. Mr. Hopwood will again call attention to the Contagious Diseases Acts, and move a resolution. Sir Thomas Chambers gallantly comes forward again to emancipate the deceased wife's sister, but still restricts his Bill to the amendment of the law with regard to marriage to women of that category, and has no like consideration for the deceased

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husband's brother; and Mr. Peter Taylor will once more endeavour to compass the repeal of the compulsory clauses of the Vaccination Bill. The increasing spread and strength of the temperance movement is clearly shown by the number of notices given relating to what may be called temperance measures. Sir J. Pease brings in a Bill dealing with Sunday closing in England and Wales; and separate notices have been given for Bills prohibiting the sale of intoxicating liquors on Sunday in Monmouthshire, Cornwall, and Durham; a Bill is to be introduced for the amendment of the law regarding the granting of licences for the sale of intoxicating liquors not to be consumed on the premises; and a Bill to secure the purity of beer; and two attempts will be made to amend the Sunday Closing Act for Ireland.

HOLIDAY COLONIES FOR FEEBLE CHILDREN.

In our report of the International Congress of Hygiene held at Geneva last autumn, we noticed very briefly Dr. Varrentrapp's paper on Holiday Colonies. It has recently been reprinted as a pamphlet, which we have received from the publishers, Messrs. Vieweg, of Brunswick; and we trust that it may find a translator into English, and that our country, which set the example of seaside hospitals for scrofulous and sick children, may now follow that of Switzerland and Germany in establishing these holiday colonies for feeble, though not actually sick, children of the poorer classes in large towns.

The method adopted in different places varies, but that at Frankfort may be taken as an example. From a list of children of necessitous parents, recommended by the head teachers of each primary school, as most likely to benefit by a change to country air, a medical man selects as many as the funds available allow. They are divided into parties of from ten to twenty, the boys and girls separately, each under a teacher of the same sex. The selection of these requires judgment—sympathy with the young and buoyancy of spirits being essential qualifications for a leader. The children should be between the ages of eight and fourteen, younger ones requiring too much personal attention for the common good. For the colonies, inns, schools, farm-houses, or other buildings with ample accommodation and good sanitary surroundings, are engaged in any healthy open part of the country, preferably in forests or near the sea, but out of the ordinary tourists' routes. There the colony is sent during the summer holidays for two, or better, three or four weeks. When the weather is fine the day is passed in walks and outdoor sports; with boys in bathing, swimming, and such free gymnastics as their strength permits; and their powers of observation and intelligence are stimulated by the collection of butterflies, plants, etc. Evenings and wet days are enlivened by indoor games, reading, singing, and arranging their collections, when much information of a scientific character may be imparted by an intelligent teacher. Most of the housework is done by the children, who thus learn habits of order and cleanliness. The food is liberal, especially as regards meat and milk, and the children gain remarkably in weight, health, and vigour of body. With a really judicious teacher, too, the improvement in general intelligence and manners is no less striking. The gain in weight is not, as was feared might be the case, only the immediate and temporary result of abundant diet, for repeated monthly weighings show that the improvement is lasting, and even in their studies the children make more rapid progress during the ensuing year. The cost of maintaining a colony of course varies, but in Germany averages two shillings a head per day. This does not include the outfit of those children whose parents are too poor to provide decent clothes, especially boots—an expense met by private charity, much caution being required to prevent its abuse. At Hamburg, numbers of children are entertained (often free of cost), one, two, or three together, in the families of country clergymen, schoolmasters, officials, and farmers; and in Denmark 7000 are put out to board with cottagers in the country; but neither of these plans can compare with the Holiday Colony, at least as regards boys. The physical exercise, the joyous life of the colony is wanting, and in the Danish system there is no guarantee that they will fare more liberally than at home; and, moreover, the moral and intellectual influence of the leader of the colony, or even of the well-ordered household, is absent.

Holiday colonies have already been introduced into Italy, and we hope it may not be long before like advantages are placed within the reach of some of the children of our own towns.

THE WEEK.

TOPICS OF THE DAY.

The difficulty of providing sites for hospitals for contagious diseases was again exemplified in a recent action brought against the Guardians of St. Mary Abbott's, Kensington, and set down for hearing before Mr. Justice Field, in the Queen's Bench Division of the High Court of Justice. The complainants sought to obtain a perpetual injunction to restrain the defendants from using an iron hospital in Mary-place, Walmer-road, Notting Hill, for the treatment of small-pox patients. In the immediate neighbourhood of this building, which was erected in 1881, there are stated to be laundries, lodging-houses, and a Board school, attended by from 400 to 500 children, and therefore, the plaintiffs alleged, the danger of infection would be unusually great. An *interim* injunction had been obtained as soon as possible to prevent the building being used for the reception of those suffering from small-pox or other infectious diseases, and it was now sought to make such injunction absolute. As a matter of fact, the hospital is not at present intended to be used for small-pox patients, and it was only built in contemplation of the possibility, in 1881, of an outbreak of that disease in the parish, which happily did not occur. As a result of negotiations for an amicable settlement of the case, the Guardians undertook that the hospital should not be opened unless under pressure of a great emergency, and then not until every other measure had been exhausted, and the sanction of the Local Government Board had been obtained, such sanction not to be asked for by them without notice to the other side. In discussing the case, Mr. Justice Field said that he was very glad to know the parties had come to terms; the question was one with which it would otherwise have been very difficult to deal. Probably the matter could hardly be settled satisfactorily without legislation, and his lordship hoped that there might soon be some legislation on the subject. With that remark all sensible people will readily concur, but the session has barely opened, and yet Irish obstruction bids fair to put a stop to everything useful and necessary.

The question of providing a park for Paddington has not been heard of for some weeks, and it is to be feared that the matter has not advanced during that time. From further correspondence on the subject which has been made public, it would appear that the question had been referred by the City Common Council to the Coal, Corn, and Finance Committee; that they communicated with the Metropolitan Board of Works, and that the Clerk to that body was instructed to reply "that they could afford no information, as they had no scheme before them for the formation of a park

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for Paddington." On January 8 last, Mr. J. Westlake, by order of the Paddington Park Committee, wrote to the Board, expressing regret that they had not supplied the desired information, as it involved the delay for three months of any action on the part of the Corporation. Mr. Westlake further requested to be informed whether the Metropolitan Board adhered to their former resolution with regard to a scheme then before Parliament to pay £1000 an acre, on the promoters acquiring and conveying the fee-simple of the ground for a park; whether the Board would lay out that ground, and take it under their charge; and whether they would receive a deputation on the subject. In reply, the Board stated that if the Paddington Park Committee had any definite scheme to propose, a deputation would be received in explanation of it. Mr. Westlake has since written, pointing out that no scheme could be matured until the desired information was obtained from the Board. The Committee believed, he added, that, with the willing co-operation of the Board and the Corporation of London, such an impetus would be given to private effort that the object might ultimately be effected.

A public meeting has recently been held in Glasgow to further the proposal for a permanent meteorological station on Ben Nevis, and Mr. Milne Home, the Chairman of the Scottish Meteorological Society, submitted a statement regarding the proposal. Such an establishment, it was stated, would enable them to ascertain and record atmospheric changes at that particular place, the temperature, the humidity, the rainfall, the electricity, the direction of the movements of the atmosphere, and the speed and violence of the wind, with respect to Atlantic weather and storms. Ben Nevis would, in fact, hold the first place among the higher level stations of Europe. To build and equip a proper observatory on the mountain a sum of not less than £5000 would be required, and the Society had already received upwards of £1400 towards the attainment of this object. Sir William Thomson, Professor M'Kendrick, Mr. John Burns, and others spoke in favour of the proposal, and a committee was formed for the purpose of promoting the scheme and obtaining subscriptions; £140 was subscribed at the meeting.

The Council and delegates to the Hospital Saturday Fund recently held a meeting at Exeter Hall, under the presidency of Mr. S. Morley, M.P., to receive and pass the annual report of the preceding year. The Chairman stated that since the Fund was instituted the workmen of London had contributed, through it, no less a sum than £50,000 to the hospitals and dispensaries of the metropolis. Against such a statement we venture to protest. The Hospital Saturday Fund may have distributed that amount, but it certainly has not come out of the pockets of the working-man proper. Mr. Hamilton Hoare, in moving the adoption of the present report, stated that £800 had been collected in copper coin—a good indication, he maintained, of the interest which poor people took in Hospital Saturday. The total collection for the past year was £8690, and it would be instructive to ascertain how much of that amount was contributed by persons who might be fairly considered to belong to the working classes. We have much more sympathy with the utterances of Mr. E. H. Byrne, who seconded the resolution for the adoption of the report. He suggested that each workman should give 1s. towards the Fund—a sum he thought a workman might easily afford,—and then the Hospital Saturday Fund would achieve a total each year of £50,000 at least. Such a course would be worthy of all praise: the hospitals would receive substantial support from the class to whom they are most useful; the Hospital Sunday Fund would be either shamed out of the field or immensely increased (another point in favour of the hospitals); and the somewhat questionable promiscuous street-corner collections of the present Hospital Saturday Fund would become no longer necessary. But we fear Mr. Byrne's excellent suggestion will take a great deal of carrying out.

The Nottingham authorities recently summoned a number of milk-dealers for selling adulterated milk. In opening the subject before the local magistrates, the Town Clerk, who prosecuted, explained that there were eleven summonses to be heard. The Chief Inspector of Nuisances in the borough and his assistants had purchased forty samples of milk from different places in the town, including the railway stations. At each place they asked for new milk and paid for new milk. All the samples had been submitted to the public analyst, and that gentleman had stated that in every case he had conducted his analysis according to the standard of purity most in favour of the milk-sellers, and the one adopted by the Society of Analysts. Had he taken either of the other two authorised standards, they would probably have had to summon twenty defendants intead of only eleven. In nearly every instance the defendants contended that they retailed the milk exactly as it came to them from the farmers who supplied them; the magistrates, however, inflicted penalties in every case, varying in amount according to the degree of the offence proved.

One of the most prominent topics of the day, though certainly not the most pleasant, has been the persistent rainfall of the present winter. From the meteorological returns, however, it would appear that, after all, the quantity which has fallen is very little over the average. As a set-off, it is pointed out that the general death-rate in London throughout the winter months has been very low, in part, at least, due to the cleansing of the air, and flushing of sewers and watercourses by rain; and it must be admitted that, although in a few districts it may induce malarial disease, the season of much rainfall is, as a rule, a healthy one. Nor is it the Old World alone that is suffering from exceptional wet: in America the most disastrous consequences are anticipated from the overflow of several of the great rivers; not only has there been much loss of life, but the public health in the inundated districts is unsatisfactory, and fears are entertained of the outbreak of a fever epidemic, to be in readiness for which sanitary commissions are already being formed.

The total number of deaths reported in the United States during the census year was 756,893, equal to a death-rate of 15·1 per 1000. It is considered, however, that the actual number of deaths was in all probability about 100,000 more than the figures given above. The male death-rate was placed at 15·35, and the female at 14·81 per 1000. Out of 390,644 deaths of males in which the ages were given, 96,894 were those of children under one year of age, and 163,880 were under five years. Of 363,874 deaths of females, where the ages were given, 78,372 were less than one year old, and 138,920 less than five years. No fewer than 38,398 persons are reported to have died from diphtheria, 22,905 from typhoid fever, 20,261 from malarial fever, and the large number of 91,551 of consumption.

Sir William Armstrong, of the Elswick Ordnance Works, has offered the Corporation of Newcastle-on-Tyne, for the use of the public, a piece of beautifully wooded land, about fifty acres in extent, known as Jesmond Dene, with certain buildings upon it, subject only to a reservation of a measure of control during his own and Lady Armstrong's lifetime. The gift, which is described as a princely one, has been accepted by the Mayor of the town on behalf of the inhabitants.

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MORTALITY IN PARIS FROM EPIDEMICS IN 1881.

DR. LAGNEAU, in his report to the Conseil d'Hygiène (*Progrès Médial*, February 10) on the mortality of the department of the Seine during 1881, states that during that year, in a population of 2,799,329, there occurred 2690 deaths from diphtheria, 2315 from typhoid fever, 1182 from small-pox, 1009 from measles, 860 from cholera and choleriform diarrhœa, 449 from pertussis, and 463 from scarlatina. If we relied entirely on statistics, there were only 109 deaths from puerperal affections, 14 from hydrophobia, and 5 from charbon and malignant pustule. But these figures are very evidently below the truth. Puerperal diseases have only been noted with any care in the hospitals, and the Conseil d'Hygiène has received direct information of 23 deaths from hydrophobia. Dr. Lagneau points out the significant fact that for several years past the deaths from diphtheria, typhoid fever, and measles have been progressively increasing.

COLLEGIATE LECTURES.

PROFESSOR FLOWER, F.R.S., will commence his annual course of nine lectures on the "Anatomy of the Horse and its Allies," in the theatre of the Royal College of Surgeons, on Monday, the 26th inst. The following is his syllabus, viz.:—Lecture I. (February 26).—Position of the horse in the animal kingdom; classification of the Mammalia; the *Ungulata*, or hoofed mammals; generalised forms, mostly extinct; characters of the two principal surviving groups—the *Perissodactyla* and *Artiodactyla*. Lecture II. (February 28).—The Perissodactyle or "odd-toed" Ungulates; characters of the existing species of *Tapiridæ*, *Rhinocerotidæ*, and *Equidæ*. Lecture III. (March 2).—Extinct species of Perissodactyles; generalised forms; forms closely related, or which lead up to existing forms; forms which have become specialised without leaving descendants or representatives. Lecture IV. (March 5).—Anatomical characters of the horse in further detail, and as compared (*a*) with the generalised mammalian type, (*b*) with the allied forms of Ungulates, and (*c*) with Man; the skeleton. Lecture V. (March 7).—The dentition. Lecture VI. (March 9.)—The muscles; structure of the limbs, especially of the feet. Lecture VII. (March 12).—The brain and organs of the senses. Lecture VIII. (March 14).—The respiratory, circulatory, digestive systems, etc. Lecture IX. (March 16).—Recapitulation and conclusion.

BACTERIA IN SYPHILIS.

WE laid before our readers last year (vol. ii., page 415), and in our number for January 13 of the present year, accounts of Birch-Hirschfeld's important observations on the special organisms in syphilitic formations; and we have now to notice some investigations lately made by Dr. Robert Morison, of Baltimore (*Wiener Medizinische Wochenschrift*, No. 3), on the presence of bacteria in syphilis. The theory that low organisms are in some way causally related to syphilis has been propounded by various observers—Hallier, Klebs, Bermann, Aufrecht, Salisbury, and more recently Martineau, Hamonic, and Birch-Hirschfeld. Dr. Morison's observations were made on fifteen patients attending Professor Neumann's clinic at Vienna. The secretions from chancres and papular syphilides were made use of. These secretions were transferred to cover-glasses and dried in the ordinary fashion; then placed first in acetic acid and afterwards in alcohol; and then stained with methylene blue or fuchsin. If the latter was employed, the cover-glasses were kept therein for half an hour, the fluid being gently warmed, and then they were transferred to a solution of nitric acid (one in six). Dr. Morison has never failed to obtain bacteria in the fluids taken from chancres since he has employed the above process. Bacteria were also demonstrated in the blood and secretion from the cut surface of a papule. Bacilli were also found in the tissues of chancres and papules, but their detection here is more difficult. With a Reichardt one-fifteenth oil immersion, and an Abbé condenser, these bacilli appear as little cylindrical rods. Martineau and Hamonic have inoculated guinea-pigs with the secretion from chancres, and have, it is supposed, produced syphilis in these animals, in the blood of which bacteria were found of the same shape as those seen in chancres. Morison has further investigated the pus from soft chancres, and has detected bacteria which are quite different from those found in genuine syphilis; they are longer, slighter, and more like those of *Bacillus anthracis*, only not so big. For the sake of comparison, the blood of normal individuals, and the fluid from simple acne, eczema pustulosum, and pemphigus, were examined with negative results.

THE PROPAGATION OF SYPHILIS BY A MIDWIFE.

MARTHA SCHOFIELD, the midwife of Attercliffe, near Sheffield, who was found guilty, on the 12th inst., of having inflicted grievous bodily harm on various women, by having attended them in their confinements when she had on the forefinger of her right hand a sore which she knew was syphilitic, was sentenced on the 15th inst. to twelve months' imprisonment with hard labour. It cannot be said that the punishment is one whit too severe, for it was clearly proved that the woman had been most distinctly warned by more than one medical man that she must not on any account continue her calling till the sore on her hand was perfectly healed. The Corporation of Sheffield deserve much credit for having, under the advice of Dr. Hime, the Medical Officer of Health for the borough, instituted and carried out the prosecution of the woman. And the public and the profession are indebted to Dr. Hime for his energy and perseverance in inquiring into the history of the whole matter when his attention was first directed to it, and for the skill and care with which he prepared and presented his evidence before the jury. The case is a very interesting and important one.

THE LOCAL GOVERNMENT BOARD AND THE METROPOLITAN ASYLUMS BOARD.

AT the last meeting of the Managers of the Metropolitan Asylums Board a letter was read from the Local Government Board, in which it was stated that it is not the intention of the Government to deal with the former Board in the proposed scheme of municipal government for the metropolis. The Chairman (Mr. E. H. Galsworthy) explained the result of the interview which he and the Vice-Chairman (Sir E. H. Currie) had had with the President of the Local Government Board; and a long communication received from Sir Charles Dilke since such interview was read to the meeting. The main suggestion contained in it, for dealing with the important question of providing infectious hospitals, was that the Asylums Board should establish one or more floating hospital-ships, in addition to the *Atlas*, some fifteen miles or more below London-bridge, where the less acute cases of small-pox might be received. It would then probably happen that land, at no great distance from where such hospital-ships were moored, could be secured (without compulsory powers of purchase) for the erection of buildings to which convalescent patients could be transferred. Such an arrangement, it was stated, would appear to be in accordance with the views of the Royal Commissioners, and, so far as regards pauper patients, would probably allow of accommodation being provided, without the delay and difficulty which might attend the obtaining

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of sites for hospitals in the metropolis or its immediate neighbourhood. The letter next considered the details of providing a carrying-steamer for the conveyance of patients from London to the hospital-ships, and the method of getting them embarked, and promised that if no point of embarkation could be obtained by voluntary arrangement, the Local Board would be prepared to apply to Parliament for compulsory powers to secure a suitable spot at a convenient place on the river. Finally, the communication assured the Managers that they should be assisted as much as possible in meeting the difficulties of their position; and the Chairman, in moving that the letter be referred to the General Purposes Committee, remarked, with much satisfaction, that it was of a character very different from the communications the Managers had of late years received from the same quarter. The returns from the fever hospitals (six in operation) showed that in the past fortnight 79 patients had been admitted, 16 had died, and 108 had been discharged, leaving 408 under treatment, namely, 307 scarlet fever cases, 1 case of typhus, 93 enteric fever cases, and 7 other cases of a febrile character. The number left under treatment showed a decrease of 45 on the numbers recorded a fortnight ago. Of small-pox cases 33 patients had been received in the three hospitals open, 3 had died, 27 had been discharged, and 99 remained under treatment (an increase of 2 over the number a fortnight ago).

DEATH OF PROFESSOR KARL LUDWIG VON SIGMUND.

PROFESSOR VON SIGMUND, for many years one of the principal representatives of the Vienna Faculty of Medicine, and so well known for his very numerous works on Syphilography, has just died at Padua at the age of seventy-two.

A COMPLEX OPERATION.

SCHUSTLER has recently recorded (*Wiener Med. Woch.*, Nos. 2 and 3) an extraordinary case of operation by Billroth. The patient, a woman aged twenty-nine, married at the age of eighteen, and had five children without any trouble; but the sixth pregnancy ended, four years ago, in the expulsion of a decomposing fœtus of about six months; since which time leucorrhœa was constantly present. Nineteen months ago the patient was delivered of a healthy child. But the first signs of illness dated from the miscarriage, and were—pain increasing in severity, fever, and tenderness on pressure about the lower part of the abdomen; later on, shortness of breath and palpitation were complained of, and to these were soon added disturbances of micturition and defæcation. The chief point made out on admission, in October, 1881, was the detection of apparently two tumours in the abdomen, to some extent connected with one another. One was situate in the right iliac fossa, and was about the size of a man's fist. The second was separated from this by a furrow, and was the larger of the two, reaching from the right swelling into the left iliac fossa along Poupart's ligament, while upwards it nearly reached the false ribs. The tumours were but little movable, and admitted of but little motion one on the other. Both tumours were irregular on the surface, of dense consistence, and no fluctuation was detected. The diagnosis was: new growth in both ovaries, with ascites. The patient growing worse, an operation was performed for the removal of the tumours on October 18, 1881. Antiseptic treatment, without the spray, under deep narcosis, was adopted. A median incision was made at first from the navel to the pubic symphysis, but had to be extended for about an inch above the navel. Some loose adhesions were easily broken down, but this was not the case with others near the symphysis pubis, on account of which Billroth found it expedient to remove a piece of the bladder about an inch long and not so wide. The urine had been previously drawn off, and only a few drops were seen in the viscus. An assistant seized the edges of the wound and held them up, and so prevented the escape of urine into the peritoneal cavity. The bleeding was slight. Six silk sutures were used to sew up the bladder. But it was found necessary to resect also a portion of the small intestine, owing to the firm union which existed between the bowel and the tumour. Rather more than three inches of the length of the ileum were in this way removed. The corresponding mesentery was secured in five parts by double ligatures. The two cut ends were brought together first at the site of the insertion of the mesentery by five silk sutures after the manner of Wolfler, and the remainder of the lumen was then closed. With a little more trouble the enlarged left ovary was removed, Paquelin's cautery being used to divide the pedicle. The *right ovary* was afterwards got out without much difficulty. After the toilette of the peritoneum had been thoroughly carried out, the abdominal wound was closed by deep and superficial sutures; no drainage was employed. A firmly applied iodoform gauze dressing was used. The further course of the case was very favourable. The temperature never rose above 100° Fahr. For the first two days nothing but a little egg albumen was taken; on the third day a spoonful of milk and meat broth, with wine, were allowed. Flatus passed by the bowel after the second day; a natural stool followed the use of an enema on the tenth day. In the first days the urine was removed by a Nélaton's catheter; later on, micturition was spontaneous. The wound in the abdomen healed completely by first intention. All the sutures were removed by the tenth day. On November 12 the patient was quite well, having got up on the 10th. Fifteen months after the operation she was in excellent health in every way. Menstruation returned three months after the operation, and continued to be regular, lasting from three to four days. The microscopical examination of the tumours showed them to be medullary carcinomata; both together weighed between four and five pounds. Schustler says that Madelung is the only other operator who has resected a portion of the intestines in such circumstances. The case is remarkable, seeing that double ovariotomy and resection of portions of the bladder and of the ileum were performed, and yet the patient recovered; further, no recurrence of the tumours had occurred after the lapse of fifteen months.

THE HEALTH OF THE COMBINED SANITARY DISTRICT OF GLOUCESTERSHIRE.

THE Combined Sanitary District of Gloucestershire, to which Dr. Francis T. Bond holds the appointment of Medical Officer of Health, is sufficiently large to tax the powers of the most able sanitary administrator. The Rural Authorities comprise Chepstow, Chipping Sodbury, Cirencester, Dursley, Gloucester, Tetbury, Thornbury, and Westbury-on-Severn; and the Urban Authorities, Awre, Cirencester, Newnham, Tetbury, and Westbury-on-Severn; the area is about 620 square miles, and the population in 1881 was 123,333. Turning to Dr. Bond's report for the year 1881, it will be found that the death-rate of the district during that period exhibited a further decline on that of 1880, having fallen from 16·3 to 14·3 per 1000, a lower point than has been reached in any of the seven preceding years. It would appear, Dr. Bond says, that a wave of mortality has passed through the district, which, steadily rising from 1874 to 1879, with the exception of the year 1877, when there was a temporary retrocession, is now subsiding with greater rapidity than it rose. The cause of this wave, Dr. Bond

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admits, is not very evident, as it does not coincide with any prevalence during this period of a corresponding general zymotic mortality, nor of any special epidemic, the great outbreak of scarlet fever having taken place in 1876. Further observation will, he thinks, alone show whether it is part of a general organic fluctuation, or whether it is merely accidental in character. In either case the fact is a subject for congratulation, as it indicates that the district as a whole is, judged by this standard, some 25 per cent. healthier than the rest of England and Wales. The report further shows that there has been a steady decline in the mortality from the zymotic group of diseases since 1874, which was arrested in the year 1880 by a rebound. This rebound, however, though sufficiently distinct, was not large enough to interfere with the general decline which had been evident up to that year, and was due to the excessive infantile mortality from summer diarrhœa which occurred in some parts of the district. The statistics of last year, now published, show that the arrest was merely a temporary one, and that the decline has again been very decided. The importance of this fact becomes more evident when it is stated that the zymotic mortality of last year (152) is as nearly as possible half the amount of that of 1874 (301).

THE DUBLIN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

In reference to Dr. Thomson's amendment, which was negatived at the adjourned meeting of February 13, there can be no doubt that it expressed not only the opinions of the vast majority of those present, but also the policy of the Branch on the subject of medical reform. The amendment ran as follows :—"That this Branch declares its approval of a well-considered scheme of conjoint examination in each division of the kingdom, and of the reconstruction of the Medical Council, including direct representation of the profession." Had this amendment been put as an original motion *after* Dr. Atthill's amendment had been carried as a substantive resolution, there would have been practically no opposition to it, and it would have been a unanimous expression of opinion to guide the Council in their reconsideration of the Report of the Royal Commissioners. Under these circumstances it is to be regretted that Dr. Thomson and his friends pressed it forward as an amendment.

MINUTE PATHOLOGY.

Fehleisen has cultivated micrococci taken from the lymphatic vessels and subcutaneous connective tissue of patients suffering from erysipelas. The bacteria were bred on Koch's preparation of meat-peptone-gelatine, which prevented their diffusion and allowed the cultivation of a pure type. Inoculations were performed on rabbits and on man with success. Prompted by the knowledge that erysipelas has done good in some cases of tumours of the skin, the following procedure was carried out :—Some of the fluid containing bacteria of the fourth generation was taken, and inoculated by five punctures into the surface of a tumour situate on the left buttock ; four days later, genuine erysipelas with shivering and high fever set in. The whole erysipelatous process lasted ten days, and ended in recovery. The patient was fifty-eight years of age, and was the subject of multiple tumours of the skin. The smaller superficial nodules on the tumour became softer, and completely disappeared during the first few days of the induced erysipelas, but the main mass only diminished a little in size. Bockhart conducted a pure cultivation, up to the fourth generation, of micrococci derived from the discharges of gonorrhœa. Some of the material from the fourth breed was transferred to the mucous membrane of the urethra of a paralytic patient, aged forty-eight years. In forty-eight hours the external meatus was reddened, and pressure on it yielded a slimy secretion. On the third day a drop of pus could be expressed; and on the sixth day as much as seventeen cubic centimetres were collected by pressure on the urethra. The patient died on the twelfth day of hypostatic pneumonia. The fossa navicularis especially was found to be the seat of a tenacious sanguineo-purulent secretion. In preparations made from this neighbourhood enormous quantities of bacteria were found in the nuclei of the white blood-corpuscles. No micrococci were detected in the epithelial cells. The lymphatic vessels and fissures in the connective tissue of the same region were blocked apparently by the "gonococci."

THE PARIS WEEKLY RETURN.

The number of deaths for the sixth week of 1883, terminating February 8, was 1146 (609 males and 537 females), and among these there were from typhoid fever 41, smallpox 15, measles 10, scarlatina none, pertussis 5, diphtheria and croup 43, dysentery 1, erysipelas 5, and puerperal infections 3. There were also 54 deaths from acute and tubercular meningitis, 206 from phthisis, 49 from acute bronchitis, 101 from pneumonia, 71 from infantile athrepsia (27 of the infants having been wholly or partially suckled), and 40 violent deaths (30 males and 10 females). The number of deaths registered exceeds the mean of the preceding four weeks, which was 1129. The number of deaths, indeed, was almost the same as that registered in the preceding week; and those from typhoid fever continue to decrease (41 instead of 45), and the admissions into the hospitals have declined from 67 to 57. The increase of deaths this week over those of the preceding weeks is chiefly due to acute bronchitis and pneumonia. This latter disease has furnished during the last three weeks 79, 95, and 101 deaths; and the age of election in this disease (as in that of phthisis) is between fifteen and forty. The births for the week amounted to 1195, viz., 630 males (456 legitimate and 174 illegitimate) and 565 females (416 legitimate and 149 illegitimate) : 100 infants were either born dead or died within twenty-four hours, viz., 69 males (44 legitimate and 25 illegitimate) and 31 females (22 legitimate and 9 illegitimate).

HUNTERIAN SOCIETY.

At the annual general meeting of this Society, held on the 14th inst., the following were elected officers for the ensuing year :—*President :* *Walter Rivington, M.S. *Vice-Presidents :* Waren Tay, Esq. ; M. Brownfield, Esq. ; *A. L. Galabin, M.D. ; *R. Clement Lucas, B.S. *Treasurer :* H. I. Fotherby, M.D. *Librarian :* P. L. Burchell, M.B. *Orator :* *George Roper, M.D. *Secretaries :* G. E. Herman, M.B. ; *Charters J. Symonds, M.S. *Council :* *F. M. Corner, Esq.; E. Dukes, Esq. ; *T. R. Fendick, Esq. ; E. G. Gilbert, Esq. ; *J. Hughlings-Jackson, M.D., F.R.S. ; W. Talbot King, M.D. ; Stephen Mackenzie, M.D. ; H. Port, M.D. ; *J. McCarthy, M.B. ; G. J. B. Stevens, Esq. ; *W. C. Toulmin, Esq. ; *F. C. Turner, M.D. (Those whose names are marked by an asterisk did not hold the same office during the past session.)

THE SOUTH DUBLIN UNION.

On Thursday, February 15, there was an unusually large attendance of the Guardians at the weekly meeting of the Board—no fewer than sixty-three members being present. The occasion which secured so good an attendance was no ordinary one. It was the appointment of a Resident Medical Officer to the Workhouse at a salary of £250 per annum. Seven candidates contested the election, which was carried by Dr. Samuel Malenoir Thompson by a majority of eleven votes on the third and final voting.

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OVARIOTOMY STATISTICS.

Professor Gross some time since applied to Mr. Knowsley Thornton for the latest statistics of ovariotomy in Great Britain, in order to include them in the new edition of his "System of Surgery." They reached him too late for this purpose, but he has obtained permission of the compiler to publish them in the *Philadelphia Med. News* of January 27. They are as follows:—

	Cases.	Recoveries.	Deaths.	Mortality per cent.
Dr. Clay	98	64	29	31·11
Mr. Spencer Wells ...	1,068	847	241	22·15
Dr. Keith	381	340	41	10·76
Mr. Knowsley Thornton	328	293	35	10·67
Mr. Lawson Tait ...	226	199	27	11·94

In a note which accompanied the communication, Mr. Thornton observes that he has not been able to verify Dr. Peaslee's statement that credits Dr. Clay with 250 cases, with 182 recoveries, 68 deaths, and a mortality of 27·2; and that the discussion which took place in the *British Medical Journal* in 1880 failed to elicit any statement from Dr. Clay himself as to the *results*. Dr. Keith's cases only come down to October, 1881. Those of Mr. Spencer Wells, Mr. Thornton, and Mr. Lawson Tait are down to 1882 inclusive.

MUSCULAR SPASM AT THE COMMENCEMENT OF VOLUNTARY MOVEMENTS.

Under the above title, a very interesting and critical study is made of a disease hitherto undescribed in France, and almost, if not quite, unrecognised in this country, by MM. Gilbert and Marie (*Archives de Neurologie*, vol. v., No. 13). The patient upon whom their observations were made was a native of Cairo, aged twenty-six, the essential feature of his disease being that whenever he put any group of muscles into action they became seized with tetanic rigidity, lasting two or three seconds, and passing off gradually, not to reappear whilst he kept on using the same set of muscles: thus, in going upstairs his legs became rigid at once; but after he had mounted a few steps the rigidity disappeared, and he was able to go up the rest like any ordinary person. His arms were affected in a similar manner, as also the muscles of his eyeballs, tongue, and larynx. The muscles of his face were not affected, and he had never had any trouble in deglutition, defæcation, or micturition. During the spasm the affected muscles were notably increased in resistance and stood out in relief. He was a well-nourished, muscular man. The muscles were not hypertrophied, but were unusually sensitive to pressure. Myoidema was obtained in the gastrocnemii, and to a less degree in the quadriceps. The tendon-reflexes were natural, and passive movements did not provoke rigidity. There was no lordosis. The chief fact brought out by the electrical examination was the readiness with which the contraction produced by the current became tetanic, and also the way in which spasm was developed in the muscles adjoining that acted upon. He seems to have been an intelligent man, though somewhat deficient in memory, and with a rather violent temper. There was nothing noteworthy in his family history. The muscular affection was believed to have commenced when he was about ten years old. Amongst the various cases of this disorder that the authors have succeeded in collating, the most interesting series is that published by Dr. Thomsen, who was himself the subject of the affection, and who had been enabled to trace it in his own family through three generations. The history of this family is so interesting that we need make no apology for giving it here. Dr. Thomsen's great-grandmother died of puerperal mania in her first confinement; her two sisters had some mental affection late in life; her son (the narrator's grandfather) also had some mental affection in old age, and he left four children, the two younger of whom had this muscular rigidity in a marked degree and were also deficient in intellect. The two elder were healthy; one of these was the narrator's mother. Of her thirteen children no less than seven were affected with this muscular rigidity. In the next generation it has shown itself in six out of thirty-six children (including Dr. Thomsen's own four, all of whom had it, one even showing it though it died in infancy). After such a history as this, the influence of heredity cannot be denied. In discussing the nature of this affection, the authors incline to the view that it is of muscular origin, notwithstanding the fact that two observers have failed to detect any morbid state of the muscular fibres. In conclusion, they point out the objections to one of the names that has been given to it, viz., "spasmodic hypertrophic spinal paralysis," inasmuch as there is no hypertrophy and no paralysis, and no evidence to support the idea that it is of spinal origin.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

It is arranged that a discussion on Scurvy is to take place at the meeting of the Royal Medical and Chirurgical Society on Tuesday, the 27th inst. The subject will be brought before the Society by a paper from Dr. W. H. Neale, who was surgeon to Mr. Leigh Smith's yacht the *Eira*, which was lost in the Arctic Expedition last year; and by a paper from Dr. Hale White on Retinal Hæmorrhage and Dilatation of the Heart in a Case of Scurvy. Several naval and military surgeons are expected to be present, including Dr. Donnett, and Drs. Colan and Ninnis (who had charge of Sir George Nares's crew during the last Polar Expedition); and Dr. de Chaumont and others will also probably take part in the discussion, and give the Fellows the benefit of their experience. We need not say that the subject is one of the greatest interest and importance.

AN HISTORICAL CASE.

In the *American Journal of Medical Sciences* for January, 1883, there is given the termination of a very celebrated case by Professor F. P. Porcher. In 1828 the late Dr. Mott removed the greater part of the left clavicle of a young gentleman, nineteen years of age, for osteo-sarcoma. The operation was an exceedingly laborious one, but the patient made an excellent recovery, and died last year, fifty-four years after the operation, without any recurrence of the disease. It should be mentioned that he always had the complete use of the left arm. A careful autopsy was made, from which we learn that the subclavian vein was found to be uninjured. The sternohyoid, omohyoid, and anterior scalenus muscles were dissected out, and also the sterno-mastoid, the clavicular portions of which were entirely wanting, though its sternal attachments remained. The space occupied by that portion of the clavicle removed was found to be replaced by an adventitious ligamentous band, two inches in length and half an inch wide, extending from the acromial end of the clavicle to the manubrium sterni. The clavicular portion of the pectoralis major lower down, which had been divided in Mott's operation, was also found to be replaced by a broad band of ligamentous tissue connecting it with the deltoid. The acromial end of the clavicle, which had not been removed, measured an inch and three-quarters in length.

THE TREATMENT OF PLACENTA PRÆVIA.

A recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains an article of practical interest on the above subject by Dr. M. Hofmeier, of Berlin. It is based upon 46 cases which have been under his care. None of them

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were primiparæ. Of these 3 were beyond the reach of treatment when first seen, one of these being dead when Dr. Hofmeier arrived, another dying three-quarters of an hour before delivery, and another two hours after delivery. Putting these aside, there remain 43. Of these in 19 the implantation of the placenta was central, in 16 lateral, and in 8 marginal. The principle of treatment which Dr. Hofmeier regards as most essential is the termination of the labour as quickly as possible. The practice of temporising by plugging until the dilatation of the cervix has proceeded far enough to admit of ordinary podalic version he regards as bad. When the case is seen early, the one step which is the more clearly indicated the earlier the case is seen, is bipolar version after the method of Braxton Hicks, one or two fingers only being passed through the os uteri, and then extraction of the child effected as gently as possible. By means of this operation the accoucheur can proceed to hasten delivery without much troubling himself about the condition of the cervix. In 37 of Dr. Hofmeier's cases this principle of treatment was acted on: in 19 of them the cervix being nearly or quite dilated; in 18 little or not at all. In 30 cases bipolar version was performed; in three it was only necessary to bring down a foot, as the pelvic extremity of the child presented; in 3 version was accomplished by the ordinary method of introducing the hand into the uterus; and in 1 case delivery was effected by forceps. In 5 cases in which the cervical canal was not dilated, and the placenta was implanted centrally, Dr. Hofmeier perforated the placenta and drew down a foot through the hole. In 2 of these there was reason to think that the child was already dead, and in the other 3 profuse hæmorrhage was going on. After delivery, ergotin was injected subcutaneously, and the uterus syringed with a 5 per cent. solution of carbolic acid. Our author combats the theoretical objections brought against the method of Hicks by some German writers, that it is difficult, and only suitable for immature children. He says—and we think accoucheurs who have followed the teaching of Dr. Hicks will agree with him—that it is easy, and suitable when the child is large as well as when it is small. Of the 37 cases treated by Dr. Hofmeier, in 17 he judged that the child had died before delivery. Of the remaining 20, 6 died in the process of birth, 3 of them being premature, and 3 as the result of perforation of the placenta. The gross infantile mortality therefore was 63 per cent. The average infantile mortality given by various writers who have collected cases is from 60 to 65 per cent. Of the 37 mothers only 1 died; a mortality of 2·7 per cent., which Dr. Hofmeier contrasts with the average mortality of 30 to 40 per cent. Of the 6 other cases treated upon a more expectant plan, 1 mother and 4 children died. Taking with these the 3 who did not come under care until too late for treatment, Dr. Hofmeier's figures show 5 deaths out of 46 cases, or a mortality of 10·8 per cent. While congratulating Dr. Hofmeier upon his low mortality, we yet think the figures are too small to show decidedly that it is due to more than good fortune, Dr. Barnes states in his work on Obstetric Operations that he had 29 consecutive cases without a death, and yet his total mortality was 1 in 11¼. It appears to us that the dilatation of the cervix by india-rubber bags, as recommended by Dr. Barnes, and by the thigh and half-breech of the child, as practised by Dr. Hofmeier, have this in common: that they substitute soft, gentle pressure, uniformly applied to a large extent of the cervix, for the violent pressure of the operator's knuckles against a few points of the cervix, which is an inseparable part of the *accouchement forcé*, *i.e.*, the violent forcing of the hand through the undilated cervix for the purpose of effecting podalic version. We are inclined to think their good results largely due to this improvement.

"CATARRHAL" ULCERS.

At the meeting of the Berlin Medical Society, on January 26, considerable interest was excited by the reappearance of Professor Virchow, who held forth on the subject of "catarrhal" ulcers before a crowded audience. The gist of the address was to point out the erroneous nomenclature into which we had fallen, and which was probably to be largely attributed to the influence of Felix Niemeyer's well-known text-book. The course of argument followed out by Virchow consisted in this:—Catarrh is essentially a disease of the superficial layers of the mucous membrane proper, and may lead to an *erosion*; but erosions are not ulcers. To produce the latter it is necessary that something more should come into play, and that may be in some cases an external agent, such as the diphtheritic poison, or some deeper form of inflammation, *e.g.*, of the laryngeal perichondrium. Now, catarrh is essentially a superficial complaint; when ulceration sets in, the morbid process is no longer superficial (*i.e.*, catarrhal), and hence the reason for Virchow's contention. In other words, simple catarrhal inflammation never, *per se*, leads to ulceration in a healthy subject.

THE ENGLISH REGISTRAR-GENERAL ON THE FOURTH QUARTER OF 1882.

The quarterly return of the Registrar-General for the last three months of the year 1882 has recently been published. It shows that the births registered in England and Wales during the period in question amounted to 217,591, or 669 above the number returned in the corresponding quarter of 1881. The annual birth-rate was equal to 32·7 per 1000 of the estimated population, and was 1·7 below the mean rate in the ten previous corresponding quarters. The birth-rate of this quarter was lower than that recorded in the fourth quarter of any year since 1861, excepting only 1880, when it was but 32·1; in the twenty-eight great towns it averaged 34·8 per 1000, in London 34·2, and in the twenty-seven provincial towns 35·3. The number of deaths registered during this quarter in England and Wales was 133,267, equal to an annual rate of 20·0 per 1000 of the estimated population. This death-rate was 0·9 below the mean rate in the ten previous corresponding quarters, but exceeded by 1·3 the exceptionally low rate in the fourth quarter of 1881. The rates in the several English counties ranged from 15·2 in Dorsetshire to 23·3 in Lancashire. Compared with the county rates in the fourth quarter of 1881, those of last quarter showed the largest increase in Berkshire, Cornwall, Lincolnshire, Derbyshire, Durham, Northumberland, and Westmoreland. In equal numbers living, the deaths were 111 of males to 100 of females; in the corresponding quarter of 1881 the figures were 112 to 100. The total number of deaths attributed to the principal zymotic diseases was 15,789, corresponding to an annual rate of 2·37 per 1000, against an average rate of 2·93 for the ten preceding fourth quarters. The mortality from scarlet fever (4053) heads the list, but, the Registrar-General remarks, the fourth quarter of the year is the one in which, almost invariably, scarlet fever is at its maximum. The one under notice proved no exception to the rule, the rate having been higher than in any of the preceding three quarters. It was, however, lower than in any of the corresponding quarters of the previous ten years. The deaths from small-pox numbered 190, and were fewer than in any quarter since that ending with September, 1880; of these 190 deaths, 38 occurred in London, 65 in Staffordshire, and 40 in Northumberland. The deaths returned as due to diphtheria were 1001, corresponding to an annual rate of 0·15 per 1000, against an average rate of 0·13 for the ten preceding fourth quarters. The highest county rates from this disease were those recorded in Cambridgeshire, Essex,

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Nottinghamshire, and Shropshire. No death from it was registered in either Brighton, Norwich, Wolverhampton, or Preston, while the rate was 0·24 in London, and 0·44 in Sunderland. The causes of 120,480, or 90·4 per cent., of the 133,267 deaths registered during this quarter were certified by registered medical practitioners in attendance during the last illness, and 7141, or 5·4 per cent., by coroners in inquest cases. The remaining 5646 deaths, or 4·2 per cent., were uncertified. The proportion of uncertified deaths showed a further decrease upon the proportions recorded in the two preceding quarters of the year; it was only 1·3 per cent. in London, but averaged 4·8 per cent. in the rest of England and Wales. While the percentage of uncertified deaths did not exceed 1·6 in the extra-metropolitan portion of Middlesex, Wiltshire, and Berkshire, it ranged upwards to 6·7 in Huntingdonshire, 7·8 in Durham, and 8·0 in Cornwall. In remarking on the meteorology of the last quarter of 1882, the return records that the amount of rain measured at Greenwich during the period was 9·39 inches, or 2¼ inches above the average amount in the corresponding periods of sixty-six years. The number of hours of bright sunshine recorded was 134·3, and was 24·6 below the average number recorded in the five preceding corresponding periods.

The managers of the Royal Infirmary of Edinburgh have resolved to establish an out-patient clinique in that institution for diseases of the ear, throat, and larynx. This appointment, which is to be filled up on March 5, is to be for five years, the holder of it, however, being eligible for re-appointment. There are as yet two candidates in the field, Dr. Kirk Duncanson and Dr. McBride.

We are requested to say that Mr. C. Cormack begs the numerous kind friends who subscribed to the testimonial fund in memory of his father, the late Sir John Rose Cormack, to accept the most grateful thanks of himself and of his sisters for the handsome sum contributed to the London as well as to the Paris Fund.

The Local Government Board have decided, for the convenience and instruction of members of the medical profession and others, that some of the reports made to the Board by their medical inspectors shall be placed on sale. They will be obtainable for a few pence, from Knight and Co., 90, Fleet-street; Shaw and Sons, Fetter-lane; Hadden, Best, and Co., 227, Strand; and P. S. King, Canada-buildings, King-street, Westminster.

M. Albert Schäfer, F.R.S., Fullerian Professor of Physiology at the Royal Institution, and Assistant-Professor of Physiology at University College, London, has been appointed Jodrell Professor of Physiology at the College, in the place of J. Burdon Sanderson, M.D., F.R.S., appointed Wayniete Professor of Physiology in the University of Oxford.

The Medical Experts in Guiteau's Case.—The Department of Justice has decided on paying the experts summoned by the Government in the Guiteau trial at the uniform rate of $25 a day, with the ordinary witness's fees in addition, but no other allowance for expenses. It was felt that the Government could not undertake to distinguish between experts according to their supposed rank in the profession or their comparative eminence, but must be governed by the length of their service. The whole amount to be paid, exclusive of the ordinary witness's fees, will be between $12,000 and $13,000. The four medical experts who were especially connected with the preparation of the case may receive an additional allowance on that ground.—*Phil. Med. News*, January 20.

ON TUBERCULOSIS.

At the meeting of the German Association of Scientific and Medical Men, which was held at Eisenach in September of last year, Dr. Steffen, of Stettin, delivered, in the Section for Children's Diseases, an address on the above subject. It appears in part 2 of vol. xix. of the *Jahrbuch für Kinderheilkunde*, just published. On account of the importance and general interest which just now attaches to this subject, we give the following abstract of Dr. Steffen's address relating to it, from the German standpoint:—

I.—There was a time when tuberculosis and the change we call caseation were regarded as identical. That which appeared common to both, not only of the tubercular morbid products, but also of certain other pathological, and especially inflammatory, processes, was the tendency, after long duration, to undergo necrobiosis, that is, fatty degeneration and inspissation. Virchow was the first to accurately differentiate these processes. The specific structure of tubercle was made out, and it was shown that its presence was a source of irritation which resulted in a condition of localised inflammation, and that, as the tubercle gradually broke down, it infected the inflamed zone of surrounding tissue. As a cause and reason for this necrobiosis was assigned the complete non-vascularity of the tubercle. Certain pathological, and especially inflammatory, processes were instanced as quite different from those just related, the products of which, however, also gradually underwent caseous degeneration, the presence of tubercle not being demonstrable. Nevertheless, in some cases, in the neighbourhood of these processes it was observed that a secondary development of tubercle took place, which, after existing for a certain time, underwent the same kind of necrobiosis as the above. This was generally spoken of as the scrofulous process.

The anatomical structure of a tubercle granule, of which, as a rule, several are agglomerated together, up to within a short time has been somewhat as follows:—Within a fine reticulum, which contains no bloodvessels, and probably also no lymphatics, there are, generally in the centre, and less often in the periphery, the well-known giant-cells, together with smaller, roundish epithelioid cells, and finally cells having the greatest resemblance to the white blood-corpuscles. Among these a few free nuclei are to be seen scattered about in variable quantity. The nodule is either surrounded by a zone of coarser fibres or disappears gradually into the surrounding tissue. Of these elements, the giant-cells are, as a rule, the first to undergo necrosis. Although it has been believed by some observers that the presence of giant-cells in a tubercle granule is not constant, the general tendency hitherto has been to consider the above-given description as that characteristic and proof of tubercle. This view, however, has undergone a fundamental change through the researches of Koch, who has found in every tubercle a characteristic bacillus. According to this observer the bacilli alone are proof of tubercle; and the peculiar structure, the absence of vessels, the presence of giant-cells, no longer suffice, without the bacillus, to prove the existence of tubercle. In all cases of tubercular affection he has found bacilli in varying quantities, and especially in miliary tuberculosis, cheesy pneumonia and bronchitis, intestinal and glandular tuberculosis, and also in cerebral tuberculosis. He has frequently found them also in scrofulous glands and in fungous disease of joints. He has found them in pigs, fowls, and monkeys, both in tubercular masses and in caseous glands, as also in the "Perlsucht" of cattle. Thus, according to these researches, the above-named processes are all identical. The bacilli are found most abundantly at places where the tubercular process is most actively at work, or towards which it is spreading. When the tuberculous process has reached its climax, the bacilli begin to die off, and they are found in gradually decreasing numbers until they finally disappear, when the tuberculous process comes to an end. These bacilli require a special soil for their growth; and, as a temperature of at least 30° C. is necessary, the animal organism affords a very suitable nidus for their development. They grow slowly, and produce from two to four

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spores, and are to be regarded as the specific tubercular virus. Koch is of opinion that, as tuberculosis most frequently commences in the lungs, the bacilli must be inhaled with the breath. They can generally be found in the sputa from phthisical patients. Their growth is slow, and they require a favourable opportunity in order to get a good footing; stagnant secretion in the lungs, therefore, or abraded mucous surfaces, afford them the best resting-places. In order to avoid all sources of infection, Koch proposes that the sputa be rapidly got rid of, and that beds, clothing, etc., be thoroughly disinfected. Especial care should be taken in respect of animals. Among cows the tubercular process not infrequently attacks the mammary gland, and in this way affects the milk, by which means the disease may be rapidly and widely spread.

II.—With the exception of the muscles, of cartilage, and of the larger bloodvessels, tubercle occurs in all the organs of children. The genito-urinary apparatus is comparatively seldom attacked, but it may be. It is more common in childhood than in later life. Virchow, Demme, and others have seen cases of congenital tuberculosis; it is, however, most frequent between two and five years of age. The specific bacilli can only be taken in either through the respiratory tract, or through the alimentary canal along with food; and the former is the more frequent, it being probable that the development of bacilli, which may be swallowed either in the air or with the food, is interfered with by the secreting glands of the alimentary tract, though secondary affection of the stomach has occurred probably from the swallowing of phthisical sputa.

Bacilli develope by preference in regions where the nutrient juices are deficient, where the blood-current is limited, and where the nutrition of the organ is therefore faulty. Hence it is common in the lungs in connexion with defects of the right heart, whereas it is uncommon with defects of the left side. In this category also come those cases of tuberculosis which supervene on chronic illness in which there is deficiency of heart-power.

Bacilli develope also under conditions which appear to have some special aptitude or vulnerability, either congenital or acquired, and in these cases the disease is generally wide-spread.

It is for these reasons that we find tuberculosis attacking only weakly children, and thus we may have isolated cases in families—the other members, notwithstanding the dangers of infection and hereditary tendencies, remaining free from the disease. On the other hand, in certain families, owing either to special idiosyncrasy, or to acquired tendencies the result of identical habits and conditions of life, we see a liability in the members to become tubercular.

The smaller the quantity of bacilli which gets into the blood-stream, the less will be the resulting tuberculosis in the individual organs and the consequent symptoms. Thus it may happen that after a slight outbreak of the disease a *restitutio in integrum* may occur. As there are no means by which the bacilli may be got rid of or rendered harmless when once introduced into the body, we are at once thrown back on the necessity for prophylaxis; and as, in all probability, the healthy body is not infected by the bacilli, so we must, before all things, strive to insure a healthy mode of life for all children, and especially for such as are by heredity disposed to scrofulosis; and, secondly, we must isolate all patients suffering from chronic disease of either the digestive or respiratory tract from those who are affected with pulmonary phthisis. For the bacilli, as has been said, may be carried either in the air and inspired, or, having settled on articles of food, may be swallowed; or they may be conveyed in the milk of tubercular cows. Finally, children should be induced to expectorate as much as possible, and on no account to swallow the sputa.

Tubercular patients should always occupy carefully ventilated and not over-heated rooms. The sputa should be kept in covered vessels, and removed from the wards as often and as soon as possible. The same care should be exercised with the stools of tubercular patients, and the most scrupulous cleanliness ought to be observed.

CINNAMON IN MENORRHAGIA.—The *North Carolina Med. Journal* commends cinnamon in menorrhagia. Though not much used, we know that it is an excellent remedy.—*Phil. Med. Times*, December 16.

FROM ABROAD.

PROFESSOR JACCOUD ON THE TREATMENT OF TYPHOID FEVER.

(*Concluded from page* 192.)

"SUCH are the reasons and means of my treatment, and here are the results. From January 1, 1867, to December 31, 1882, I have applied this treatment to 655 adults, and have had 71 deaths—that is, a mortality of 10·83 per cent. Is this a good result? To judge of this the general *natural* mortality of typhoid fever should be known. I had already in my clinic of 1872 pointed out the difficulties of this question, and the numerous sources of error inherent to statistics that are limited or derived from isolated epidemics; but I also said then, what I repeat to-day with the same conviction, that we may still arrive at a knowledge of the truth if we will take the pains to operate on a very large number of figures derived from various sources, taking care to leave aside the series of cases in which the disease has been submitted to energetic treatment capable of modifying its course. Thus, in order to establish the natural mortality of the disease it is necessary to omit the figures which concern its rigorous treatment by refrigerants and antipyretics, whatever may have been the methods and procedures adopted. I have undertaken this labour to the extent in which it was possible for me to do so, and I have in this way reached a total of 80,149 cases, with a mortality of 19·23 per cent. The various collections of cases belong to the period ranging from 1840 to 1881, and are derived from various countries of Europe and America. I am of opinion that the numerous elements of mutability which this problem presents derive a sufficient compensation from the magnitude of the total brought under view, and that this figure of 19 per cent. may really be accepted as the expression of the mean mortality of typhoid fever when abandoned to the evacuant, symptomatic, or indifferent treatment. I have, moreover, an indirect proof of the truth of this figure, which appears to me worthy of being submitted to you. In my clinic of 1872, operating according to the same rules, I was only able to adduce a total of 64,468 cases, which furnished a mortality of 19·74 per cent. In my course of 1877—five years later, therefore—I was able to speak concerning a total of 75,299 cases with a mortality of 19·51 per cent.; and at the present time, with a total augmented by 5000 cases, the percentage is 19·23. This persistance of the figure 19 is surely a guarantee of its exactness. Thus is resolved my question just now put—Is my result a good one?

"As regards my method of treatment I have finished, and perhaps I ought to stop here; but it seems to me that I have yet a duty to fulfil. From this tribune, authoritative and resounding before all others, I wish, for the good of the sick, to affirm the protest which I have delivered in another place against the therapeutical excesses which have led astray for several years the treatment of typhoid fever. It would seem that the error is possessed of powerful attractions, for this troubled period, although the date is so comparatively recent, already comprises two distinct phases. The excess commenced with this false idea, that the fever is all the malady, and that consequently the sole useful procedure consists in combating continuously and reducing to a minimum the febrile temperature, without paying other attention to the patient. This was the purely antipyretic phase, and the error consisted in the exaggerated increase of the doses of antifebrile agents, especially quinine. A considerable number of physicians, especially abroad, seemed then to have no other aim than to evolve typhoid fever without fever—witness the work of Wachsnuth, published in 1868, bearing the title 'Typhus without Fever.' So much was this so, that Liebermeister, who, nevertheless, frequently gave three grammes of the sulphate, was on one occasion led to indicate the danger of stronger doses, and to blame the conduct of some of his countrymen who went so far as to administer four or five grammes of this medicine in the twenty-four hours. Well, matters did not stop here, and the evil became still more aggravated when the idea arose of applying the bacterian doctrines to typhoid fever. This new phase, this anti-parasitic phase, of the expansion of which we are witnesses at the present time, has been the signal of a true therapeutical outpouring. It was no longer

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sufficient to increase beyond measure the doses of antipyretics, which were also parasiticides, but they must be accumulated in powerful association. Before all things the microbe must be killed, and quinine, salicylic acid, phenic acid were given all at the same time. If we reflect for an instant on the similar action of these three agents in large doses on the organic calorification of the heart, the brain, and the kidneys; and if we further reflect that we have to do with a disease which, directly and of itself, menaces these organs, we are able to judge of the dangers of such an association, in which each of the remedies is given in strong doses. And it is not only this triple association which should be denounced as dangerous, but also, and for the same reasons, the double association, more frequently employed, of quinine and salicylic acid.

"But these vagaries are no new thing, for they are the fatal product of the spirit of system. The same errors are committed, the same dangers arise every time, when, under the influence of any theory, therapeutics, forgetful of its fundamental laws, is confined and blinded by a single objective. The history of our art has shown this on many occasions; and what have we seen even in our own century? In the time of Rasori the diathesis of stimulus had to be subdued, and the subjects of pneumonia were siderated; and when, in that of Broussais, irritation was indeed put an end to, it was so at the same time with its subject. In our own day the microbe is aimed at, and the patient is struck down. This denunciation is neither excessive nor premature, since we may witness, in all parts of the world, patients who are the subjects of typhoid fever subjected, on mere theory, to one or other of these complex aggressions which I have indicated. And yet how easy it is for the physician to resist such enticements! It suffices for him to leave every question on its own true basis, and to reject all unjustifiable applications of animal pathology to human therapeutics. Whatever may be the part assigned to the microbe by the future in the diseases of man, we must never forget that it is the patient in whom this microbe is deposited, that we cannot attain this enemy except through the intermedium of the patient, and that consequently the tolerance of the latter is the only measure of our intervention. And, in fact, what matters, to indulge for an instant in this hypothesis, that the cure of typhoid fever should depend on the death of microbes, if the treatment requisite to effect this exceeds the power of resistance of the patient?

"These are the true principles, and happily are held by all of us. They are more than principles, they are medical laws. Let us proclaim them loudly, and continue to employ them. In a word, let us remain physicians, and without difficulty and at the same time we shall be able to oppose an insurmountable barrier to these adventurous temerities, and guard our patients against the unforeseen danger of these impetuous therapeutics." The discourse was terminated amidst loud cheers.

ABSORPTION OF NUTRIENT ENEMATA.—Dr. Charles Dana terminates a paper on this subject (*New York Med. Record*, January 6), in which he details several of his experiments, with the following observations:—"Albuminous food, when injected, speedily undergoes changes and decomposition. In some of the early stages of this process it is quite possible that the changed albumen passes into the surrounding vessels. Normal peptic digestion is only a decomposition with many stages in it, during some of which the albuminous matter is absorbed. It is not necessary that albumens be made perfect peptones before they can diffuse into the bloodvessels and lymphatics. Fats cannot be absorbed to any great extent in the colon or rectum. So far as my clinical experience goes, injections of milk and beef-tea, especially the former, are very nearly as effective as the peptonic preparations, those prepared with acid and pepsin being the best. Dr. Bliss has published some cases which seem to show that mixtures of peptone and beef extract are very effective. Such mixtures were recommended by Leube and Mackenzie twelve years ago, but they are costly. Doubtless, solutions of the powdered meat or milk, as used by Debove and Dujardin-Beaumetz, would be useful. I have been unable to convince myself that there is any magic in peptone preparations, or that they are absorbed more rapidly than carefully prepared and finely divided meat preparations."

REVIEWS.

Contributions to the Vital Statistics of Australia. By JAMES JAMIESON, M.D. (Reprinted from the *Australasian Medical Gazette.*) Sydney: L. Bruck. 1882.

DR. JAMIESON, who is Lecturer on Obstetrics at the Melbourne University, treats, in this pamphlet, of the frequency of abortion in Victoria; puerperal fever, its prevalence and pathological affinities; and infant mortality. We cannot find that he has added anything to our knowledge of these questions, but his observations are sensible and occasionally suggestive. His inquiries on the first point were made among 500 married women who presented themselves consecutively at his clinique, of whom he found that 262 had aborted once or oftener. His results differed little from those of Mr. Whitehead, of Manchester, although the number examined by the latter amounted to 5000. The only conclusion to which Dr. Jamieson came was, that fertility and frequency of abortion do not, as some have asserted, go together. Of course multiparæ are more likely to abort than primiparæ, and older women to have done so oftener than younger, but the causes tending to abortion, viz., uterine derangements (in the absence of acute diseases or actual violence), are unfavourable to the production of full-time children. On the whole, the women who had the largest families were those who had had the fewest miscarriages.

Puerperal fever, he maintains, is a form of pyæmia or septicæmia, and he finds a remarkable correspondence between the prevalence in different years of puerperal fever and erysipelas. He rejects the notion of Braxton Hicks that it is a puerperal scarlatina, or, in fact, any acute specific fever. We have ourselves seen several cases of scarlatina in parturient women, unmodified, and running as favourable a course as in other women of the same age. Puerperal fever and diphtheria he finds to bear a closer relation, but attributes it rightly to the fact that like conditions are favourable to the development of each. He complains of the imperfection of statistics in this disease, cases being too often registered as "pyæmia," "peritonitis," "exhaustion," etc., the fact of recent parturition being concealed. Again, it is, to say the least, suspicious that in the years when puerperal fever is most prevalent there is a marked increase in the deaths referred to the accidents of childbirth, which one would think were likely to be pretty constant. On the whole, metria is less frequent in Australia than in England, but deaths in childbed are more numerous. This is probably due to the same cause, viz., want of skilled medical aid, to which Dr. Farr, in his thirty-eighth annual report, attributed the high mortality in childbed observed in the rural districts of England, that in North Wales being more than double that in London. In Melbourne the accidents of childbirth are not more fatal than in English towns, but metria is, perhaps owing to the bad drainage, which makes enteric fever and diphtheria so fatal there.

"The subject of infant mortality is one of the most interesting and important which can occupy the physician or the social reformer." So Dr. Jamieson begins the chapter on this subject, and it is refreshing to find that he has the courage to reject as worthless all consideration of the proportion which the infant deaths bear to those at all ages, which invariably figures in such discussions, and to which we referred in our notice of Dr. Tatham's report on the health of Salford. To give this ratio any value for comparative purposes we must be certain that the populations compared are composed of persons of every age in like proportions, which we seldom can be, even in the case of towns of equal sizes, and which we know will not be so in the mother-country and its colonies. Dr. Jamieson, therefore, confines himself to the proportion of infant deaths to births, which gives a fair basis for any conclusions. This in England and Wales is 144 per thousand births, in Scotland 125; in New South Wales 115, in Victoria 120, in Queensland 135, and in South Australia 141. On the other hand, in Bavaria it is 340, and in Munich 420! He very truly states as his opinion that the question of infant mortality is essentially that of feeding, and is little influenced by climate, as shown by Dr. Varrentrapp in the remarkably low mortality which obtains in Norway, Sweden, and above all in the Faroe Islands.

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The high mortality of infants in Queensland may, to some extent, and indirectly, be attributed to the hotter climate, but this cannot explain that of South Australia, which Mr. Hayter, the Victorian statist, thinks may be owing to the large German population bringing with them their habits of artificial feeding.

In Victoria great care is bestowed on the correction of the alleged causes of death. Teething is never, and convulsions only after investigation, entered as the cause; these, as well as thrush, etc., generally turning out to be merely consequences of improper feeding.

The Systematic Treatment of Nerve-Prostration and Hysteria. By W. S. Playfair, M.D. London: Smith, Elder, and Co. 1883.

This little pamphlet is, with the exception of some introductory remarks, a reproduction of two letters addressed to the *Lancet* upon this subject during the year 1881, and also of an address to the members of the British Medical Association in the Medical Section at the Worcester meeting, 1882. It deals with the systematic treatment of a class of patients who, without having anything definite the matter with them, have yet defied the resources of practitioners to effect a cure. Of them Dr. Playfair said, in his address at Worcester, "nothing could possibly be more hopeless than the experience of all of us, of these wretched instances of broken and shattered lives, these bedridden, helpless creatures, who become a burden not only to themselves, but to all around them, making happy homes miserable, and exhausting at once the patience and the resources of those who are responsible for their care." And in another chapter he writes—"Another group of symptoms which soon show themselves under such conditions are those of a moral character, the patient becoming emotional and hysterical, constantly craving for sympathy, which she often obtains to a degree most prejudicial to her welfare, until at last the whole household becomes victimised by the morbid selfishness thus developed." The patient's view of the matter is well expressed in the following lines, written by a sufferer to describe an imaginary interview with a doctor:—

> "But stay! I have prescriptions tried by scores;
> Gone out for walks, and sometimes stayed indoors;
> Was galvanised till I became much worse;
> Would ride, but cannot always find a horse;
> Tried German baths, and much increased my pain,—
> Until I fear all remedies are vain."

The treatment of such cases consists of, first and foremost, seclusion and rest, the former of these being *absolutely essential*; next, massage and the use of electricity, not only to restore tone to the muscles, but to assist the digestive powers; and thirdly, a remarkably copious diet. Anyone who feels curious to know exactly what these two last words mean should read the pamphlet for himself, when he will learn that under this treatment a lady can digest with ease in a single day about as much food as would previously have lasted her a month. Dr. Playfair claims no originality whatever in reference to this treatment; he has merely followed the lines laid down by Weir Mitchell.

General Medical Chemistry for the Use of Practitioners of Medicine. By R. A. Witthaus, A.M., M.D. London: Sampson, Low, Marston, Searle, and Rivington. 1882.

The practitioner who takes up this book expecting to find nothing in it that will interest him will be agreeably disappointed, for in the first few pages he will find an article on the various natural waters, and on the impurities contained in water that is or should be potable, which cannot fail to interest everyone, and instruct not a few of those engaged in the science and art of medicine. This is followed by a most elaborate table showing the relative composition of the waters at no less than sixty different spas in Europe and America. Next to these in general interest probably should be placed the sections on urea and its compounds and on albuminoids, which last seems to us to have suffered somewhat from the condensation for which the author apologises in respect of the later parts of the work. In treating of hydrochloric acid and arsenic the author takes the opportunity to allude to the subject of poisoning, and the duties of the medical man in relation thereto, on which points we heartily endorse every word he has said.

British Homœopathic Pharmacopœia. Third Edition. London: Published for the British Homœopathic Society by E. Gould and Son.

"It is a fundamental rule in homœopathic practice to employ no medicine which has not been first *proved* by ascertaining its effects when given to healthy persons. This is a necessity of the law of *similars*, which requires that all diseases should be treated by medicines that have been shown to be capable of producing on the healthy body symptoms in all essentials similar to those present in the sick person." After reading the above passage in the Introduction, we thought it not a little strange that there was no mention throughout the book of the action of any of the drugs contained therein; and, after much contemplation, we have arrived at the conclusion that the compilers of this Pharmacopœia have considered only the public weal in this matter, and doubtless all those engaged in the instruction of youth will be deeply grateful to them. Our public schools would have been decimated by the ravages of epidemics of measles, scarlatina, etc., had this book reached the schoolboys' hands, enriched with all the information of which it was capable: henceforth the education of the idle would have been an impossibility, as they would have had within their grasp a certain method of obtaining a medical certificate. Doubtless the similarity of the volume in external appearance to the last edition of the British Pharmacopœia is a pure coincidence; but if its editors had tried their utmost to produce such a resemblance, they could hardly have succeeded better.

GENERAL CORRESPONDENCE.

A PAROCHIAL HOSPITAL RATE.

Letter from Mr. A. J. Harvey.

[To the Editor of the Medical Times and Gazette.]

Sir,—A parochial hospital rate, say of ½d. in the pound (which the public generally would cheerfully pay), would, for the first time, place the legal claims of our hospitals upon society upon the same humane level as those of our workhouses—positions of permanent independence and of comparative affluence. What is now for the most part given in charity by the benevolent few, would then be demanded from the public generally as a right. A Minister and a ministerial Department of Public Health are now most urgently needed, for at this moment the public spectacle of our hospitals and sick charities is simply a disgrace to our humanity.

I am, &c.,

14, Landridge-road, Fulham. Augustus J. Harvey.

Olive Oil in Chest Disease.—Assistant-Surgeon Parker, referring in the *Phil. Med. Times*, December 30, to an article by Dr. Woodbury, in which he states that "in all forms of chronic bronchial disease the use of inunctions of cocoanut oil, walnut oil, sweet oil, lard, or similar substances will improve the nutrition and relieve the congestion of the mucous lining of the air-passages," observes that he learned at the clinic of Prof. von Giett, of the General Hospital, Munich, the great value of olive oil in all forms of chest disease, whether acute or chronic. Prof. von Giett uses the oil in the following manner:—"The patient's chest is first thoroughly bathed in the olive oil, slightly warmed; and then a strip of clean, old, soft shirting, large enough to envelope completely the whole chest, and saturated with the oil, is carefully adjusted. Another piece of dry cloth covers the first, and over this may be placed cotton batting or flannel, but usually only the clothing. This is the only application made to the chest by Prof. von Giett where *warmth* is indicated. These inunctions will be found excellent in all cases in which artificial nutrition is sought for. The method is especially admirable in bronchitis, pleurisy, pneumonia, and consumption."

Fine for Illegal Practice in New York.—The new law against practising without a licence is being vigorously carried out in New York, where a so-called Dr. Ruhnberg was arraigned for practising medicine without having registered under the State law of 1881, governing the licensing of practitioners. He pleaded guilty, and was fined $250.—*Philadelphia Med. News*, December 30.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 13.

JOHN MARSHALL, F.R.S., President, in the Chair.

THREE papers on aneurism and its treatment were read and discussed, the meeting being greatly prolonged in consequence of the importance of the discussion. The following are the abstracts of the papers:—

CASE OF ANEURISM OF THE EXTERNAL CAROTID ARTERY—LIGATURE OF THE COMMON CAROTID, WITH CURE OF THE ANEURISM—DEATH FROM PARALYSIS ON THIRTY-FIFTH DAY.

Mr. CHRISTOPHER HEATH recorded this case in support of the view that ligature of the common carotid is sufficient for the cure of certain cases of aneurism of the external carotid, and in opposition to the view that ligatures should also be placed on branches of the external carotid artery. A carbolised silk ligature was employed with antiseptic dressings, and the wound healed by first intention, the silk being *in situ*. The patient was a young woman of twenty-three, with extensive disease of the cardiac valves. A month before admission she came down in the morning, speaking indistinctly, and found that the tongue deviated to the right side. Four days after she noticed a swelling near the angle of the jaw, for which she became out-patient at a hospital, where the swelling was painted with iodine. On admission to University College Hospital there was a smooth, round, pulsating swelling just below the right mastoid process, reaching down to about the level of the upper border of the thyroid cartilage, limited in front by the ramus and angle of the jaw, and overlapped behind by the sterno-mastoid. The right tonsil was pushed somewhat inwards, and the tongue deviated much to the right, the right half of the organ being a good deal wasted. The heart's impulse was strong and heaving, extending far outside the nipple-line. At the apex a loud, well-conducted, mitral systolic murmur was heard; at the base a much fainter double aortic murmur. On January 11, Mr. Heath tied the common carotid above the omohyoid with a carbolised silk ligature, the ends of which were cut short, and the wound closed throughout. An antiseptic dressing was applied after the wound had been washed out with carbolic lotion. A gutta-percha splint was bandaged to the head and shoulders to keep the face turned towards the left. Slight pulsation persisted till the seventh day, on which the wound was found completely healed. The patient made a good recovery until the thirty-third day, when, while eating dinner, she suddenly dropped her knife and fork and complained of pain in the spine. An hour and a half later her speech became unintelligible, and four hours later she ceased to take notice. During the night swallowing became difficult, and next day (thirty-fourth) the right arm, and soon after the right leg, became paralysed, and she died on the afternoon of the thirty-fifth day. The post-mortem showed an embolus at the base of Broca's convolution, and five or six small patches of yellow softening were found beneath the grey matter of the surface. The heart was much hypertrophied, the mitral valve thickened, and with vegetations on both surfaces; each cusp of the aortic valve was also studded with vegetations. The wound was completely healed, and the sac of the aneurism filled with firm clot. It sprang from the external carotid, half an inch above the origin of the artery, stretching the hypoglossal nerve, which was of a yellow colour at that point. The silk ligature was embedded in connective tissue, and a firm red clot extended for three-quarters of an inch above and a quarter of an inch below the ligature. Microscopic examination showed the silk to be unaltered.

LIGATURE OF THE RIGHT SUBCLAVIAN AND CAROTID ARTERIES FOR ANEURISM OF THE AORTA—DEATH FROM RUPTURE OF THE SAC ON THE FIFTY-FIRST DAY AFTER THE OPERATION.

Mr. HOWARD MARSH read the case of F. B., a shopman, aged thirty, admitted into St. Bartholomew's Hospital, January 17, 1881. His previous health had been good; he had never had syphilis; he was in the habit of lifting heavy weights, but was unaware of having received any blow or strain. Nine months before admission he had "neuralgia" in the right side of the head and neck, and in the right shoulder and arm. A month later his voice changed to a hoarse whisper. Seven weeks before admission he first noticed a pulsating swelling at the root of the neck to the right of the middle line. This was of the size of a bantam's egg. On examination, the tumour was found rising above the right sterno-clavicular articulation. The clavicle and sternum were partially absorbed. No pressure signs or extended dulness could be detected in the thorax. No bruit. Heart normal. Pulse in the right radial somewhat more feeble than in the left; pulsation hardly to be felt in the right carotid. Pupils equal. In the next few days swelling increased slightly towards the left; neuralgic pains were severe, and the swelling became tender. On January 31 the subclavian and carotid were tied with catgut prepared by the chromic acid process. The wounds did favourably, but the operation was followed by rapid enlargement of the aneurism to the left side; the swelling soon led to absorption of the sternum, and extended high in the neck. Repeated hæmorrhages occurred, and the patient died at the end of about seven weeks. The author remarked that the case illustrates what is probably a serious danger in the treatment of aortic aneurism by ligature of the carotid and subclavian vessels, namely, disturbance of the blood-pressure, and consequent dilatation of the arch in some new direction; and he alluded to one case in which great pulsation in the sac followed the operation, and to another in which a second aneurism was found, that had apparently commenced very shortly after the trunks had been tied. In the present case no post-mortem could be obtained. He believed, however, the aneurism was originally seated on the first part of the arch near the innominate, but that increased pressure after ligature led to rapid dilatation of the arch towards the left side. The cases of distal ligature for aortic aneurism previously recorded were alluded to, and the improvement that followed the operation in many of them was referred to, yet the danger pointed out in this case was one, the author remarked, that must be carefully borne in mind.

CASE OF ANEURISM OF THE ARCH OF THE AORTA INVOLVING THE INNOMINATE ARTERY; WITH REMARKS ON THE DISTAL LIGATURE.

Mr. HENRY MORRIS read this paper. A married woman, aged forty-three, who described herself as a "farm labourer," came under treatment on September 7, 1882, for an aneurism supposed to be of the innominate artery. The symptoms were partly characteristic of innominate, partly of aortic aneurism, but the shape and position of the tumour favoured the opinion that it was chiefly, if not entirely, of the innominate vessel. Tufnell's treatment was tried for nearly two months with temporary benefit. As distal pressure on the common carotid produced marked effect on the aneurism, and pressure on the third part of the subclavian did not, ligation of the carotid alone was decided upon. The operation disclosed a strongly pulsating internal jugular vein adherent to the sac of the aneurism, but no common carotid could be found. In the search for the artery the vein was wounded, and had to be ligatured above and below the wound. The patient died fourteen days after the operation, from asthenia, the result of diffused suppuration in the right side of the neck. Post-mortem examination showed the aneurism to be almost entirely aortic, though the innominate and roots of the subclavian and carotid were thickened and enlarged. The carotid was firmly occluded by a plug of fibrine about one inch and three-eighths of an inch from its origin, and lay flattened and deeply bound down by a dense thick layer of sclerosed connective tissue, out of which it was dissected with much difficulty. The left innominate vein was occluded, so that the whole of the blood from the head had to return through the right external jugular and other smaller anastomosing veins of the right side; this had excited the fatal suppuration. The author remarked that the case shows:—1. The impossibility of diagnosing some aortic from innominate aneurisms. 2. The unreliability of any conclusion which may be drawn from the effects of distal compression on the large arteries in connexion with such aneurisms, as to the form of operation to be adopted for their cure. 3. That a very appreciable pulsation may be felt along the curse of the carotid in the neck, though that vessel be

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plugged, if the internal jugular become incorporated with the wall of the aneurism. 4. That it is not probable that this aneurism would have been cured by the occlusion of the subclavian as well as the carotid. It was suggested that Mr. Heath's well-known case had led to the double distal ligature being held in a far too favourable light, and that in estimating the effect of this treatment too much importance had perhaps been attached to cases, such as Fearn's and others, in which the aneurism had been found filled with clot after death. As distinct from the effects of ligature, much importance ought also to be attached to the condition of the blood and the circulation which preceded death, as well as to the slow approach of death—circumstances which themselves favoured, in no small degree, the deposition of fibrine. Various reasons were given why the distal ligature *on the right side* should be performed only in desperate cases, and even in those the effect of ligature of the common carotid should be tried before the subclavian was ligatured. It was further submitted that, in suitable cases of aortic aneurism, ligation of the *left* common carotid gives the patient a much better chance, because the method is more nearly allied to Brasdor's, whilst there is only half the risk of the double distal ligature.

The PRESIDENT invited discussion on the three papers: in the first the ligature had been successful in curing the aneurism; in the second it had failed; in the third, owing to circumstances, it had not had a trial.

Mr. BRYANT thought Mr. Heath's case a good example of the Hunterian operation, but it did not disprove the superiority of the distal ligature or of the old operation of laying open the sac and tying all the branches. He had long felt that the results of distal ligature in innominate aneurism were misleading. In a very few had good been derived. Mr. Heath's case was exceptional in this respect. In the other cases it was questionable whether life had been really prolonged, though much comfort was secured. Rest and careful treatment nearly always succeeded in prolonging life for a year at least. Perhaps they did not secure as much comfort and relief of suffering. He doubted whether it was wise to ligature both arteries at the same time. The diagnosis of innominate aneurism was exceedingly difficult: there was danger of increasing pressure in the sac in cutting off the circulation all at once; whereas in slowing the current good would possibly result. In two cases of the kind he had tied one artery instead of the two—the carotid in one case, the subclavian in another,—and with relief in both.

Mr. BARWELL was pleased to have this question further discussed. He did not think that any definite conclusions would be arrived at from the present cases: in Mr. Marsh's, the distal operation was contra-indicated, as the aorta was diseased and as the aneurism was spreading towards the left side; in Mr. Morris's case no deduction could be drawn, as no artery had been tied. He considered it of great importance to make a correct diagnosis. This lesson was taught by the cases to-night: when an aneurism was pressing forwards, there was venous engorgement at root of neck: when it pressed backwards, there was evidence of pressure on the bronchus. He would draw attention to the value of rest, before as well as after the operation. He believed that there was a time when rest did no more good; then operative interference was indicated.

Mr. HOLMES was interested in Mr. Heath's case, as it resembled one of the first cases ever reported to the Society by Sir A. Cooper. He thought this plan preferable to the more difficult one of laying open the sac and tying all the branches, and that it was frequently successful was shown by the result of femoral and popliteal aneurisms so treated. As regards innominate aneurism, he agreed with the authors of the present papers, that it would be safer and wiser to tie one artery at a time, and he should suggest that one which was most accessible. Mr. Fearn's case was one of the most successful of this kind. Dr. Ogle had had under his care a case of aortic aneurism. The patient was suddenly seized one day with head symptoms of an alarming character; after a while they passed off, when it was found that the aneurism was cured. A year later the patient died of phthisis, and it was found that the carotid was plugged, and that the plug here extended down into the aneurismal sac, and caused occlusion. In the only case he had had under his own care he had ligatured the carotid; it gave local relief, though it did not cure the patient. In any case where pressure on one of the branches arrests pulsation, that branch may be tied. He could not understand the *rationale* of ligaturing the third part of the subclavian, so long as its branches continued pervious; it must be an additional source of danger, by throwing extra strain on the walls of the possibly diseased artery.

Mr. SAVORY thought this was Brasdor's operation in principle, the pressure in the trunk being in proportion to the area supplied by the trunk. The immediate effect is doubtless to increase the pressure within the artery; but later on, if Brasdor's principle obtains, the remote result was to diminish pressure. Mr. Morris had stated that we cannot gauge the effect of ligature on the arterial tension by merely making pressure. He had himself recently seen a case, where pressure on the carotid artery seemed to diminish the heart's action and arterial tension generally; but he found that pressure on the left carotid was followed by a similar result. He asked whether, in such a case, the diminished action was not due to pressure on the pneumogastric nerve rather than to pressure on the artery.

Dr. POWELL wished to know whether the aneurism was of the sacculated or dilated variety, and what the auscultatory sounds revealed? He inquired whether a peculiar "jog" sound was audible; a sound almost diagnostic, in his experience, of a sacculated aneurism. He said that no venous pressure signs were present in Mr. Morris's case. They were, he thought, only present in the advanced stages. Mr. Morris's case he thought specially fit for this plan of treatment; the aneurism was sacculated, and though possibly aortic in part, it was largely innominate.

Mr. TREVES referred to the difference of the mortality after ligature of the common and of the external arteries respectively; it was true that death was mostly due to cerebral causes. He agreed generally with the conclusions of the authors. Wyeth gives thirteen cases of distal ligature, of which six died of the operation. He referred to his own case, in which Mr. Adams had tied the carotid, and he the subclavian. After death it was found that for some cause the carotid artery had not been occluded, so that practically it was only ligature of the subclavian. In some cases the sternum or clavicle became affected and pressed into the sac: this alone would prevent a cure. He suggested the temporary ligature of arteries in such cases; the knot to be tightened occasionally, and then relaxed.

Mr. LISTER made remarks on the material used. The proper ligature to use yet remained, he thought, uninvented. The desideratum was a substance which could be firmly knotted, which was impermeable to the fluids of the part, and incapable of absorption. Meanwhile, he thought it best to use a thread which could be absorbed.

Mr. STANLEY BOYD had examined the ligature in Mr. Heath's case. Its fibres were separated by indifferent and giant cells, though in the wound there was no sign of inflammation. It was thus easy to see how an abscess might occur.

Dr. GOODHART had of late grown restive of Tufnell's treatment for aneurisms of the large vessels; patients so treated for the most part came to the post-mortem room An aneurism was not to be treated simply because it was an aneurism; he thought we ought not to worry and trouble our patients unless there was some special point to be gained. He said the presence of clots in the sac was no sign of cure. He was more confused than ever as to the choice of one or other vessel for ligature. Mr. Barwell's advice was the contrary of Mr. Holmes's.

Dr. BROADBENT could not agree with Dr. Goodhart. He thought the post-mortem room was not the place in which cures were to be sought. He had seen many cases where very marked benefit resulted from treatment by iodide of potassium.

Mr. HORSELEY showed microscopical preparations illustrating the mode of absorption of a catgut ligature at different stages and dates.

Mr. HEATH, in reply, said that his paper went to show that aneurism of the external carotid could be cured by the proximal ligature. In this case death was due to a cause unconnected with either the aneurism or the operation. As regards innominate aneurism and the distal ligature, he was sorry that Mr. Holmes had not suggested which carotid he would tie in any given case. It was probable that if Mr. Morris had tied the left his case would have died immediately, since the right one was already blocked. This accident had occurred to himself, and he now regretted that

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with the outset of the grave symptoms he had not at once removed the ligature.

Mr. MARSH, replying, said his case did not show signs of spreading to the left previous to the operation, or otherwise he would have deferred its performance. He had not heard the "jog" referred to by Dr. Powell, but was quite sure he had to deal with a sacculated aneurism.

Mr. MORRIS said that consolidation was not necessarily a cure; it included also shrinking of the sac. He rather thought, contrary to Dr. Broadbent, that the post-mortem room was the place to see cured aneurisms, as in Mr. Heath's case. As regards carotid aneurisms, the large branches given off placed them in an exceptional class, which necessitated ligation not only of the common carotid, but also of the branches of the external carotid, in order to shut out the return flow by anastomosis. The point raised by Mr. Savory was interesting. He had seen the same point raised by some other authority in a similar case.

The Society adjourned at a quarter to eleven.

THE OBSTETRICAL SOCIETY OF LONDON.

ANNUAL MEETING—WEDNESDAY, FEBRUARY 7.

J. MATTHEWS DUNCAN, M.D., President, in the Chair.

PERIMETRIC ABSCESS.

MR. GRIFFITH showed a specimen of retro-uterine perimetric abscess due to the opening into Douglas's pouch of a number of rectal fistulæ—a cause of these abscesses, he believed, not previously described.

EPITHELIOMA OF CERVIX REMOVED DURING PREGNANCY WITHOUT CAUSING ABORTION.

An account of this case by Dr. GODSON was read. The patient, aged thirty-five, had suffered for twelve months from yellow or watery fœtid discharge, latterly from hæmorrhage and occasional pain. Till then she had been healthy. The cervix was enlarged and ulcerated, the uterus mobile. The cervix was removed by the écraseur four days after the cessation of hæmorrhage believed by the patient to be menstrual. No bad symptoms followed. Nine days after the operation a sound was passed into the uterus, and four days after this a fœtus of about eight weeks' development was expelled. The author remarked that he believed the abortion was due to the use of the sound, and not to the operation. He advocated the removal of cancerous growths, if possible, at any stage of pregnancy. His case supported the view that cancer favoured the occurrence of pregnancy, the patient not having been pregnant for six years previously. He remarked on the patient's previous good health, the late onset of pain, and the importance of not pulling down the cervix when using the écraseur.

Dr. ROUTH remarked on the advantages of early removal of the disease during pregnancy when possible.

Dr. PLAYFAIR thought cancer of the cervix more prone to occur in women in whom that part was previously unhealthy. When pregnancy occurred in a cancerous uterus, the cancer often grew with extreme rapidity. He thought the use of the écraseur to amputate a cancerous cervix was the worst way of doing it. By this the superficial part only was shaved off, and the diseased base left. The best operation was that of Marion Sims, which he (Dr. Playfair) had done repeatedly, with very satisfactory results.

Dr. HERMAN thought that if cancer of the cervix favoured conception, cases of complication of cancer with pregnancy would be much commoner than they were. The galvanic écraseur not only cut through the cervix, but burnt the tissues on each side for some little distance from the line of division. Where the wire tended to slip, it was his practice to cut with scissors a shallow groove for it to lie in.

Dr. ROGERS mentioned a case in which removal of a cancerous cervix was followed by abortion. He thought that in this operation Douglas's pouch might be opened notwithstanding every precaution.

Dr. EDIS remarked on the practical importance of the early diagnosis of uterine cancer. Where there was doubt, a second opinion ought to be at once procured.

The business of the annual meeting was then proceeded with. The list of officers nominated by the Council (and published in our number for February 10) was accepted by the Society; and the President delivered an address, which, abreviated, we published last week.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 7.

G. BUCHANAN, M.D., F.R.S., President, in the Chair.

THE SANITARY STATE OF THE BRITISH TROOPS IN NORTHERN INDIA.

DEPUTY SURGEON-GENERAL A. C. C. DE RENZY, C.B., read this paper, which had for its object the estimation of the results of the measures taken to improve the health of the British troops in India since the date of the issue of the Report of the Royal Commission on the Indian Army. The speaker first proceeded to fix a standard of comparison. He rejected the oft-quoted death-rate given by the Royal Commission—viz., 69 per 1000—as a standard, because it was founded on the results obtained in a period of incessant war, viz., from 1800 to 1856, and was to be regarded rather as a statement of the cost in life at which the British Empire in India had been built up, than as an estimate of the rate of mortality existing at the time when the Report was issued. He took the death-rate of 1862—the year in which the Royal Commission submitted its Report—as closely approximating the average death-rate of the troops at that time. The death-rate of that year—which was by no means a healthy one, cholera in a virulent form having visited many stations—was 27·25 per 1000. The speaker then referred to a table showing the death-rate for each year from 1862 to 1880. This period was one of almost unbroken peace, except in the years 1879 and 1880; and in order to make the statistics of those years fairly comparable with those of the previous years of the series, the figures relating to the troops on field service in Afghanistan were excluded from the table. The most marked feature in the table was the extraordinary fluctuations in the death-rate, which ranged from 11·64 to 42·89 per 1000. The death-rate of the later years was shown to be quite as high as that of the earlier ones of the period. The death-rate of 1880 was 27·73, that of 1862 being, as before stated, 27·25 per 1000. The death-rates of individual stations, as shown in another table, confirmed the conclusions indicated by the statistics of the Presidency as a whole. The stations continue, as before, to be subject to the most destructive epidemics—one or two years healthy, and then visited by cholera or enteric fever in a most virulent form. In 1877, for example, Morar had a death-rate of 12, and in 1878 one of 65 per 1000. Peshawur had a death-rate of 3 in 1877, and one of 141 in 1879. Another point clearly shown by the statistics of stations was the fact (of constant occurrence) that, in the same season, of two stations at a very moderate distance apart, one was extremely healthy, while the other was decimated with cholera or enteric fever—proving conclusively that the epidemics were not due, as was usually supposed, to some general atmospheric influence. After showing that nearly half of the total mortality was due to cholera, enteric fever, dysentery, diarrhœa, and other fevers, the speaker discussed the causes of the excessive mortality from diseases so eminently preventable. He gave a concise sketch of the general sanitary conditions of Indian cantonments, but entered into a very full description of the state of the water-supply, which he considers the key to the whole matter. The Royal Commission summed up their conclusions on the water-supply, as it existed twenty years ago, in these words, "It will be seen that the supply for permanent stations is the same as that usually adopted for armies in the field. Somewhat similar methods have always been in use among uncivilised or imperfectly civilised populations." Great improvements have been made in other matters. Magnificent barracks have been built at a cost of ten millions sterling. Twenty-six per cent. of the troops have been located in the hills, but the water continues, in the opinion of the speaker, in a state unworthy of a civilised people, and this is the reason why the death-rate has not fallen, and why epidemics of cholera and enteric fever continue so common. After quoting several high authorities, whose opinions on this point differ widely from that of the speaker, the case of Fort William, in Calcutta, was referred to as one in which sanitary requirements, as they are understood in England,

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were fairly satisfied. It is surely an encouraging fact that while in the decade ending in 1880 the average death-rate of the troops stationed in the United Kingdom was 8·68 per 1000, the death-rate of the troops stationed in Fort William in the same period was only 10·60 per 1000. The prevalence of intemperance was referred to as an indirect effect of the present system of water-supply: cool, drinkable water not being procurable, the men acquire a craving for alcoholic drinks, which result in many deaths from hepatic disease and apoplexy. The paper concluded as follows:—"The subject thus imperfectly dealt with is one of immense importance. The fabric of the British Empire in India visibly rests on the health of the British troops; but the importance of the subject extends far beyond them—it concerns the teeming millions of the native population. Orientals are fatalists. Epidemics, they believe, are special dispensations of Providence, with which it is idle, if not impious, to interfere. When, as a Sanitary Commissioner, I endeavoured to convince native municipalities of the error, I was met by some such arguments as these:—'If epidemics be preventable, why has not Government prevented cholera among the British troops? In endeavouring to protect them against that disease Government has spent millions. The conservancy of cantonments is perfect; the highest authorities have declared again and again that there is no defect in the sanitary arrangements; and yet every year we see that some portion or other of the British troops have to seek refuge from cholera in flight from their barracks, exposing themselves to all the sufferings of life in camp at the hottest season of the year.' The constant recurrence of distinctive epidemics among the British troops is the greatest obstacle to the progress of sanitary improvement. To refute Oriental fatalism a clear demonstration of the preventability of epidemics is required, and such a demonstration can be best made in military cantonments. In conclusion, I submit that the facts and figures I have laid before you warrant the following conclusions:—1. That since the publication of the Report of the Royal Commission in 1862 there has been no appreciable reduction in the rate of mortality among the British troops in Northern India. 2. That, with very few exceptions, the water-supply remains substantially in the state described by the Royal Commission in the following words—viz., 'Somewhat similar methods have always been in use among uncivilised or imperfectly civilised populations.' 3. That so long as the water-supply remains in this state, the health of the troops will lie at the mercy of any accident which may convey the contagia of such diseases as cholera and enteric fever among them. 4. That the case of Fort William affords ground for hope that the measures which have reduced the rate of mortality in that fortress almost to the standard of mortality prevailing among the troops stationed in the United Kingdom would produce equally good, if not better, results in the naturally more healthy stations of the North-West Provinces and Punjaub.

In the discussion which followed the reading of the paper, the President, Sir Joseph Fayrer, Drs. Dickson, Gordon, Manifold, Murray, McConnell, and Scriven, and Mr. Shirley Murphy took part.

Slaughter-House Reform.—At the usual monthly meeting of the Sanitary and Economic Supply Association, held on the 17th inst. at Gloucester (the Bishop of Gloucester and Bristol in the chair), after a discussion on the above subject, introduced by Dr. Wright, F.R.S., Medical Officer of Health for Cheltenham, the following resolution, proposed by Dr. Bond, and seconded by Mr. S. Bowley, was unanimously adopted:—"That this meeting desires to express its warm approval of the principle of public slaughter-houses as conducive to the interests of economy, health, and humanity, and its earnest hope that the local authorities of this neighbourhood will, with as little delay as possible, take such steps as may be in their power to provide for this most pressing want."

An Illustrious Centenarian.—Prof. Chevreul is, without doubt, the freshest old man ever known. Some days ago the illustrious centenarian terminated a communication at the Academy of Sciences by saying: "Moreover, gentlemen, this observation is by no means a recent one for me, since I had the honour to speak of it, in this very place, on May 10, 1812!"—*Revue de Thérapeutique*, February 15.

MEDICAL NEWS.

Apothecaries' Hall, London.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 15:—

Buck, Lewis Archer, Newman's-row, Lincoln's-inn-fields.
Doyne, Robert Walter, Clifton-gardens, Maida Vale.
O'Connor, John Kane, Wellgate, Rotherham.
Williams, John Henry Hywell, Dew-street, Haverfordwest.

The following gentleman also on the same day passed his Primary Professional Examination:—

Nutting, Philip Henry, London Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

Bennett, Storer, F.R.C.S. (Exam.), L.R.C.P. Lond., L.D.S.—Dental Surgeon to the Middlesex Hospital, *vice* J. Smith Turner, M.R.C.S., L.D.S., resigned.

NAVAL, MILITARY, Etc., APPOINTMENTS.

Bengal Medical Establishment.—Surgeon Charles Henry Beatson.

Medical Department.—Brigade-Surgeon Charles Moore Jessop, from half-pay, to be Brigade-Surgeon, *vice* J. S. Comyn, M.B., granted retired pay.

BIRTHS.

Andrews.—On February 15, at Everleigh, Hampstead, the wife of James Andrews, M.D., of a daughter.

Atkins.—On February 13, at Aldershot, the wife of Surgeon-Major C. A. Atkins, of a son.

Ellis.—On February 14, at 7, Howard-square, Eastbourne, the wife of Heber D. Ellis, M.D., of a son.

Godfrey.—On February 19, at Devonshire Cottage, Balham, the wife of B. G. Godfrey, L.R.C.P., M.R.C.S., of a son.

Green.—On February 19, at Belgrave House, Sandown, Isle of Wight, the wife of W. E. Green, M.R.C.S., L.S.A., of a son.

Murray.—On February 14, at Warrington House, Ipswich, the wife of Surgeon-Major J. Murray, of a son.

Rosser.—On February 11, at 1, Wellesley-villas, Croydon, the wife of Walter Rosser, M.D., of a son, stillborn.

MARRIAGES.

Cassels—Willis.—On February 20, at Baillieston, N.B., James B. Cassels, to Harriett, eldest daughter of George Willis, L.F.P.S.

Dennys—Tulloch.—On January 16, at Sialkot, Punjaub, Charles John Dennys, Lieutenant Bengal (Staff Corps, Cantonment Magistrate of Sialkot, to Lucy Winewood, eldest daughter of Brigade-Surgeon J. Tulloch, M.D., Army Medical Department.

Helder—Hudson.—On February 20, at Liverpool. Lewis T. Helder, of Whitehaven, to Florence, daughter of E. L. Hudson, M.R.C.S., of Liverpool.

DEATHS.

Ball, Angell, L.R.C.P., M.R.C.S., J.P., at Spalding, Lincolnshire, on February 14, aged 66.

Combe, James Scarth, M.D., at 36, York-place, Edinburgh, on February 14, aged 87.

Cunningham, Mary, the wife of J. C. Cunningham, M.D., I.M.D., Surgeon-General to the Supreme Government of India, at Florence, on February 15.

Dempster, Thomas Erskine, late Superintendent Surgeon, Bengal Army, at 6, Elm-grove-road, Cotham, on February 15.

Gill, Henry Clifford, M.R.C.S., L.S.A., at Bootham, York, on February 12, aged 36.

Milroy, Sophia, wife of Gavin Milroy, M.D., at Richmond, Surrey, on February 10.

Moberly.—On January 14, at Thayetmyo, British Burmah, the wife of Herbert J. R. Moberly, Surgeon A.M.D., aged 27.

Robinson, Henry William, Assistant-Surgeon, late of H.M. Indian Army, at Albion Villa, Forest Gate, on February 10, aged 53.

Sawtell, Edythe Alice, wife of Tom Henry Sawtell, M.B. Lond., at 14, Stapleton Hall-road, Stroud Green, N., on February 16.

Tyndall, Edward, M.R.C.S., L.S.A., late of Ashwell, Herts, at 277, Cornwall-road, Notting Hill, W., on February 15, aged 76.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

Carlisle Dispensary.—Assistant House-Surgeon. Salary £100 a year, with apartments, coals, gas, and attendance (not board). Applications, enclosing copies of testimonials, and stating qualifications, to be sent to Mr. John Ostell, Hon. Secretary, 14, Bank-street, Carlisle.

Great Northern Hospital, Caledonian-road, London, N.—Junior Resident Medical Officer. (*For particulars see Advertisement.*)

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MORPETH DISPENSARY.—House-Surgeon. Salary £120 per annum, with furnished house, etc. Candidates must be doubly qualified and registered. Applications, with testimonials, to be sent to the Secretary before March 1, from whom further particulars may be had.

RETFORD DISPENSARY.—Surgeon. Salary £120, with rooms, coals, gas, and attendance. Candidates must be duly qualified. Applications, with copies of testimonials, to be sent to the Secretary, The Vicarage, East Retford, not later than March 3.

ROYAL CORNWALL INFIRMARY, TRURO.—House-Surgeon. Salary £120 per annum, with furnished apartments, fire, light and attendance. Candidates must be single men, and legally registered to practise both in medicine and surgery. Applications, stating age, and with testimonials, to the Secretary, Royal Cornwall Infirmary, Truro, before March 1.

WEST LONDON HOSPITAL, HAMMERSMITH.—Assistant-Physician. Candidates must be Fellows or Members of the Royal College of Physicians of London, and not practising as apothecaries. The Medical Council will meet on the 27th inst., at 3.30 p.m., to nominate candidates, who must attend the meeting. Applications and testimonials to be forwarded not later than February 27, at 9 a.m. The election will take place on March 5.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Eastry Union.—The Ash District is vacant: area 8038; population 2653; salary £50 per annum.

Pembroke Union.—The Third District is vacant by the death of Mr. George Chater: area 6665; population 4698; salary £30 per annum.

APPOINTMENTS.

Bedminster Union.—William H. Cory, M.R.C.S. Eng., to the Fifth District.

Beverley Union.—Harry Hine, M.R.C.S. Eng., L.R.C.P. Lond., to the Sixth District.

Bromyard Union.—Capel W. Bringloe, L.F.P. & S. Glasg., to the Cradley District.

Cuckfield Union.—Charles Braid, B.M., M.C. Edin., to the Fifth District.

Hackney Union.—Theophilus Hoskin, L.R.C.P. Lond., M.R.C.S. Eng., M.B. Lond., to the Sixth District.

Poole Union.—Samuel Montgomery, L.R.C.P. Edin., L.R.C.S. Edin., to the Second District.

Southwell Union.—John H. Osborne, M.R.C.S. Eng., L.S.A., to the Southwell District and the Workhouse.

ADMINISTRATION OF PEPSINE.—M. Pierre Vigier, the distinguished pharmacologist, exposes in the *Gazette Hebdom.*, February 16, the error of combining pepsine with alkalies. It is the most important and most sure digestive we possess, but its activity can be called forth only in an acid medium; and a great number of bodies by neutralising it deprive it of its remarkable power of peptonising fibrine—all the alkalies, for example. It is indispensable, then, that it should be prescribed alone to avoid all causes of error; whereas it is often combined with alkalies exactly as if it were a chemical product, its power is destroyed, and a great expense uselessly incurred. It should be taken apart in the middle of a meal in the form of an amylaceous powder, or in a solution of sugared wine, or in an aromatic elixir—these being the only efficacious forms of administration that pharmacy supplies.

SORE NIPPLES.—Fissured and tender nipples may be protected by painting them with gutta-percha dissolved in chloroform.—*Phil. Med. Times*, December 16.

EARTH-DRESSING OF WOUNDS.—Dr. Bull, of New York, writing to the *Philadelphia Med. News*, January 27, states that a recent article in that journal erroneously described the material employed in Esmarch's clinic as "earth" and "earth-mould." The dressing really introduced by Neuber into Esmarch's clinic is the ordinary peat (*Torf*) generally used as fuel in North Germany. After being dried it is ground up into a coarse granular and fibrous mass, which is enclosed in bags of gauze and sprinkled with some antiseptic solution (5 per cent. carbolic acid or corrosive sublimate 1 to 1000), or mixed with 2½ per cent. of iodoform, and applied to wounds by means of "crinoline" bandages. Having observed the gratifying results of the employment of this substance in Esmarch's clinic, Dr. Bull introduced it into the hospitals he is connected with in New York, and states that "it has proven the most satisfactory and cheapest form of antiseptic dressing that I have tried; and in six years I have used the carbolised gauze and jute, the salicylated and borated cotton, and 'antiseptic irrigation.'" Two hundred kilogrammes of the *Torf* are delivered in New York for about $25. and this quantity suffices for an active surgical service of fifty beds for a period of three or four months.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 17, 1883.

BIRTHS.

Births of Boys, 1354; Girls, 1378; Total, 2732.
Corrected weekly average in the 10 years 1873-82, 2782·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	766	759	1525
Weekly average of the ten years 1873-82, corrected to increased population ...	979·4	967·1	1946·5
Deaths of people aged 80 and upwards ...	...	...	66

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	3	3	...	7	...	1	...	1
North ...	905947	1	4	5	4	6	2	6	...	3
Central ...	282228	...	1	3	1	1	...	1	1	2
East	692736	1	9	10	2	6	...	4	1	3
South	1265927	1	3	8	7	15	...	11	3	5
Total	3816483	3	20	29	14	35	2	23	5	15

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·800 in.
Mean temperature	42·9°
Highest point of thermometer	54·4°
Lowest point of thermometer	30·9°
Mean dew-point temperature	37·3°
General direction of wind	S.
Whole amount of rain in the week	0·61 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Feb. 17, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Feb. 17.	Deaths Registered during the week ending Feb. 17.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2732	1525	20·1	54·4	30·9	42·9	6·06	0·44	1·13
Brighton	111962	68	37	17·4	53·0	33·0	43·0	6·11	1·01	2·57
Portsmouth ...	131478	94	55	21·8	...	...	...	...	...	...
Norwich	89612	63	36	21·0	...	...	...	...	...	...
Plymouth	74977	46	32	22·3	51·6	32·8	44·1	6·73	1·44	3·66
Bristol	212779	134	82	20·1	50·6	34·3	43·5	6·39	1·49	3·78
Wolverhampton ...	77557	49	40	26·9	48·4	30·0	39·6	4·23	0·98	2·49
Birmingham ...	414846	279	190	23·9	...	...	...	...	...	...
Leicester	129483	92	45	18·1	50·8	30·2	41·6	5·34	0·99	2·51
Nottingham ...	193349	147	99	23·3	50 5	28·9	41·1	5·06	1·02	2·61
Derby	85574	71	31	18·9	...	...	...	...	...	...
Birkenhead ...	88700	66	28	15·3	...	...	...	...	...	...
Liverpool	566753	377	295	27·2	...	...	...	...	...	...
Bolton	107862	75	45	21·8	49·6	31·3	40·2	4·55	0·61	1·55
Manchester ...	339262	246	166	25·5	...	...	...	...	...	...
Salford	190465	137	78	21·4	...	...	...	...	...	...
Oldham	119071	83	43	18 8	...	...	...	...	...	...
Blackburn	108460	85	54	26·0	...	...	...	...	...	...
Preston	96564	80	45	28·8	...	...	...	...	...	...
Huddersfield ...	84701	43	43	26·5	...	...	...	...	...	...
Halifax	75591	44	31	21·4	...	...	...	...	...	...
Bradford	204807	131	96	24·5	51·2	34·8	41·9	5·50	0·67	1·70
Leeds	321611	190	138	22·4	51·0	34·0	42·4	5·78	0·92	2·33
Sheffield	295497	217	138	24·4	51·0	33·0	41·2	5·11	1·08	2·73
Hull	176296	120	93	27·5	50·0	32·0	41·4	5·22	0·87	2·21
Sunderland ...	121117	92	49	21·1	53·0	33·0	42·1	5·62	0·87	2·21
Newcastle	149464	100	70	24·4	...	...	...	...	...	...
Cardiff	90033	78	39	22·6	...	...	...	...	...	...
For 26 towns ...	6630975	5939	3611	21·9	54·4	28·9	41·9	5·50	0·94	2·39
Edinburgh	235946	128	109	22·1	52·5	33·2	41·3	5·17	0·83	2·11
Glasgow	515599	376	291	29·5	52·5	33·0	41·3	5·17	2·40	6·10
Dublin	349685	194	262	39·1	55·7	33·0	41·9	5·50	1·22	4·25

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·80 in. The lowest reading was 29·14 in. at the beginning of the week, and the highest 30·33 in. at noon on Friday.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Dr. Sinclair.—The expense of the *conversazione* given by the City of London to the International Medical Congress in August last amounted to £2099; that given by the Royal College of Surgeons on the same occasion cost £378 10s. 8d.

One who Highly Valued the Franchise.—A fisherman at Bournemouth, who was laid up with acute bronchitis lately, and could not afford to pay for medical aid, refused to have a parish doctor because "he did not want to lose his vote." The family were in very indigent circumstances, and the household furniture had to be sold to provide food. The doctor was, however, ultimately called in, but too late,—the man died the next day. An inquest on the body resulted in a verdict to the effect that death was accelerated by neglect and want of medical attendance.

The New Buildings for the Edinburgh Medical School.—It was stated at the annual dinner of the Royal Medical Society, Edinburgh, last week, that Lord Provost Harrison had inaugurated a scheme for the completion of these buildings, including the hall and tower, by April, 1884, when the tercentenary of the University will be celebrated.

An Old Correspondent.—With reference to the observations quoted by Mr. Spencer Wells in his Oration, on "the unnecessary expenditure on dinners" by the College of Surgeons, we are informed that in days long gone by there were four dinners of the Council (twenty-four) and their guests, the same number of the Court of Examiners, and one Hunterian dinner, making nine banquets per annum, which, with the exception of the Hunterian, have within the last few years been quite abolished. Past and present members of the Council now dine together as a "College Club" at their own expense.

Cabmen's Shelters.—The Committee of the London Cabmen's Shelter Fund desire gradually to increase the number of shelters to 120. There are at present thirty-one. Each shelter costs about £150. There are 124 cab ranks in the metropolis. Most of the shelters are open day and night.

Sensible Provisions against Fires in Large Hotels in America.—In consequence of the late calamitous fires in large hotels in America, a Bill has been introduced in the New York Legislature, providing for the better protection of hotels and their guests against fire; and the Court of Aldermen of that city has passed an ordinance directing the Fire Commissioner to examine the means of escape in the hotels and lodging-houses of New York, and to cause them to be connected with the electric system of the Fire Department. It further provides special regulations for hotels or lodging-houses in which twenty-five persons can be accommodated, as to the different passages, staircases, and fire-escapes, and their approaches.

Uninvited.—Members and Fellows of the College are not invited to the banquet held after the Hunterian Oration unless holding some high official appointment. Surgeon-General Sir Joseph Fayrer, K.C.S.I., F.R.C.S., was invited as President of the India Medical Board.

Mr. Dundass.—It need hardly be said that no such occurrence ever took place at the Royal College of Surgeons of England as that recorded in the following curious advertisement in the *Times*, viz.:—"After an examination held at the Royal College of Surgeons on the 14th inst., Mr. Charles Sloane was elected a member, and by the particular desire of the Court of Examiners was highly complimented for his professional knowledge.—Edmund Belfour, Secretary.—London, April 15, 1829." The name still remains in the Calendar, but without any address, of this wonderful almost octogenarian.

Leamington.—The Medical Officer of Health reports that the death-rate during the past year had only been 15 per 1000, a decrease of two compared with the average of the preceding ten years. Only one death per 1000 was due to the six principal symotic diseases.

A Gas Nuisance.—In the Chancery Division, the case of the Attorney-General against the Metropolitan Railway Company was one of nuisance, the action being brought on information by the Attorney-General, on behalf of the public, to restrain the defendants from continuing to manufacture gas at their works near Baker-street station, so as to be a nuisance to the neighbourhood. An individual resident in the locality also sued separately as plaintiff in another action. The medical evidence adduced by the plaintiff was to show that the fumes escaping from the Company's works were noxious, and had affected the health of many persons in the district, through a considerable portion of which it was stated the smell was perceptible. An undertaking was given by the defendants, on an application for an interlocutory injunction against them to abate the nuisance. It was now shown that the objectionable works had been removed to the suburbs. As to the question of damages, in the first action by the individual resident it was agreed that £37 damages should be paid by the Company in respect of what was called the private nuisance. His Lordship held that in the second action by the Attorney-General a public nuisance had been proved, justifying his interference on behalf of the general public, and accordingly granted an injunction, as prayed, without costs.

Obesity.—An exhibition of fat people has recently been opened in New York, and six tons of humanity are on exhibition. The heaviest man is Recinnie Porter, of Camden, Indiana, who weighs 550 lbs.

The London University College.—It is said that at the recent matriculation examination there was amongst the assistant examiners appointed to see that no copying took place in the rooms, one of the lady graduates, who appeared in full University costume. And it is suggested that, judging from the interest and attention excited by her appearance, her presence may not improbably have exercised an unfortunately disturbing and perturbing influence upon some candidates.

The Alexandra Children's Hospital, Rhyl.—In the past year eleven ladies entered this Hospital for training as nurses, and during the recent war one old pupil was selected to go to Egypt. A fund is being raised towards the purchase of additional buildings.

A Herbalist Infringing the Law.—At Henley a herbalist has been fined £5 and costs for selling poison without labelling the wrapper. A widow went to the defendant's shop for some blood-purifying herbs, and was supplied with roots, which she stewed, as directed, and herself and her daughter drank of the decoction. She became seriously ill, and her daughter was also affected, but in a modified degree. Medical evidence showed that the illness was belladonna poisoning. The defendant was also amerced in 5s. for circulating indecent bills.

A Model Abattoir.—The Society for Providing Sanitary and Humane Methods of Killing Animals for Food has obtained the necessary funds for erecting a model *abattoir*. For the *abattoir* itself £1500 has been subscribed, but there is at present some difficulty in securing land. About an acre is required.

Urban and Rural Sanitary Improvements.—The Ely Board of Health has decided to call in an engineer to advise them as to the best mode of improving the filtration of the sewage.——The Greenwich Board of Guardians have adopted plans for the enlargement of their workhouse. ——The report of the engineer on the waterworks scheme informs the Blackburn Town Council that the Brennaud intake had been opened, and water is being taken by gravitation into the reservoir at Guide at the rate of 1,500,000 gallons per day. The expenditure has been about £80,000. ——The Frome Local Board have decided on a scheme for the sewerage and sewage disposal of their district.——The Improved Industrial Dwellings Company possesses thirty-one estates in various parts of the metropolis, in which 4029 dwellings have been erected, and are in occupation, and 426 are in course of erection, making a total of 4455 tenements. When these are completed, the number of tenants in the Company's dwellings will be upwards of 20,000.——The Somersetshire Drainage Commissioners have held a meeting on the recent floods in the district under their jurisdiction. A variety of opinions were expressed as to the best modes of dealing with the evil in a practical manner, but no resolution was adopted.——Extensive new buildings in connexion with the Eastern Counties Asylum for Idiots have just been opened, and a movement was at the same time inaugurated for providing fifty additional beds at a cost of about £5000.——At Hasland, near Chesterfield, about two acres of ground are being adapted for a new cemetery for the Rural Sanitary Authority, at a cost of £1277.

Meteorology and the Spectroscope.—Mr. F. W. Cory states that he has proved by experiments that it is possible to predict the weather by means of the spectroscope. He takes his observation in the direction of the wind, and according to the rain band on the spectrum he tells what the weather is to be. The width of the band indicates the rainfall, not, of course, accurately to a fraction, but sufficiently well.

A Favourite Watering-place.—A modern dairy.

Working Men as Factory Inspectors.—Mr. W. J. Davies, formerly Secretary of the Amalgamated Brass Finishers, at Birmingham, has received his certificate of appointment as an inspector under the Factories and Workshops Act, and will take charge of the Sheffield district. This is the second appointment of a working man to a similar office.

The Solacing "Whiff."—According to a statement at the meeting of the Chester Board of Guardians, no less than £70 a year is paid for tobacco consumed in the workhouse.

Royal Doctors.—None of our Royal family have evinced any desire to study medicine or surgery, but in Germany it is different, as two or three of the princes have done so; and a short time ago the German Chancellor caused an announcement to be made that His Royal Highness Duke Theodore of Bavaria, who had recently taken the degree of Doctor of Medicine at a German university, had received the certificate enabling him to practise as a surgeon without being required to undergo the additional examination to which intending practitioners are ordinarily liable under the German law.

Adulteration in the City of London.—Dr. Sedgwick Saunders, the public analyst for the City, in his annual report, lately issued, states that in the twelve months 197 articles had been analysed, including milk, butter, disinfecting powders, tea, coffee, whisky, water, etc.

A Personal Illustration.—A surgeon once jeeringly asked a Quaker if he could tell the difference between "also" and "likewise." "Oh yes," said the Quaker, "Sir William Fergusson was a great surgeon—his skill as an operator was admitted by almost everyone. You are a surgeon *also*, but not *likewise*."

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Tall Chimneys.—The *Builder* says that at present the construction of tall chimneys is not under any form of official regulation and inspection, such as is given to ordinary buildings. By-laws regulate the thickness and construction of factory, warehouse, and other walls in proportion to height and purpose; but a tall chimney may be erected outside any such stipulations or restrictions.

English Female Doctors in China.—The Chinese papers state that Li-Fu-Yen, wife of the ex-Viceroy of the province of Chilli-le, being seriously ill, her husband had sent for "Miss Dr. Howard." It is added that this lady, who appears to be established in Pekin, is obtaining a good practice among the titled ladies of China.

"*Disgraced.*"—The Birkenhead stipendiary magistrate has called attention to the shocking condition of the police offices at the Bridewell. Owing to the defective sanitary arrangements, the wife of the keeper of the Bridewell was dangerously ill of typhoid fever, from which there had been previously two deaths. He denounced the state of the building as a disgrace to the Corporation authorities. In future he would send remanded prisoners to Liverpool.

The Oldest Teetotaler.—Mr. B. Whitworth, M.P., claims to have been a teetotaler longer than any man in England, having been one all his life. When he entered Parliament in 1865, the only other teetotaler there was Sir Edward Baines. At present there are at least thirty-four or thirty-five total abstainers among the members of the House of Commons.

Metropolitan Charities.—In the eighth annual edition, just published, of Mr. Howes's classified Directory to these charities, it is seen that the income of these institutions is estimated to have increased during the year 1881-82 to no less than £331,356, the grand total being little short of four millions and a half sterling. It appears, *inter alia*, that nearly every class of medical charity shows an improved revenue. The greatest increase, however, is for the relief of distress, chiefly owing to the total of the Mansion House Fund, which is £200,000, as against £62,000 only in the previous year.

Dining Then and Now.—Professor Blackie considers that we have at the present day made a distinct advance in the art of dining, though he admits there are still "fools and beasts in high places," who are a disgrace to humanity. The Professor does not deny that we have vastly improved on the habits of our ancestors in the matter of post-prandial drinking.

Wine Production, France.—According to the statistics just published by the French Ministry of Agriculture, the produce last year was little more than half the average of the twenty years 1858 to 1878, and, compared with the ten years immediately preceding last year, when the production had been greatly reduced by the *phylloxera* and bad seasons, there is a falling off in last year's harvest of a full third; in consequence, France, usually a large exporter of wine, last year imported very much more largely than she exported.

The Significance of Surnames on the Admixture of Races.—Dr. Beddoe has investigated about fifteen thousand English surnames, belonging to various classes of the population, with a view to ascertain the light they throw on the admixture of races, and furnishes details of the results. Mr. Park Harrison has, for the same purpose, entered upon an elaborate study of the facial outline.

COMMUNICATIONS have been received from—

Mr. Charles Cormack, Paris; Dr. J. W. Langmore, London; Mr. Clement Lucas, London; Mr. H. de Styrap, Middlesborough; Mr. William Rau, Paris; The Editor of the "Gazzetta degli Ospitali," Milan; Messrs. Burgoyne, Burbidges, and Co., London; Mr. A. J. Harvey, Fulham; The Registrar of the Apothecaries' Hall, London; Dr. F. T. Bond, Gloucester; Mr. J. Whittall, London; Mr. George Meadows, Hastings; Mr. E. G. Gilbert, London; Surgeon-General C. R. Francis, M.B., London; Dr. C. Mercier, London; The Treasurer of St. Thomas's Hospital, London; Mr. J. Chatto, London; The Honorary Secretary of the Royal Medical and Chirurgical Society of London; Dr. J. A. Irwin, Liverpool; Mr. H. W. Manly, London; The Registrar-General for Scotland, Edinburgh; Mr. W. H. Lamb, M.B., London; Mr. C. Innes, London; The Sanitary Commissioner for the Punjaub, Lahore; Mr. J. S. Baily, London; The Registrar-General for Queensland, Brisbane; Mr. F. Rudler, London; Messrs. J. H. Chambers, St. Louis; The Secretary of the Royal Institution, London; Messrs. Dickinson, London; The Honorary Secretary of the Medical Society of London.

BOOKS, ETC., RECEIVED—

Economy of Coal, by T. P. Teale, M.A., F.R.C.S.—The Law of Human Increase, by Nathan Allen, M.D., LL.D.—Papers relating to the Administration of the Dentists Act—A Dictionary of Domestic Medicine and Surgery, by Spencer Thomson, M.D., L.R.C.S., and J. C. Steele, M.D.—Report of the Bourton-on-the-Water Cottage Hospital, 1882—Esmarch, Antisepsis and Bacillus, by William Hunt, M.D.—Clinical Lectures on the Diseases of Women, by J. Matthews Duncan, M.D.—A Synoptical Guide to the Study of Obstetrics, by Robert Barnes, M.D.—Micro-Photography, by A. Cowley Malley, B.A., M.B., etc.—Syllabus of Materia Medica, by Alexander Harvey, M.D., and Alexander Dyce Davidson, M.D.—Refraction of the Eye, by A. Stanford Morton, M.B. F.R.C.S.—Eleventh Annual Report of the Local Government Board, 1881-82—Illustrated Medicine and Surgery, vol. ii., No. 1—Eighteenth Annual Report of the Sanitary Commissioner with the Government of India, 1881—London Water-Supply Report—Ingleby Lectures, 1882: Infectious Disease, by R. C. R. Jordan, M.D. Lond.—The Management of Chronic Inebriates and Insane Drunkards, by Albert N. Blodgett, M.D.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Nottingham Journal, February 15—Journal of the Vigilance Association—Dublin Journal of Medical Science—Italian Times, February 3 and 10—Journal of the British Dental Association—Weekblad—Pictorial World—Phonetic Journal, February 3—Centralblatt für Klinische Médicin, January 6 to February 17—Revue de Chirurgie—Revue de Médecine—American Journal of Obstetrics—Scottish Review—Revue d'Hygiène—Echo, February 21—Liverpool Daily Post, February 21—Canadian Practitioner—Detroit Lancet.

APPOINTMENTS FOR THE WEEK.

February 24. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Dr. W. H. Stone, "On Singing."

26. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies" (Lecture I.)

Medical Society of London, 8½ p.m. Mr. Fisher will show a Case of Dupuytren's Contraction of the Fingers in a Woman. Dr. Day will record "A Case of Ascites in a Child: Tapping: Recovery." Dr. Robert Lee, "On the Diffusion of Antiseptics and Medicinal Agents in the Atmosphere."

27. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. R. S. Ball, "The Supreme Discoveries in Astronomy: The Sun no more than a Star; the Stars no less than Suns."

Anthropological Institute (4, St. Martin's-place, W.C.), 8 p.m. Mr. Alfred Taylor, "On the Homological Nature of the Human Skeleton."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. W. H. Neale, "Notes on some Points in the Etiology of Scurvy." Dr. W. Hale White, "On a Case of Scurvy, with Dilatation of the Heart and Retinal Hæmorrhages." Mr. Johnson Smith will show specimens of Hæmorrhage in Muscles of Fatal Cases of Scurvy.

28. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

Royal College of Surgeons of England, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies." (Lecture II.)

Royal College of Physicians, 5 p.m. Dr. J. E. Pollock, "On the Modern Theories and Treatment of Phthisis." (Croonian Lectures—I.)

Hunterian Society (Royal Institution), 7½ p.m. Address by the President (Mr. W. Rivington). Dr. Pye-Smith, "On Mistakes in Diagnosis," illustrated by Cases.

March 1. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Spectroscope and its Applications."

Royal Medical and Chirurgical Society, 8 p.m. Annual Meeting: Report; President's Address, etc.

Harveian Society, 8½ p.m. Mr. E. Owen, "On the Simple Treatment of Congenital Talipes." Dr. Percy Boulton, "On the Treatment of Post-partum Hæmorrhage."

2. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies." (Lecture III.)

Royal College of Physicians, 5 p.m. Dr. J. E. Pollock, "On the Modern Theories and Treatment of Phthisis." (Croonian Lectures—II.)

Royal Institution (Council Meeting, 8 p.m.), 9 p.m. Mr. C. V. Boys, "On Meters for Power and Electricity."

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ORIGINAL LECTURES.

GULSTONIAN LECTURES ON STERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London, February, 1883.

By J. MATTHEWS DUNCAN, M.D., F.R.C.P.L., Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, etc.

LECTURE I., PART II.—ITS NATURE AND AMOUNT.

THERE are several tests of relative sterility secondary to that implied in the paramount question—How many did she bear? These subsidiary tests are based on the ascertained course of natural fertility, and show the deviations from this course of the relatively sterile. Inquiry made by these tests implies a knowledge of how many children a woman will naturally bear, or is likely to bear, and of the natural order of births. They are as follows:—

1. When after marriage did she begin the career of child-bearing? 2. How rapidly did the children follow one another? or, What was the interval between successive births? 3. When did childbearing cease? or, What was the age at the birth of the last child? 4. How long was the child-bearing period of life? or, What was the interval between the beginning of the first pregnancy and the end of the last?

In studying population, these subsidiary matters are little regarded, for the statesman has direct interest only in the mutually related questions—How many are born? How many might have been born? What is the health of those born? The answers to these inquiries give him the actual relative sterility of the population, and in the case of a population this includes the absolute sterility. He may now attempt to increase or diminish the sterility of the people, not neglecting the health of the progeny, so far as it is related to fertility; and this control he will effect by raising or lowering the age at marriage. On the other hand, the physician, having care of individuals, not of a people, and advising each from year to year of life, has his chief interest in these subsidiary matters, which the statesman may not utterly neglect, but may leave to the care of the medical philosopher.

The importance of the question—How soon after marriage does a woman bear her first child?—is self-evident, and it will be found to be more a test of sterility than it appears at first sight to be. Whitehead, founding on the observation of 541 married women of the average age of twenty-two years, makes the average interval between marriage and the birth of a first child to be eleven months and a half. Sadler says that married females do not become fruitful, on the average, during the first year of their nuptials, but nearly so. A great number of cases, he says, which he has collected, with a view of determining this point, gives three-fourths of them as producing their first child at the average of one year after marriage.

From the Edinburgh and Glasgow registers for 1855 I was able to make out this point in 3722 cases. But in these extracts from the register there are two sources of error, which prevent an exact comparison with the results of Ansell's more valuable table, for twins are excluded, being placed in the column of secundiparæ, not of primiparæ. (See Table II.)

TABLE II.—*Showing the Interval between Marriage and the Birth of a First Child.*

Years married.	No. of births.	Years married.	No. of births.
Less.	608	10	1
1	2,390	11	3
2	437	12	4
3	133	13	2
4	61	14	—
5	32	15	1
6	27	16	—
7	12	17	—
8	5	18	1
9	5	Total...	... 3,722

TABLE III. (*from Ansell*).—*Showing the Interval between Marriage and the Birth of Firs Children.*

Year after marriage.	No. of first children.	Year after marriage.	No. of first children.
1	3,159	9	7
2	2,163	10	7
3	421	11	5
4	137	12	4
5	69	13	3
6	26	14	2
7	21		
8	11	Total...	... 6,035

And, still more important, the great number of mothers whose children were stillborn is excluded. Now, twins affect specially young, immature, and quickly breeding mothers; their omission, therefore, from the column of primiparæ will tend to delay the estimated time of primiparity. Again, a similar delay will result from the omission of women having dead children from the primiparous column, for such women, when they bear a first living child, which may be in reality a second, third, or other child, will appear in the primiparous column with an over-estimated and erroneous retardation of primiparity.

The Edinburgh and Glasgow table gives a mean interval of about seventeen months between the marriage and the birth of a living child. It shows that fecundity is not demonstrated by a living child in the majority of cases till a year of married life is passed; nearly two-thirds of the whole beginning their families in the course of the second year of marriage. It also shows that there is no ground for presumption of sterility till the fourth year of married life is entered upon; for while of those three years married and less than four 133 bore a first living child, there were only 154 who did so in all the subsequent years taken together. Of the whole 3722 only about one-twenty-fourth part began bearing living children after four years of married life had elapsed.

Ansell's table includes first stillborn children, and is corrected for twins, and gives us the data in 6035 cases. It is therefore better than the preceding, and better than any other of which I know regarding this point.

Ansell's table gives a mean interval of nearly sixteen months between marriage and the birth of a child. The majority of the women in Ansell's table bore their first children before the first year of married life had elapsed—nearly seven-eighths before the expiry of two years of married life. It also shows that there is no good presumption of sterility till the fourth year of married life is entered upon; for while of those three years married and less than four 421 bore a first child, there were only 292 who did so in all the subsequent years taken together. Of the whole 6035, only about one-twenty-first part began bearing children after the third year of married life, and only one-thirty-ninth part after the fourth year.

It may therefore be held that married women delaying the commencement of fertility beyond sixteen months are already exhibiting a degree of relative sterility; and this conclusion is quite in keeping with the rest of our knowledge of this subject.

The second question proposed is, How rapidly do the children in a family follow one another? or, What is the interval between the births of successive children? Great authors on population used to hold that breeding women never exceeded, in rate of prolificness, a child every two years; but, like many of the other principles on which Malthus and the rest based their theories, this has proved to be false. With our present knowledge, we can assert that Malthus erroneously endowed womankind with a degree of relative sterility; for women who breed do so at an average rate of a child every eighteen months, or nearly so.

I here give a table compiled from the Edinburgh and Glasgow registers, which makes the average interval between successive children nearly twenty months. But this requires several corrections, which will, on the whole, tend greatly to reduce the amount. Twins are included, and counted as two children. But a source of greater error is the exclusion of dead children, whether one or more. This last error might not be grave, or even an error at all, in the view of an economist such as Malthus; but reckoning for it would make his actual error comparatively much greater.

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TABLE IV.—*Showing the Average Duration of Marriage at Birth of each Successive Child, and the Average Interval between the Births of the Successive Children.*

Number of children.	Number of mothers.	Duration of marriage in months.	Average interval between successive births.
1	3,722	17	—
2	2,893	38	19 0
3	2,534	64	21·3
4	1,982	90	22·5
5	1,543	115	23·0
6	1,221	137	22·8
7	848	162	23·1
8	641	181	22·6
9	425	203	22·5
10	222	225	22·5
11	152	235	21·4
12	61	246	20·5
13	34	263	20·2
14	11	281	20·1
15	6	280	18·7
16	2	336	21·0
17	2	252	14·8
18	1	252	14·0
19	1	204	10·7
	Average		19·9

Table IV., like Table V., made up from Ansell, is not correctly described as giving the average interval between births, but as giving the average interval between the marriage and the birth of the child, divided by the number of children born, which is a near approximation to what is wanted.

TABLE V. (*from Ansell*).—*Showing the Mean Time after Marriage of Successive Births, and the Average Interval between them.*

Order of birth.	Mean time of birth after marriage.	Average interval between successive births.
1st child	1·32 years	—
2nd ,,	3·02 ,,	18·0 months.
3rd ,,	4·83 ,,	19·0 ,,
4th ,,	6·69 ,,	20·0 ,,
5th ,,	8·53 ,,	20 0 ,,
6th ,,	10·28 ,,	20·5 ,,
7th ,,	11·92 ,,	21·0 ,,
8th ,,	13·47 ,,	20·0 ,,
9th ,,	14·93 ,,	20·0 ,,
10th ,,	16·33 ,,	20·0 ,,
11th ,,	17·65 ,,	19·0 ,,
12th ,,	18·85 ,,	19·0 ,,
13th ,,	19·87 ,,	18·0 ,,
14th ,,	20·71 ,,	18·0 ,,
15th ,,	21·41 ,,	17·0 ,,
16th ,,	22·01 ,,	16·5 ,,
17th ,,	22·54 ,,	16·0 ,,
18th ,,	23·02 ,,	15·0 ,,

Ansell's table does not require corrections for twins or for dead-born children, and its value may be judged by the statement, indefinite though it is, that it is based on more than 25,000 observations. The average interval, as calculated from them, is eighteen months. Ansell's table may be studied, further, with a view to a statement of the average interval in those who have not excessive families, but families of natural or normal number. For those mothers who have shown excessive intensity of fertility, either by a high number of births or by excessive rapidity so long as childbearing continued, are mixed up in each successive row of figures with those that are normal, or nearly so. Now, looking at the rows of figures of families varying from four to ten, which show intervals of twenty to twenty-one months, we are safe in stating the average interval for normal families as above twenty months, yet, probably, considerably under two years.

It may therefore be held that a married woman who, during childbearing life, does not have a child every twenty months is exhibiting relative sterility.

The third question is, When did childbearing cease? or, What was the age at the birth of the last child? Now, it is the rule to confuse the childbearing period of life with the period during which a woman menstruates, and this is a great mistake. It is only a part of this that, in married life, is occupied by childbearing, except in rarest cases, such as have never come under my observation. When a woman begins childbearing, she generally, under favourable circumstances, continues her career of fertility steadily till her last child is born.

The registers tell us when women actually begin to have children, and I have already made use of such information, but we have no data nearly sufficient to decide what is the average age of commencing fertility; we may, however, be sure, from what we do know, that it is not the age of puberty or of commencing menstruation, and that it is not the age of nubility or age at which procreation is commenced with the greatest advantage to mother and progeny. It is evidence of good conduct in the race that we cannot get sufficient data, there being very few unions permitted in early life. The great mass of our women are, fortunately, married within the limits of nubility, or the marriageable age. Nevertheless, it is very desirable that we should find out what is the mean age of commencing childbearing.

Regarding the time of cessation of childbearing we have more exact information, and it shows well the distinction that must be made between the cessation of menstruation and the cessation of procreation. Menstruation ceases at from forty-five to fifty years of age, but childbearing ceases at an average age of thirty-eight. This cessation arises from no imperfection or decay of organs that has been demonstrated, but it may be due to that nevertheless. It is highly probable that its main cause is a cessation of functional vigour or activity, for it is delayed in women who have begun their fertility late in life.

On the subject of the cessation of childbearing our best information is derived from Ansell, whose calculations are based on 4899 observations, restricted to those in which both the father and mother survived the childbearing age of the latter—a point which was determined, as regards each case, in accordance with a scale already given, whose chief governing rule is not to suppose a woman under forty-four years of age to have borne her last child until she has been for ten years barren. The quinquenniad thirty-nine to forty-three is that at which the largest number ceased to bear children. Thirty-eight years is the mean age of mothers, married at the mean age of twenty-five, at the date of the birth of their last children in cases where childbearing was not prematurely terminated by the death of either parent.

The productive period begins earlier, and it is protracted to a later age, in cases where the children are numerous than where they are few. This protraction is shown by the following table:—

TABLE VI. (*from Ansell*).—*Showing the Mean Age of Mothers at the Birth of their Last Child in families of different numbers.*

Number in family.	Mean age of mothers.
1	31·08
2 or 3	34·21
4 or 5	37·04
6 or 7	39·21
8 or 9	40·61
10, 11, or 12	41·74
13, 14, or 15	42·83
16 or more	44·32

Women have, in their career, and with a view to our present subject, many stages in life. There is the age of puberty or of commencing menstruation, and this is to be distinguished from the age of commencing childbearing, regarding which we have no data adequate for a decision. But the age of commencing childbearing, though it may be identical with that of commencing menstruation in individual cases, is certainly not nearly so in the mass of women, being fortunately considerably delayed. Then, after the age of commencing childbearing comes the age of nubility or marriageable age, that at which a woman can enter on married life with the best chances of having a healthy and not excessive family. After the age of nubility comes the age of cessation of childbearing, which, as already said, is

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thirty-eight for women married at twenty-five years of age. A woman may bear children after this age, or even after the cessation of menstruation, but such cases are exceptional and rare. The last stage in their career is generally the cessation of menstruation at an age of forty-five to fifty.

There is a mean age of puberty and of commencement of possible procreation, a still farther advanced mean of commencing procreation, a still farther advanced mean of nubility or fitness for procreation, a still farther advanced mean of cessation of procreation, and lastly comes the mean of cessation of menstruation and of possible procreation. Most of these stages of woman's life have their analogues in the female life of the lower animals which are best known to us, and some of them have analogues in the life-history of plants. There can be no doubt that they all have their co-ordinate physical states of the genital organs, and in this department there has been much successful anatomical investigation, especially as regards puberty, nubility, and the cessation of menstruation.

Writing regarding the age of cessation of childbearing Whitehead makes the following pertinent remarks:—"The sum of the ages of the individuals (thirty-eight) recorded in the preceding table, at the time of their last delivery is 1586, giving an average of 41·73 years; the average age of the same individuals, at the time of their last menstruation, is 47·54 years, so that a period of nearly six years is here indicated, during which, although the menstrual function continued to be more or less efficiently discharged, and the health good, aptitude for procreation did not exist. They were all placed under equally favourable circumstances for the continuance of childbearing so far as regarded their matrimonial position. . . . A like period of uterine quiescence," he adds, "is observed before childbearing begins."

The average cessation of childbearing is for all women, no doubt, between thirty-five and forty years of age, and a woman in whom this career ceases earlier shows relative sterility.

To the question, How long does childbearing continue? it is easy to give some answer; for if the average age at the commencement of childbearing is twenty-six years, and the mean age at termination is thirty-eight, the average duration of childbearing is twelve years. The duration of fertility will be the number of pregnancies multiplied by nine (months) added to the number of intervals multiplied by nine (months). It will vary, therefore, from a case of one-child sterility, with nine months of the childbearing period of life, to a case of ten-child fertility, with a childbearing period of life of 171 months, or about fourteen years; and to a case of twenty-child fertility, with very much less than thirty years of childbearing life; very much less, because women of this great and excessive prolificness do hurry their children into the world to get through the high number.

From Ansell's table of 4899 married women, whose ages at the birth of their last children were known, and where both parents survived the childbearing age of the mother, I have constructed the following table to show the nearest figures I can give to the actual lengths of childbearing life in families of different members. The commencement of childbearing at twenty-six years of age is, in all cases, assumed, because it really was very nearly the mean age in Ansell's collection:—

TABLE VII. *(from Ansell).—Showing the Average Age at Cessation of Childbearing in families of different numbers, and the Time occupied in Childbearing, estimated at the rate of eighteen months for each child, in families of less than ten children: the mean age of mothers at commencement of childbearing being twenty-six years, and the parents both surviving the childbearing age of the mother, according to the scale of Ansell* (page 50).

Number of family.	Number of cases.	Mean age of mothers.	Time occupied in childbearing.
1	244	30 yrs. & 6 months	1 year and 6 months
2	401	32 „ 11 „	3 years — „
3	425	34 „ 5 „	4 „ 6 „
4	485	35 „ 10 „	6 „ — „
5	565	36 „ 11 „	7 „ 6 „
6	494	38 „ — „	9 „ — „
7	490	39 „ — „	10 „ 6 „
8	467	39 „ 8 „	12 „ — „
9	387	40 „ & 6 months	13 years & 6 months
10	312	40 „ 10 „	14 „ 10 „
11	239	41 „ 1 „	15 „ 1 „
12	170	41 „ 7 „	15 „ 7 „
13	115	42 „ 5 „	16 „ 5 „
14	43	41 „ 10 „	15 „ 10 „
15	34	42 „ 8 „	16 „ 8 „
16	10	43 „ 6 „	17 „ 6 „
17	10	43 „ 5 „	17 „ 5 „
18	6	44 „ 7 „	18 „ 7 „
19	1	45 „ — „	19 „ — „
20	1	45 „ — „	19 „ — „

This table affords us further valuable information as to the duration of childbearing in families which reach the normal limit of about ten, and we see that it is about fifteen years. A woman then may be regarded as relatively sterile who, married within the years of nubility (about twenty to twenty-five), ceases to have children within fifteen years from the birth of her first child.

We must now try to answer the last and comprehensive question, How many children does a woman bear? On the answer to this depends the settlement of the amount of relative sterility. It cannot be satisfactorily answered directly, on account of the paucity of data, but such answer as we can give is corroborated by the various subsidiary answers which we have just furnished. We shall not enter on subjects important politically, such as the numbers in actual families, the number to a marriage, etc., because these are foreign to our present inquiry.

In the district of St. George's-in-the-East the Statistical Society found, among the poorer classes, eighty mothers who had been married at ages varying from fifteen to nineteen, and who had lived in wedlock at least thirty-one years, or all the childbearing period of life. These fertile wives had borne, on an average, 9·12 children. Considering the undoubted existence of evident sources of error, all tending to unduly diminish the average amount of fertility, we may safely say, using the data of St. George's-in-the-East, that ten is about the average fertility of fertile marriages lasting during the whole childbearing period of life.

The average age of marriage in England is twenty-five, and consequently the production should be less than ten, the women living in fruitful wedlock from twenty-five till the end of the childbearing period of life, not all the childbearing period.

The actual fertility of fertile marriages in England, if only nine in ten wives have living children, is, according to Farr, 5·2; but with a view to contrast with the data of St. George's-in-the-East and of Ansell this figure needs correction; for in making it up, the condition of living in wedlock till the end of the childbearing period of life is omitted. If that condition were not omitted, there would of course be a large increase of fertility of wives in England. Ansell's collection includes 1767 spinsters married to bachelors at a mean age of twenty-five, and living in fruitful wedlock till the end of childbearing, as calculated by a scale already given, and the production was 5·7, or nearly 6, a figure which I regard as indicating a less fertility than that of Englishwomen generally.

The fertile wives of England, without the condition of persistency in married life till the end of the childbearing period of life, bore 5·2 children. Ansell's mothers in the upper classes, married at a mean age of twenty-five, and living in wedlock till the childbearing period of life was passed, bore, on an average, six children. The fertile wives of St. George's-in-the-East—a poor class—living in wedlock all the childbearing period of life, bore above nine children. Each of these statements yields some corroboration of the others; and, keeping in view some further evidence, they seem to justify us in holding that a healthy woman, living in wedlock all her childbearing life, under the most favourable circumstances for natural procreation, should have a family of ten; or women, under such circumstances, bearing fewer than ten are relatively sterile, and the sterility is inversely as the number.

Further evidence to the same effect is got by referring to the data derived from the registers of Edinburgh and

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Glasgow for 1855. There ("Fecundity," page 125, second edition) I found that in fertile wives married at various ages there was a fertility of between seven and eight after the lapse of fifteen years of marriage, counting to the birth of the last child; and fifteen years is full allowance for persistence in fertility. Now, as many women are married some years after the best period for commencing childbearing, we may, by making allowance for such delay, raise the number from between seven and eight to ten.

There are many women who bear families above ten in number, and it is desirable to devote to them further special consideration. Such families are, on the whole, abnormal or excessive. For many an individual woman a family less than ten is excessive. We have, indeed, spoken of the occasional calamitous character of only-child fertility. But there is a mass of evidence tending to show that a family, in the average female, rising above ten, begins to be excessive and increasingly so as the figure increases. It may seem paradoxical to bring the consideration of excessive families into a lecture on sterility, but in the next lecture the paradoxical character of this proceeding will disappear.

The bearing of a first child is well known to be very dangerous, often fatal, to the mother. After this she comes into a period of childbearing which is the safest, and which continues while she has a natural or ordinary degree of fertility. The danger of primiparity is, for a fertile woman, inevitable, but the special danger of multiparity is incurred only when a family is excessive; and I hold this danger to be good evidence (along with other) of excessiveness. It is, at the same time, to be kept in mind that danger has been demonstrated to rise with increasing elderliness; but elderliness of the mother is an essential element in a question of excessive family. I extract from my work on Fecundity, etc., the following table, whose composition is there stated:—

TABLE VIII.—*Showing a Comparative Percentage of Deaths in Successive Labours.*

Number of pregnancy.	Number of mothers.	Number of deaths.	Percentage.	Or 1 in
1	3722	254	6·82	15
2	2898	60	2·07	48
3	2534	64	2·52	39
4	1982	39	1·97	51
5	1543	31	2 01	49
6	1221	28	2·29	43
7	848	16	1·88	53
8	641	15	2·34	42
9	425	13	3·06	32
10	222	9	4·05	24
11	152	5	3·28	30
12	61	1	1·64	61
13	34	4	11·77	8
14	11	—	—	—
15	6	1	16·66	6

It does not give actual mortalities, but only such mortalities as may be compared with one another with a view to making out the peril attending confinements of different numbers.

In the sequel I shall give further and varied evidence as to the excessiveness of families above ten. This evidence is based not on the danger to the mothers only, but on the nature of the production—that is, on the occurrence of twins, of weakly children, and of idiots.

CASTRATION OF WOMEN.—Dr. Max Nordau, in his work on this subject, published at Paris in 1882, states that up to the present time the cases of double castration that are known to have occurred are 218 in number, and that of these thirty-eight have proved fatal: that is, a mortality of 17·4 per cent.—a mortality, therefore, which is greater than that of ovariotomy in recent times. This percentage shows that it is one of the gravest operations of surgery, while in most of the statistical returns which have been published the results furnished by authors are often announced in the vaguest terms. This operation has been seldom practised in France, only three cases by Péan being known of, and even these have not yet been published.—*Bulletin de Thérap.*, January 30.

THE LETTSOMIAN LECTURES
ON THE
TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

By A. ERNEST SANSOM, M.D. Lond., F.R.C.P.,
Physician to the London Hospital; Senior Physician to the North-Eastern Hospital for Children, etc.

LECTURE III.—MITRAL STENOSIS.—FEBRUARY 5.

MORBID ANATOMY—PHYSICAL SIGNS—DIFFERENTIATION FROM THE LESION WHICH INDUCES REGURGITATION—RISE AND PROGRESS OF THE DISEASE RESULTING IN STENOSIS — COMPENSATION — SPECIAL TREATMENT IN MITRAL STENOSIS—COMPLICATIONS OF MITRAL DISEASE—PERICARDIAL ADHESIONS—EMBOLISM.

I PROPOSE now to consider the morbid conditions associated with a structural change at the left auriculo-ventricular aperture—a change which narrows this outlet and impedes the influx of blood into the left ventricle during the period of diastole. No disorder of function can bring about such a condition as this; the lesions are always organic.

We will first glance at the *morbid anatomy* of the affection. If the mitral aperture be viewed from the auricle it may, in many cases, be seen that a smooth septum presents itself between auricle and ventricle, crossed by a narrow slit, almost straight, but inclining to be crescentic. Such slit may be no larger than a sixpenny-piece or a shirt-button will pass through, and from its appearance the orifice has been termed the "button-hole mitral." The natural form of the curtains may be entirely lost, their place being occupied by a thick fibrous structure welded at its circumferential attachment with the cords and fleshy columns, which may all be transformed into a dense tendinous mass. In certain cases this fibrous material is infiltrated with calcareous salts to such a degree as to make it closely resemble bone.

Another, but less frequent, form of obstruction is that in which the mitral orifice, as seen from the auricle, resembles a hollow cone. This is known as the "funnel-mitral." Its ventricular outlet may be so small that it will scarcely admit the point of the little finger. Dr. Hilton Fagge has recorded forty-six examples of the button-hole to one of the funnel form of constriction; Dr. Hayden, thirteen of the former to one of the latter; and of my own records of twenty autopsies in cases of mitral stenosis, two only were "funnel-mitral." M. Lancereaux has described a case of mitral stenosis in which, amongst the vegetations which surrounded the thickened orifice, he discovered hard granules, that were shown by chemical tests to consist of urates. When heated with nitric acid they gave rise to a yellowish product (alloxan), and this, on the addition of ammonia and distilled water, gave the characteristic red colour of murexide or purpurate of ammonia. The granules, when dissolved in acetic acid, crystallised in the characteristic rhomboids of uric acid.(a) I draw attention to this observation because it may have an important bearing on the questions of etiology and treatment. I have myself met with a case of mitral stenosis in which there were abundant gouty deposits in the joints, some of which suppurated, and gave exit to uratic concretions intermixed with the pus.

It is obvious that the great difficulty created by such alterations as these is the due filling of the ventricle from the auricle. In addition, there is, however, in many cases necessarily a reflux into the auricle at the systole of the ventricle. In proportion as the slit is narrow the possibility of such reflux is less, and in extreme cases of stenosis it appears probable that no regurgitation is possible. In all cases the main difficulty is the obstruction; that of regurgitation is subsidiary, though frequently co-existent.

It requires only a slight consideration to be convinced that quite a different set of conditions obtains in mitral stenosis to that manifest in mitral regurgitation. Morbid anatomy teaches us that in stenosis the left ventricle is

(a) "Anatomie Pathologique," page 215. Paris: Victor Masson et Fils. 1871.

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usually not dilated; it has its normal capacity, or is even smaller than natural. We should expect so, for the difficulty is not that the ventricle is habitually overfilled as in regurgitation, but that it is insufficiently supplied owing to the imposed obstruction. When the left ventricle is observed to be dilated in the autopsy of a subject of mitral stenosis, it is probable that mitral regurgitation or disease of the aortic valves conduced to such a change. Upon the left auricle the consequences of mitral stenosis are very manifest. It is usually not only dilated, but hypertrophied. The wall of the auricle may be increased in thickness from its normal of about three-twentieths of an inch (Bouillaud) to a quarter of an inch or more. I have found it a quarter of an inch thick in the case of mitral stenosis in a child. On the other hand, it is occasionally found dilated rather than hypertrophied. In one case I found it extremely dilated, and the walls almost as thin as an ordinary visiting-card. The dilatation and hypertrophy of the left auricle are also in accord with *à priori* considerations, for the cavity becomes overfilled on account of the obstruction to its outflow, and the muscle has a heavier task than the normal in aiding the filling of the ventricle. When dilatation is in excess, it is through an unusual failure of muscular power.

I turn now from the morbid anatomy to the *clinical history* of mitral stenosis, and I shall have to crave your indulgence if I seem to dwell too long upon points which may not appear at first sight to have a very distinct bearing upon treatment. I feel sure that I shall have your concurrence when I say that no disease is well treated that is misunderstood. We have a great deal to learn as to mitral stenosis; it is, I feel quite sure, in many instances, unrecognised—not from any fault in observers, but from their misfortune. It is only comparatively recently that our pupils could be taught in our hospitals the methods of discriminating between cases of mitral stenosis and those of mitral regurgitation, and it is unwise to conceal the fact that difficulties in such differential diagnosis do occur. But it has, to my mind, been too hastily assumed that the consecutive changes and collateral phenomena in the two conditions are so closely similar that a plan of treatment for the one is equally applicable to the other. I need not ask you to concur with me in deprecating the plea of "*Cui bono?*" It is our bounden duty to learn all we can of the disorder we have to treat, even if the immediate influence of such knowledge upon treatment be not so very apparent.

Let us consider the signs by which we may recognise the condition of mitral stenosis. 1. *The murmur.* This is heard in the neighbourhood of the apex of the heart, in the mitral area, but, according to my experience, usually rather to the right of the apex. It occupies the diastolic period—the long pause—usually the concluding portion of it, and then it terminates abruptly with the first sound. It is chiefly Dr. Fauvel, of Paris, and Professor Gairdner, of Glasgow, we have to thank for accurately describing this murmur and making it available for the practical purposes of diagnosis. The distinction between the murmur indicating mitral stenosis and that indicating mitral regurgitation is to be made partly by the character of the sound and partly by the rhythm. The stenosis-murmur is usually of a rattling and rolling character, but its chief characteristic is its abrupt termination—it ends with a sudden stop, as the murmur of regurgitation *never* does. Even when the murmurs of stenosis and regurgitation are combined there is usually a spot in the neighbourhood of the apex at which the former is heard to stop suddenly, and the systolic murmur to "tail off" from it. The rhythm is determinable by ascertaining the relation to the second sound and to the impulse of the heart. In approaching the apex from the base one may be convinced of the commencement of the murmur after the second sound. Near the apex one may hear that the termination of the murmur is with the impulse of the heart as felt upon the chest-wall, or, where this cannot be determined, with the pulsation of the carotid in the neck. Such are, very briefly, the chief characters of the murmur which is so commonly known as the *presystolic* murmur that has been considered to be almost, if not absolutely, pathognomonic of mitral stenosis. And now as to its mode of production—a question which is really of practical importance. Professor Gairdner and others have considered it due to the muscular contraction of the auricle urging the blood through the stenosed aperture into the ventricle. It is well known that Professor Gairdner proposed the term "auriculo-systolic" to describe the murmur. Dr. Wilks,(b) however, considered that the murmur might anticipate the auricular systole, that it might occur "not only during the contraction of the auricle, but also during the heart's diastole and pause." Dr. Galabin came to a like conclusion from the evidence afforded by the cardiograph. I am able to afford the crucial proof of the view that the causation of the presystolic murmur may be independent of the auricle: *first*, because in many cases I have observed that, though there has been present a prolonged presystolic murmur commencing in the long pause almost immediately after the second sound, cardiographic evidence has shown the auricular systole to occupy its normal position just anterior to the commencing contraction of the ventricles;(c) *secondly*, because I observed a case in which a murmur occupied at one time a portion of, and at another almost the whole of, the long pause; and the autopsy showed that the auricular systole could have had no share in producing such a murmur—for not only was the left auricle so dilated that its wall could have exerted no appreciable muscular power, but it was lined by a closely adherent old laminated blood-clot. I consider that it is clearly proven that the so-called presystolic murmur may occur during the diastolic as well as the presystolic period, and that it may be due to the entrance of blood into the ventricle directly diastolic relaxation permits, the blood being urged through the stenosed aperture owing to the tension under which it has been retained in the elastic and distended auricle and the pulmonary veins. The contraction of the auricle may reinforce the murmur and make it loudest just before the ventricular contraction. This consideration explains why, in exceptional cases, the murmur of mitral stenosis is post-diastolic and ceases with a distinct pause before the first sound, the auricular systole in such cases being weak or imperfect. It is certain that in a large majority of instances the presystolic murmur serves to indicate with precision the existence of mitral stenosis. The late Dr. Hayden has said: "It is *never* present where mitral narrowing does not exist, and it is never absent, and that only for a very limited period, in cases of that lesion."(d) I am sorry that I cannot concur in so positive a statement. In a few cases I have found the presystolic murmur closely simulated by the murmur of aortic regurgitation, when this is conducted towards the apex, and especially, as is sometimes the case, when it is heard *only* in the mitral area. Cases have been recorded in which a presystolic murmur has been noted during life, and the autopsy has demonstrated not mitral stenosis, but aortic regurgitation. Another possible source of error is the existence of pericarditis, when friction may be occasioned by the auricle, and cease at the moment of systole. Again, I think, most observers will agree that in some cases the presystolic murmur is extremely variable: it may be inaudible during repose, and yet very evident when the patient is made to manifest some slight exertion; it may be absent for considerable periods, and then be readily discoverable. Although, therefore, I consider that in the great majority of cases the presystolic murmur declares with precision the existence of mitral stenosis, it is necessary to consider other signs before committing oneself to a positive opinion.

Another auscultatory sign of great importance in indicating the obstructive lesion is (2) *reduplication, or a seeming reduplication, of the second sound of the heart.* This phenomenon is to be noted in at least a third of the cases of mitral stenosis, and only rarely in other conditions. It becomes, therefore, a valuable aid to diagnosis. I have formerly developed before the Society at length my views as to the mode of production of this seeming reduplication.(e) I will only say here that I believe it to be due not to any want of synchronism in the closure of the aortic and the pulmonary semilunar valves, but to the normal second sound followed by another sound due to a sudden tension of the mitral valve itself. The blood, accumulated under pressure in the auricle, rushes through the stenosed aperture as soon as diastolic relaxation permits, and jerks the mitral curtains or the thickened material which represents them on the ventricular aspect; this gives rise to a sound

(b) *Guy's Hospital Reports*, third series, vol. xvi., March, 1871.
(c) "Manual of the Physical Diagnosis of Diseases of the Heart," third edition, page 278. London: J. and A. Churchill. 1881.
(d) "Diseases of Heart and Aorta," page 898.
(e) *Proceedings of the Medical Society of London*, vol. v., page 191.

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of tension, which, coming closely after the normal second sound, appears like a reduplication of the latter. The great anterior flap of the mitral valve is normally on the stretch in diastole; in Dr. MacAlister's words, "it does not hang loosely down, it is stretched taut from basal ring to muscle tip."(f) It does not seem difficult to realise that in the condition of stenosis, and for the reasons given, this diastolic tension may be so increased as to give rise to sound.

A third sign of importance in establishing the diagnosis of mitral constriction is (3) *thrill*. A thrill at the apex is rarely met with in mitral regurgitation, but very commonly in mitral stenosis. Its rhythm is determinable in like manner with that of the murmur, and if it be presystolic the diagnosis of mitral constriction is assured. I have observed presystolic thrill when there has been no presystolic murmur, and where the condition of stenosis has been indicated by other signs.

A fourth means of differentiation is (4) *the determination by percussion of the outline of the heart*. If this be done accurately by means of a pleximeter, and marked upon the chest-wall with a copying pencil, a transfer may readily be taken upon paper and kept for reference. By this method I have shown in some cases—(1) an abnormal bulging in the situation of the left auricle; (2) a dilatation of the right cavities and of the pulmonary artery, with an absence of dilatation of the left ventricle. The concurrence of these signs has strongly suggested the diagnosis of mitral stenosis when other signs have been obscure.

Lastly (5), a valuable aid to diagnosis may be received from the *employment of the sphygmograph and cardiograph*.

Very contradictory opinions have been put forth as to the pulse of mitral stenosis. Dr. Hayden considered that "the pulse of mitral obstruction is usually quite regular, not above ninety in the minute, but small,"—that is, until the later stages, when failure commenced; and Dr. Fagge thought that in the majority of cases in which a presystolic murmur was heard the pulse gave no indication of the existence of disease. A large number of observers, however, have noted irregularity of the pulse as pertaining to mitral constriction.(g) My own observations point strongly to a notable irregularity of the pulse in mitral stenosis; and this in such degree as to afford valuable diagnostic evidence. In mitral regurgitation the pulse is usually regular until compensation is beginning to be imperfect and the right chambers commence to yield. In mitral stenosis, however, irregularity may be evident when compensation is perfect. It is true that many observations may be made with a record only of an even and regular pulse; but with repeated observations the peculiarity of mitral stenosis becomes manifest in the trace—a double or even triple pulse is recorded before the base line of the sphygmographic trace is reached. These pulsations are due to repeated systoles, the normal correlation between auricle and ventricle being disturbed. In the later stages, when the right side of the heart commences to fail, irregularities in volume of the pulse may be observed; and in a case where there was great dilatation of the auricle, I found the pulse become extremely slow, its rate falling from eighty to fifty-six, and then to an average of forty per minute. At one time it was thirty-six.

The evidence afforded by the cardiograph, when mitral stenosis is suspected, is, in my opinion, extremely valuable. The trace enables one to judge of the relative length of systole and diastole. In free mitral regurgitation a very short interval separates the systoles; the duration of the systole, instead of being, as in the normal, less than that of the diastole, is greater. In stenosis, on the other hand, the interval between the systoles may be greatly prolonged. Or in stenosis the diastolic intervals may be observed to vary greatly in duration. Two systoles may occur with no appreciable diastolic interval, and another interval may be abnormally protracted. Much more characteristic, however, is the appearance of a number of vibrations in the diastolic part of the trace; in fact, the vibrations which are heard by the ear as murmur, or felt by the finger as thrill, may be written on the smoked paper by the needle of the cardiograph. I show you many examples. In some it will be seen that the diastolic portion is serrated, and there is no indication of the elevation caused by the auricular systole just before the main upstroke indicating the grasp of the ventricle; in others vibrations are seen to precede a definer systole of the auricle; in a third set the auricular systole is well marked, and the sonorous vibrations of murmur, though murmur existed, are not recorded. So I think we have a means of determining in some measure the degree of constriction. If such were considerable it is unlikely that the auricular systole would be readily transmitted and recorded; on the other hand, it is likely that the finely serrated line of vibrations would be produced by the extrusion of blood through the narrowed aperture.(h) Some of my tracings show in a marked manner the effect of effort in rendering evident vibrations in the diastolic portion which were not visible during repose. By a comparison, too, of the characters of the systolic and diastolic portions I think we are enabled to obtain some indications whether, in combined stenosis and regurgitation, the former predominates over the latter or otherwise, and whether or no hypertrophy preponderates over dilatation of the ventricle.

Such are the chief means at our command for arriving at a diagnosis of mitral constriction; and, though I do not think we are justified in coming to a conclusion from observation of the sign alone, I consider that, by a judicious combination of methods of observation, no case of mitral stenosis ought to go unrecognised.

I pass on now to consider the clinical evidence as to the *origin and course of the morbid changes which bring about the obstructive lesion*. We are at once met by a body of evidence which shows that mitral stenosis, like mitral regurgitation, has a strong relationship with rheumatism. From the morbid anatomy standpoint it has been supposed that, at least in some cases, the lesion might have been congenital. The smooth surface of the septum between auricle and ventricle, with its symmetrically edged aperture, might *primâ facie* support this view; but we do not find the lesion commonly associated with those which are undoubtedly congenital; and these are, moreover, infrequent in the left, though comparatively frequent in the right chambers of the heart. In one of the twenty post-mortems, however, which I have recorded, a large permanent foramen ovale was present, the subject being a female aged fifty. It is known that such congenital disease, as Dr. Peacock formerly pointed out, predisposes to endocarditis, and it is probable that such was the sequence in this case; for we are met by many observations which show that the lesions of stenosis, which in appearance suggest a congenital causation, are met with in cases which are undoubtedly rheumatic.

Dr. Dyce Duckworth has collated the records of 264 cases of mitral stenosis from various sources, including eighty observed by himself, and the figures show that 141, or 60·8 per cent., manifested in some form rheumatic antecedents. Of sixty-four cases observed by myself, and of which I have records, exactly thirty-two (50 per cent.) had been the subjects of rheumatic fever, subacute rheumatism, or rheumatoid pains. The association, therefore, of mitral stenosis with rheumatism is an intimate one. When we come to inquire, however, as to the degree of such association comparatively with that subsisting between mitral regurgitation and rheumatism, I think we shall find the relationship less marked in the one case than in the other, and I hope that the inquiry will not be unfruitful as regards the determination of the nature of the change which induces mitral stenosis. If I take the cases of mitral regurgitation derived from the same sources (viz., private and hospital practice) from which I obtained the cases of mitral stenosis that I have mentioned, I find that of 123 cases, seventy-three, or 59 per cent., presented evidence of rheumatism in their history. But it must be recollected that in a considerable number of the cases of regurgitation organic disease was not present or not proved, whilst mitral stenosis is always due to organic change. It follows that the figures do not sufficiently express the relation between rheumatism and the organic change which induces *regurgitation* at the mitral orifice. From the analysis of cases of cardiac disease prepared from the records of the London Hospital by Dr. Gabbett for the year 1880, it will be found that whilst 58 per cent. only of the cases of mitral stenosis presented a history of rheumatism, 77 per cent. of the cases of mitral regurgitation were rheumatic.

And now, to push this question further, let us inquire as to the *degree* of manifestation of rheumatism in the two classes of cases. First, as to the relation with acute rheumatism

(f) *British Medical Journal*, October 28, 1882, page 835.
(g) See list in Balfour's "Clinical Lectures on Diseases of the Heart." Second edition, page 123. London: J. and A. Churchill. 1882.

(h) In some instances there is cardiographic evidence of two or even three auricular systoles in one diastolic period.

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If we examine the records of acute rheumatism in the London Hospital for 1880 and 1881 we find that the proportions of cases of mitral stenosis (including those in which stenosis was combined with regurgitation) stand thus:—Proportion to all cases in a first attack of acute rheumatism, 5·6 per cent.; in patients suffering a second attack, 3 per cent.; in those with a history of two or more previous attacks, 1·7 per cent. It is obvious that this relationship differs very widely from that existing between mitral *regurgitation* and acute rheumatism, where the proclivity to the lesion increases with the attacks. It is obvious, therefore, that a close relation does not obtain between mitral stenosis and the acute forms of rheumatism, and that repeated attacks do *not* generally tend to produce the lesion.

As a further step towards the elucidation of the question, I will now ask you to follow me in the inquiry as to the etiology of mitral stenosis in the cases of children. I think you will agree with me that a considerable light can be thrown on the subject from this source. Contradictory opinions have been enunciated as to the proclivity of children to the affection. Dr. Hayden thought that it was to be met with most frequently in children; while Dr. Fagge had no patients under ten, and the youngest observed by Dr. Dyce Duckworth was fourteen. The cases I shall now call your attention to were all under twelve years of age; I have had many who were seven years old. I have tabulated these cases according to the degree of manifestation of rheumatic symptoms. In those who suffered from *acute rheumatism* I found twenty-four cases of mitral regurgitation to one of mitral stenosis; in those classed as *subacute rheumatism*, thirteen of mitral regurgitation to two of mitral stenosis; in those who suffered only *rheumatoid pains*, six of mitral regurgitation to two of mitral stenosis. So far as this evidence goes, therefore, it tends to show that it is not the more severe, but the slighter forms of articular rheumatism, which are attended with the obstructive lesion, whilst the opposite is the case as regards the regurgitant.

To pursue the point, where the rheumatic tendency is not so obvious, but where, as I have said in my first lecture, a rheumatic form of endocarditis is nevertheless manifest, we will consider the cases occurring after scarlatina and measles. In cases presenting a history of scarlatina I found thirteen cases of mitral regurgitation to two of mitral stenosis; in those with a history of measles, twelve of mitral regurgitation to two of stenosis. Lastly, in the case of children in whom no history of rheumatism was manifest, nor any disease which we might suppose to be likely to induce endocarditis, in these I found twenty-four cases of mitral regurgitation to *fourteen* of mitral stenosis. It is obvious, therefore, that the proclivity to the obstructive lesion is in a very marked manner greatest where articular phenomena are not manifest at all. It might be thought that this was evidence rather against the view that rheumatism is a cause of mitral stenosis; but, as I have shown in my former lecture, the advent of endocarditis having the essential characters of that associated with rheumatism may be so insidious that no subjective sign marks its onset, and we have found in many instances that the course of the affection in the non-articular examples and the morbid changes, as shown by post-mortem examination in the fatal cases, do not differ in any appreciable way from those which are manifest in cases having a distinct history of rheumatic causation. It would, therefore, appear most probable that the correct conclusion is not that mitral stenosis is independent of rheumatism, but that it is associated with the less pronounced forms of it—with its insidious, and not, so to speak, with its *explosive* varieties.

(To be continued.)

British Medical Benevolent Fund.—The concert to be given at St. Andrew's Hall, Newman-street, by the Strolling Players' Amateur Orchestral Society, in aid of this Fund, will take place on Thursday, March 8, instead of February 28, as stated. Tickets may be obtained of the Hon. Secretary, Mr. Edward East, 18, Clifton-gardens, W., or at the hall.

Sciatica.—Dr. Pollak, at the St. Louis Medical Society, reported a case of sciatica promptly and permanently relieved by the hypodermic injection of ice-cold water. The needle of the syringe was buried deeply in the tissues.—*Phil. Med. Reporter*, February 3.

ORIGINAL COMMUNICATIONS.

PROBABLE TUMOUR OF THE CEREBELLUM: CEREBELLAR GAIT.

ERRONEOUS ASSERTION OF UNIOCULAR DIPLOPIA BY THE PATIENT.

By JAMES RUSSELL, M.D., F.R.C.P.

The case which follows is chiefly interesting from its presenting clearly certain of the most important features of cerebellar disease, and particularly those which are characteristic of the removal from the trunk muscles of the normal cerebellar influence in co-ordination.

I have also thought it worth recording on account of the singular statement made by the patient of the presence of uniocular diplopia. That this symptom may exist independently of fault in the transparent media of the eye appears, among other evidence, from a discussion at the Ophthalmological Society, in which, if I remember correctly, the symptom seemed to be associated with the presence of an intracranial tumour; but in this case the affirmation of this symptom, though obviously made by the patient with a clear conviction of its reality, was found to be inaccurate or imaginary by the test applied by Priestley Smith.

A young man, aged eighteen, was admitted into the Birmingham General Hospital, complaining of symptoms strongly suggestive of the presence of a tumour beneath the tentorium. The only important element in his family history consists in the death of an adult sister suddenly after a fit. His previous health has been good.

His present illness developed itself six months before admission in the occurrence of morning vomiting, which continued to recur through three months; and a little later by staggering and unsteadiness in his gait.

The unsteadiness gradually increased until it reached a point at which he was obliged to use a stick. About the same time the patient experienced "a jumping kind of pain" in the occipital region whenever he stooped.

During the fortnight or three weeks preceding his admission the ground had felt soft under his feet. His vision also became affected, so that he "saw things double." He ceased working about a week before he entered the hospital.

The patient presents the appearance of a well-nourished, healthy young man, with a rather heavy expression of countenance, and a somewhat fixed aspect of face and neck; but he is clear and intelligent when engaged in conversation. His complexion is clear; his front teeth are small, but not peculiarly formed. It will be sufficient for me to name his principal symptoms, without attempting any detailed account of the progress of the case. His admission took place on October 25 of last year: at the present time (the middle of January) his symptoms have undergone considerable advance. The morning vomiting has been almost constant during the first part of his residence in hospital; sometimes it has occurred very early, sometimes after breakfast, and in either case has often lasted till 11 a.m., but has never occurred after that hour. It is unattended by nausea, and is without effort. The symptom has been absent during the last week. His gait has presented characteristic variation: at first it was unsteady, requiring the legs to be separated, and caution to be exercised in turning, the neck being rigid and the expression fixed, but the patient could walk unaided. Since admission, walking power has rapidly deteriorated, and the deterioration has consisted mainly and palpably in loss of full co-ordination in the machinery for regulating the attitude of the trunk. By the end of December walking was only managed by the aid of some one to afford support, and even then was accomplished with difficulty. Leaning on the nurse, he scarcely advanced twelve inches at a step, the body fixed, and the limbs kept rigid, as if in uncertainty how to act; the whole expression being one of great insecurity. A fortnight later he required the support by both hands of some one in front; he advanced cautiously about four inches at a time, the neck and spine stiff, and the entire trunk having the appearance of a fixed machine working on a universal joint situated at the sacrum, over the action of which the patient had imperfect command. His legs, however, were used easily, the feet raised fully, and there was no uncertainty nor difficulty in their action, and resistance

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to passive movements when the patient had returned to bed was powerful.(a) From the first the knee-jerk was very powerful; it seemed exaggerated: it is now still more active. When first seen, slight clonos was noticed in the left leg, *possibly* in the right also; now clonos is very active in each leg. The superficial reflexes are active. The muscles of the lower extremities are well nourished. He states that at an early period in the history of his case he had slight vertigo, but the symptom has never been prominent. Headache has only become important during the last week. On January 13 he was groaning with intense pain shooting over the occipital region, but not down the neck, nor was it attended with rigidity. The pain was preceded by pain in the sacral region; relieved by mustard and linseed. The occipital pain has recurred. At the time of its appearance we noticed a remarkable development of *tâches* over the chest and face, produced by drawing the finger-nail over the skin. I do not know, however, whether this symptom had existed previously.

As regards the ocular symptoms: Both discs are blurred, and the edges completely indistinct; at the period of admission they were congested. The right pupil has been persistently dilated to one-third above the size of the left; both contract by light, and both actively in convergence—preserving, however, their abnormal relation. There has been throughout a slight degree of nystagmus. On admission the patient could hardly read No. 8 Jaeger; now he is only able to read the very largest type. The ocular movements are co-ordinate, but jerky. For some time before entering the hospital the patient had double vision at intervals; and he repeatedly mentioned the presence of this symptom subsequently. But on a later occasion I was surprised by meeting with a very decided affirmation of double vision with the right eye whilst the left was carefully closed. There was no hesitation nor indistinctness in the patient's assertion. He illustrated the appearance by holding his two fingers about two inches from each other in a horizontal direction. He asserted that this diplopia did not exist in the left eye, the right being closed.

I referred the case to Priestley Smith for his examination, the patient at his first visit clearly repeating his former account of his visual phenomena. I give here Priestley Smith's report:—Ordinary binocular diplopia due to deviation of the optic axes was proved to exist. The patient, however, complained of seeing double when either eye was used alone, and he repeated the statement many times. The reality of this symptom was obviously doubtful, because when both eyes were open there were still only two images seen; moreover, the statements with regard to the monocular diplopia were contradictory. Thus, the boy declared that through a prism he saw only one object, while without it he saw two; a plane glass produced the same change. At a subsequent examination, a few days later, the binocular diplopia remained unaltered; but no further statement as to double vision with either eye could be elicited.

Operation for Umbilical Hernia.—Dr. Dejean, a provincial practitioner, communicates an interesting case to the *Bulletin de Thérapeutique*, in which he performed an operation for an umbilical hernia, as large as a fist, which occurred in the person of a woman twenty-two years of age. Signs of strangulation had manifested themselves during five days, when the operation was performed, under Listerian precautions "as far as possible." The hernia, as usual in such cases, was found to consist of omentum and intestine, the former placed in front. The reduction of the intestine was accomplished, as recommended by Richer, by dilatation of the ring instead of by its incision, and the portion of the omentum which obstructed the reduction was removed. The wound healed readily; and on the twelfth day the patient was able to leave her bed.

‖ (a) A curious illustration of this want of correlation between the trunk and the limbs was exhibited in another case, presumably of cerebellar disease. I had the man in the hospital at an early period of his illness, and had carelessly believed in the existence of locomotor ataxy. Visiting him eight years afterwards, when infirmity in walking had greatly advanced, I at once discovered that the man had perfect and orderly control over his lower limbs: when his hands rested on a table, around it he walked with tolerable facility. Having removed his trousers and stockings for the purpose of testing the condition of cutaneous sensibility, I desired him to replace them, which he did, by first bending towards the wall, against which he placed his head firmly; his trunk thus being steadied, he raised his leg and put on his stockings without any difficulty. Of course my diagnosis was at once changed.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

EAST LONDON HOSPITAL FOR CHILDREN.

CASE OF OBSCURE BRAIN DISEASE IN AN INFANT—DEATH—ARTIFICIAL RESPIRATION FOR FOUR HOURS.

(Under the care of Dr. DONKIN.)

[Reported by Mr. J. Scott Battams, Resident Medical Officer.]

Mabel D., aged ten months, was admitted June 16, 1882, under the care of Dr. Donkin, but died before he saw her.

Family history good. A fine healthy child at birth. Has been brought up on cow's milk. Soon after birth had "the thrush" in the mouth, and an eruption on the buttocks, lasting two weeks. Never snuffled. Child always seemed in good health till April 25, 1882, when, after being "out of sorts" all day, she was taken in a fit during the night. The fit lasted five hours, the left side of the face being drawn up. She has never been well since then.

She keeps her head drawn back, and often vomits—chiefly after food. During the day she has frequent convulsive attacks of short duration, the left side of the face, the left arm, and especially the left leg, being convulsed or drawn up. During the intervals the left leg is contracted more than the right. (While taking these notes, the child vomited several times and had two very slight convulsive attacks.) Mother also states that after the first fit the left side of face was swollen, and the left hand trembled when she used it. She has noticed the left eyeball getting smaller the last three weeks or so; at first the eye was "bloodshot." The pupil of the left eye "looks like glass, or as if it had no back to it, not dark like the other pupil." Has had no convulsive attacks for a week till to-day. She has intervals when she seems much better. When the vomiting ceases she does not get convulsions. She is always worse at night and more restless. Bowels regular; stools constipated; urine thick, smells badly; no cough; no teeth. Often tries to put the hand to back of head, and used to be constantly rubbing left eye. Is said to sigh at times. Never flushes. No history of injury. Is said to be sensible and to follow objects with her eyes.

17th.—Note by Mr. Battams: "Child has red hair and pale face; is badly nourished. Cries very often as if in pain, especially if touched or moved. Is now lying on right side with head retracted; muscles of nucha rather rigid; arms and legs flexed; fingers flexed on palm, thumbs not drawn in; temperature last night 100°, this morning 99°. When in repose all the limbs seem more or less rigid, and when touched she cries and stiffens them the more, especially on the left side; sole reflex well marked on both sides; child sucks and swallows well; no apparent facial paralysis,—she moves the muscles on both sides equally. (In the out-patient room Dr. Crocker found very slight facial paralysis on the right side.) Vomited three times last night, and cried a good deal; no teeth, but gums full for lower incisors. Right pupil medium size; acts to light. Left eyeball much smaller than right; the pupil also is smaller, a little irregular, and does not act to light. The lens seems opaque, and the iris apparently adherent to it. Abdomen not retracted; skin rather inelastic. Liver and spleen not felt; no strabismus; does not sigh; pulse 100, regular; respiration regular; heart and lungs normal." Child continued in this state all day. At 10.30 p.m. she was quiet, looking pale and apparently asleep. At 1 a.m. the nurse reported that she heard the child making a noise in its throat, and on going to see it she found it dead. On examining the child a few minutes after, it was apparently quite dead. The face had the ash-white hue of death. The eyelids were half closed, the left more than the right. The eyes had lost their lustre. Right pupil dilated; conjunctiva insensible. The jaw had dropped. The limbs fell dead when lifted. There was not the slightest sign of cardiac action; no sound could be heard, and no pulsation seen or felt over præcordia. No pulse to be felt. Respiration seemed entirely abolished; there was not

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the least trace of movement. Artificial respiration was now performed. In ten minutes a slight pulsation was felt over præcordia; this gradually became stronger, and a pulse was felt at the wrist. Brandy was given by enema and by nasal tube, and a hot mustard-bath given; but the heart gradually ceased beating. The child was removed to the bed, and artificial respiration kept up. Again cardiac pulsation came slowly back, till it could be plainly seen and felt; the sound seemed fairly strong and regular. A slight colour came in the cheeks. When artificial respiration was suspended the heart kept on beating for a few minutes, but its beats became gradually feebler and slower; the pulse failed, and the slight colour faded. When the heart-beats fell to ten or fifteen a minute, the artificial respiration was again resorted to, and with a similar result. A strong faradic current was now used, a pole being placed in each supra-clavicular fossa. This caused a raising of the arms and upper part of chest, and descent of diaphragm, and air whistled through larynx. The heart-beats and radial pulse came back as before, remained fairly strong for ten or fifteen minutes, then gradually died out. This process was continued for three hours longer, when the night nurse, who had charge of the battery for half an hour, found the chest-movements could no longer be produced. The child was quite cold; the heart had ceased beating. The fingers of both hands were flexed, and, when extended, gradually reflexed themselves. It was impossible to fully extend either the left elbow or knee-joints. No blood flowed on pricking. The faradic current caused slight transitory flushing of the skin where it was applied.

Remarks (by Mr. Battams).—It is unfortunate that no post-mortem examination could be obtained in this case. I have reported the bare facts, in the hope that the case may have some value when associated with others of a similar nature. I refrain from guessing the precise nature and situation of the disease, but it was evidently close to the respiratory centre. I am not aware of a case in which artificial respiration was kept up for four hours in the manner I have described. It was only by chance that I did it, for I had no doubt that the child was quite dead, and though the heart was set going time after time after it had ceased to beat during these four hours, yet it brought no sign of life to the child excepting the faintest tinge of colour in the cheeks. There was never at any time the slightest indication of respiratory movement, though we watched carefully for it—not even when the heart was beating sixty or seventy in the minute. I suppose it was one's clear duty not to desist from these hopeless measures while there remained the faintest action of the heart.

THE SANITARY ASSURANCE ASSOCIATION.—The second annual meeting of the Sanitary Assurance Association was held on Thursday, February 22, Professor Hayter Lewis presiding, in the absence of Sir Joseph Fayrer. The Executive Council in their annual report said that the inspection of houses, supervision of work, and issue of certificates had been continued on the plan initiated by the Association in 1881. The property placed in the assurance register and inspected during the year had varied in annual rateable value from £10 to £1000, and in every case the sanitary arrangements had been found to be defective. The report contained the following remarks:—"The financial statement shows that considerable progress has been made since the issue of the first report. The increase during 1882 has been nearly double that of 1881. The Council have cleared off the suspense account outstanding at the end of 1881, and the Association commences its third year of action with a balance on the right side. The increase of success thus achieved in two years by an undertaking which is as yet imperfectly understood by the general public seems to indicate that the Association has already met a public want, and that its operations will be extended as it becomes more widely known. In July, in order to meet the convenience of members and subscribers wishing to avail themselves of the services of the Association when about taking a new house, an alteration was made in the scale of fees by separating the charge for report and specification from supervision of work and certificate, so that the charges for the latter are not incurred in cases where for any reason the work recommended is not carried out." The report was adopted unanimously.

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THE MEDICAL TIMES AND GAZETTE *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, MARCH 3, 1883.

SPECIAL CERTIFICATES IN STATE MEDICINE, AND IN PSYCHOLOGICAL MEDICINE.

THE question of the advisability of instituting examinations, and granting special certificates of proficiency, in the subjects of State Medicine and Psychological Medicine, is under consideration by the Fellows of the Royal College of Physicians of London. A committee appointed last year to consider the Report of the Visitors from the General Medical Council had suggested whether the College might not, with advantage to the public, institute separate and voluntary examinations on the above-named subjects, to be followed by a special certificate or diploma; and the Council of the College, after careful deliberation, agreed that a scheme for conducting such examinations "would confer a great benefit on the public, and supply a much-needed want in the profession." They therefore have recommended the College to institute a special examination on the subject of Hygiene or State Medicine, and one on the subject of Psychological Medicine; such examinations to be conducted by special examiners, and either of them to qualify, if passed, for a distinct diploma or certificate of proficiency; and it is proposed that all registered practitioners shall be admissible as candidates. The report of the Council came before the College at its last meeting, but time did not admit of its being fully considered, and the discussion on it was adjourned to the next meeting. The subject does undoubtedly call for very careful consideration, for, as a rule, all proposals for separate examinations on special subjects, and distinct certificates or diplomas of proficiency in separate subjects, are to be strongly discouraged. But the recommendations of the Council, which in a large measure consists of men engaged in teaching and well acquainted with the needs of the profession, are very decided, and ought to have great weight, and, so far at least as regards one of the subjects dealt with, we are entirely in accord with them. The advisability of instituting a special examination in hygiene decidedly forms, we think, an

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exception to the general rule of which we have spoken. The Sanitary Medical Service of England and Wales is a very large and ever increasingly important public service; and the instruction of the public in the value and importance of preventive medicine, and the acceptability, popularity, and efficiency of hygienic measures, must depend very largely on the practical skill and proficiency of the medical officers of health. But, in order to discharge efficiently their special duties, these officers must possess a sound and practical knowledge of subjects which they have neither time nor opportunity to study during the period of the ordinary medical curriculum. They ought to be well versed in the chemical and microscopical examination of air, water, and food; to have a general knowledge of soils, *i.e.*, they should possess a good knowledge of geology; also of meteorology; of the construction of dwellings; and of sanitary engineering, as far as regards water-supply, sewerage, and ventilation: they should thoroughly understand vital statistics; they must be well acquainted with sanitary law, and with the powers given under the Sanitary Acts; they must be able to read plans, sections, and scales, and have a practical working knowledge of sanitary apparatus. The list of the acquirements needed by them might be enlarged, or at least be mentioned in greater detail; but it is amply evident that, in order to understand well these technical subjects, a man must devote a large amount of time to the special study of hygiene; and if he does this he deserves to be able to obtain a certificate that he possesses the special knowledge. Then, as regards the public service, how are sanitary authorities to distinguish between candidates applying for the appointment of medical officer of health unless some of them can show proof of possessing the technical knowledge required, while others cannot? Lastly—and this is an important point—a candidate for the proposed distinct certificate can be fully and thoroughly examined; there need be no difficulty in testing in the most thorough manner his practical, as well as his book knowledge of hygiene. We hold, therefore, that the College of Physicians will confer a great benefit on the public, and supply a much-needed want in the profession, if they resolve to offer to those affiliated to the College a special examination, and a distinct certificate of proficiency in State Medicine, instead of leaving them to go to the University of Cambridge, or anywhere else, for it; and that they will do still better if they open their examination to all registered practitioners.

Whether it would be wise and expedient to deal with Psychological Medicine in the same way, is not, we think, by any means so clear; and, with all due deference to the judgment of the Council, we feel that their recommendation as regards that subject is very open to objection. We fail to find any valid reason for making in favour of a distinct examination in Psychological Medicine the exception that we willingly admit in respect of State Medicine; and it appears to us that the contention in favour of such an examination in the former subject is especially weak in all the points that tell so strongly in favour of the latter. There is no public service of Psychological Medicine requiring to be provided for; the subject demands no special technical knowledge, beyond that of the Lunacy Acts; it is a specialty, like ophthalmology, otology, and orthopædic surgery; the practitioners requiring any special acquaintance with it will be comparatively few in number, compared with the profession at large; and we do not clearly see how it will be possible to test well and thoroughly the practical knowledge of candidates for a distinct certificate of proficiency on the subject. Persons of unsound mind are especially suspicious of, and disturbed by, anything like a medical examination; and moreover, we do not see what right anyone can have to submit such patients, of any class, to an examination that would certainly not in any way be for their benefit or advantage, while the institution of such examinations would very probably rouse a public outcry against the profession. Medical men seeking appointments in lunatic asylums would no doubt be glad to support their application by a certificate of special proficiency in Psychological Medicine from such a body as the College of Physicians, but we suspect that the superintendents of those places would give very much more weight to ordinary certificates of practical acquaintance with the management and treatment of lunatics, and of work actually done in asylums.

THE SAILOR'S "DAILY BREAD."

The "instructions" lately issued by the Board of Trade on the subject of the "dietary scale" allowed to merchant sailors do not seem altogether satisfactory. The Board acknowledge to serious defects, and then content themselves by suggesting, with diffidence and hesitation, the necessary remedies. The very first paragraph of the "Report" on which they base their "instructions" would seem to show the necessity of immediate and energetic action, for it says that "scurvy has been on the increase in British ships since 1873"; and the second paragraph recognises the fact that lime-juice of itself will not prevent the disease, and that too much reliance is placed on its use, "to the neglect of varied food scales." But having pointed out the fallacy of relying upon lime-juice to remedy the evils which result from the consumption of the Board's own scale of diet, and having further stated that they know of more than one remedy, they hesitate to insist upon *any* remedy being tried aboard British vessels. They candidly acknowledge that "more fresh vegetables should be carried, and notably raw potatoes," and point out that these articles keep well in foreign ships, and that sailors benefit by the variety of diet; but the Board say, "it is not at present desirable" to insist upon British shipowners reforming their ways, although they insinuate that it may be necessary to take strong measures "hereafter," unless the shipowners themselves move in the matter. "Hereafter" is a vague and uncertain future! For ten years scurvy has been on the increase among British sailors, due in part to improper food; but the unfortunate men are still to go on with their present scale of diet, and console themselves with a visionary "hereafter"! Perhaps the Board, however, are only waiting for the shipowners to reform a few long-existing defects in regard to the present scale of diet, before they insist upon such an innovation as potatoes. There is no doubt that there are many causes which predispose men to scurvy; and the quality of the food now supplied, irrespective of its want of variety, may be in great measure to blame for outbreaks of the disease. The Board may think it desirable that shipowners should study the present bill of fare which they offer to their seamen, and see whether they could, for instance, *improve the meat*, before they add the vegetables. Let us look at what is facetiously called the sailor's "whack." We will take Monday's allowance on board the *Jolly Briton*, which carries no passengers. "Jack Bowling" gets one-third of a pint pease, one and a quarter pound pork, and one pound bread, which is represented by four and a half biscuits. He has tea and coffee, and his proportion of the weekly issue of sugar to sweeten them; and he gets three quarts of water, which must serve all purposes. The scale varies a little on different days. Salt beef replaces salt pork, and twice a week flour is issued. On Saturday there is rice, and "bouilli" on the Sunday. This sounds well enough as to quantity, and shipowners may hold up their hands in astonishment at any marine "Oliver Twist" asking for more. But the fact is, Jack does not ask for more; in many cases he requires

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less, but he wants quality as well as quantity. Now and again a man comes aft to complain of his provisions, and the skipper turns upon his heel and tells the man that he has nothing to complain of, for "he has got his whack"! Nothing to complain of! The truth is that bad food is often the rule, and the half-starved sailor has no remedy. For this state of things the owners are not altogether to blame. "The remainder biscuit, after a voyage," is proverbially dry; and it must be acknowledged that, if the devil provides cooks, he certainly keeps his worst specimens for the galley of merchant ships. But sailors are not quite unreasonable. Jack, when he comes aft to show his dough, which he has ingeniously carved into a ship's figure-head, will be told to go forward, for he has got his "whack"; and he will probably recognise the propriety of seeking redress from the cook in a stand-up fight; but with regard to some of the provisions issued the case is totally different. It is no secret that the beef and pork served out are often of more than doubtful quality, and it is certain that some one concerned in supplying these articles must be aware of the fact. To the eye the cask looks all right. People would say: Until it is opened how can anyone tell how the meat will turn out? But when the cask is opened, and sailors find *three or four bungs inside the cask*, they know that the cask has leaked and been refilled as many times, and that the state of the meat could have been no mystery to the person who performed the operation. And yet, if the pork is "green all through," and so stinking that the men cannot eat it, they have no redress—"they have got their whack"! Who can wonder that men who think themselves to have been unjustly treated in the matter of their daily food should grow mutinous, discontented, and sickly? It is no misfortune they have met with, it is an *injustice* which they have got to bear. Jack complains that "nobody" made it his business to see that his meat was good, and feels that it is to "somebody's" interest that every cask of bad meat shall be emptied before another is broached. How differently are soldiers treated in a troopship! It needs only a suspicion that the meat is bad, and a "board" is held until the doubt is solved, and if the meat be condemned a fresh issue is made; but Jack must take his rotten food, and be contented that he has got full weight! Nothing short of a mutiny can get him good meat until all the bad is disposed of. We can understand that there are difficulties in varying the sailor's dietary scale, quite apart from any disinclination on the side of the shipowners. Jack is suspicious, and likes to follow the old ways; but we find that in American ships sailors have their choice to take their "scale," or to leave everything in the way of diet to the skipper, and that, as a rule, they elect to trust the officer. English captains could be trusted quite as well as any others, but it is necessary that shipowners should leave them the power of rejecting all bad meat. That day may come, and then the sailor can hope for the "hereafter," when potatoes may form a valued addition to his daily bread.

GOODACRE *v.* WATSON: A BUILDER'S NUISANCE.

THE LORD CHIEF JUSTICE, in some remarks made by him at the close of a case tried on the 22nd ult., said, "he wished people in his position would remember that they had to try cases, and not to instruct mankind generally, which could be so much better done by people in other positions." The remark is no doubt a very wise one, as it was made by Lord Coleridge—and, be it observed, he said that he "applied it also to himself,"—but we venture to think that the extra-judicial observations made on the same day by Mr. Justice Fry, in delivering judgment in the case of Goodacre *v.* Watson, show that a judge may very usefully exceed the strict limits of his duty in order to instruct and warn parish vestries, speculative builders, contractors, sanitary inspectors, and like officials. The action in question was brought, in the Chancery Division of the High Court of Justice, for an injunction to restrain the defendant from continuing to commit a nuisance of a by no means uncommon character; and is worthy of special notice, not only because the application was successful, but on account of the remarks made by the judge on the dangerous and injurious character of the nuisance complained of.

The action was brought by some gentlemen living near Fulham-road to restrain the defendant, who occupied a piece of land known as Dancer's Land on the Fulham-road, from using it so as to create a nuisance. Very strong evidence was given of the nuisance complained of. Mr. Justice Fry said it appeared that two persons, holding a building lease of a plot of land in the neighbourhood of numerous houses, entered into a contract with the defendant to allow him to remove the clay and gravel, and to substitute slops from the roads and the contents of the dustbins of the parish. The Fulham Local Board had thought it consistent with their duty to allow this stuff to be shot on to the land. The scrapings of the roads, called "slops," and the contents of the ashpits of the parish of Fulham, and to some extent of Kensington, were brought to the land and there sifted. The "soft core," consisting in large part of vegetable and animal refuse, was allowed to remain on the surface of the land for a considerable time. Then it was removed and placed under four or five feet of earth with a view of being made the foundation of houses for human habitation. Whether the refuse was directly under the houses or under the roads, to his mind was of little significance. The clay dug out was converted into bricks, and the "breeze" from the dustbin refuse was used in making the bricks. The question was, had the mode of using the matters brought on to the land created a nuisance. The plaintiffs' residences were some way off, but the nuisance was so great that it was very perceptible at those houses. His lordship thought the case was one to which the public attention ought to be called. It showed a course of conduct calculated to bring death and disease into the neighbourhood. It was obvious that the defendant was doing that which must result in serious detriment to the health of the public. It was nothing short of horrible to think that persons should seek to place foul vegetable and animal matters as foundations for buildings, and then come into court to defend such conduct. Many a man, his lordship finally observed, had been found guilty of manslaughter for offences less morally culpable than that of the defendant. An injunction was granted, with costs; and the defendant submitted to have the motion treated as the trial, and to have the injunction at once made perpetual. The censures of Mr. Justice Fry are very severe, but not one whit too severe. The practices that excited his observations seem to have been new to him, but in fact they have been and are going on all round London. They have been constantly complained of by medical officers of health; and they are denounced and prohibited in the series of Model By-laws issued by the Local Government Board for the instruction and guidance of sanitary authorities. In the "By-laws with respect to New Streets and Buildings" is one which runs thus:—"A person who shall erect a new building shall not construct any foundation of such building upon any site which shall have been filled up with any material impregnated with fæcal matter, or impregnated with any animal or vegetable matter, or upon which any such matter may have been deposited, unless and until such matter shall have been properly removed, by excavation or otherwise, from such site." But

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though such regulations are constantly being disregarded, the offenders are, comparatively, very rarely proceeded against. Boards and vestries are tender-hearted and very slow to move in such cases, and private individuals are, naturally, unwilling to incur the worry, trouble, and expense, and the risk of failure, of bringing an action. And it is to be observed that, even in the case we are noticing, the action was successful, not because of the pestilential construction of the foundations for houses and roadways, but because the disgusting smell caused by the defendant's proceedings reached the houses of the plaintiffs. It is unquestionable that, practically, the public are powerless at present against contractors and builders who find it convenient or econonomical, or both, to employ these horrible gatherings of the contents of dustbins and of scrapings from the public roads in forming foundations of new streets and houses; and Mr. Justice Fry's strongly expressed denunciation of such nefarious practices may, it is to be hoped, help to bring about a better state of things. At any rate, he has done good service in endeavouring to excite the attention of the public to the matter.

THE WEEK.

TOPICS OF THE DAY.

At the recent examination held at the London University, Burlington House, for Service appointments, we believe about sixty candidates presented themselves to compete for fifteen vacancies in the Army Medical Department, about twenty-five for five vacancies in the Indian Medical Service, and about twenty-five for twelve vacancies in the Naval Medical Service. The number of candidates thus presenting themselves should be satisfactory both to the Government and the profession: the former may claim that the conditions of service have now been revised to such an extent that the Services are once more popular with young members of the profession; and the latter may congratulate themselves upon the fact that their united action has brought about such an improved state of affairs. *À propos* of these appointments, Mr. Gibson recently asked the Secretary of State for War, among other questions, whether the candidates for the Medical Departments of the Army, Navy, and India had to give their names and qualifications to the Board of Examiners, instead of being known to these gentlemen by numbers only, as in almost all other public examinations; and whether he would take care that each candidate should only be known to the examiners by numbers. The Marquis of Hartington replied that no complaints as to unfairness in any examination had reached the War Office; but the Government were perfectly willing to consider how far it would be advisable to substitute the system of adopting numbers for the candidates instead of names. It is somewhat singular that up to the present time this system has always been in force in examining candidates for the Government Medical Service, but we must (whilst admitting that the plan of numbering each candidate, as in other competitions, would be preferable) emphatically protest against any reflections being cast upon the fairness of the gentlemen to whom the duty of conducting these examinations has been entrusted. The whole question put by Mr. Gibson (which is given in full in our Parliamentary report), must be regarded as another significant sign of "the dissatisfaction and discontent" existing in Ireland with everything not managed entirely by the Irish; the unsuccessful English and Scotch candidates are willing to admit that, however much they may have deserved success, they have simply failed to secure it.

The Master of the Marylebone Workhouse recently reported to the Board of Guardians that during the past twelve months fifteen dead bodies had been brought to the workhouse by the police. When the first body was brought he referred the police to the keeper of the parish mortuary, who refused to receive it because it had not been placed in a shell. At the inquest the coroner remarked upon the indecency of a dead body being carried about in such a manner. Upon this Mr. Douglas sent some shells to the mortuary for use in similar cases, but the keeper declined to receive them, so that dead bodies continue to be brought to the workhouse mortuary, which, the Local Government Board officials say, is not intended for the reception of the bodies of persons who have died out of the workhouse. The parish deadhouse, which is under the care of a tradesman appointed by the Vestry, is situated in the old burying-ground of the parish, in Paddington-street; and, as it possesses no accommodation for making post-mortem examinations, when these are ordered the body has to be taken from the mortuary to the parish stone-yard, a distance of over a mile, and, after the examination, returned to the mortuary. Repeated efforts have been made, both by the Press and by some members of the Marylebone Vestry, to induce the great parish of St. Marylebone to build a suitable coroner's court, with a mortuary adjoining, but up to the present time parochial stubbornness has been too strong for common-sense and decency.

It is reported from Cairo that the hospital returns for the week ended the 16th ult. show that 977 officers and men were at that date in hospital, out of a total force of 11,199. The Cairo hospital returns contain records of 411 entries of new patients, and of four deaths in the first eighteen days of February. Everything has lately tended to show a marked improvement in the health of the army of occupation, but those acquainted with the climate of Egypt say that this improved state of affairs cannot be expected to continue, since in about a month's time the Khamsin winds will begin to blow, and Cairo will be again unhealthy until October. It is also suggested that the headquarters of the reduced force to be retained in Egypt should be transferred to Alexandria, which, on the whole, is considered to be a much healthier locality than Cairo; and there are not wanting those who assert that, both from a sanitary and political point of view, it would be extremely advantageous to quarter detachments temporarily in the country districts of Egypt, instead of confining the occupation to the two principal towns. A later report, dated February 27, states that the improvement in the health of the troops continues. Taking the whole force, an average of 7 per cent. were sick—a proportion only exceeded in the cavalry, of whom 8·5 per cent. were under medical care.

The sixty-second annual meeting of the Court of Governors of the Seamen's Hospital Society, which was established in 1821, incorporated in 1855, and is situate at Greenwich, was recently held, under the presidency of the Right Hon. G. J. Goschen, M.P. The annual report showed that the number of patients treated in the Hospital last year was 2386, as compared with 2171 during the preceding year; and that the number of out-patients relieved was 5118, as against 4961 in 1881. The Chairman remarked that while he heartily congratulated the Society upon the work they had accomplished, he had to say that he could not equally congratulate them on the state of their finances. An impression unfortunately prevailed among some people that the Hospital was supported by the Government, whereas the use of the present building was all that was given by the Government. Ever since the work of the institution had been removed to the shore from the floating vessel, the *Dreadnought*, there had been greater difficulty in collecting funds. He would remind them that the charity appealed to the sympathy of the public not only

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of this kingdom, but to the people in our colonies, and in all foreign countries—no mariner, of whatever nationality, being refused admittance; and he was at a loss to imagine what would become of many of these strange seamen in illness, were it not for the succour afforded by this excellent institution. On the motion of Viscount Lewisham, M.P., seconded by Mr. Charles Wilson, M.P., the report was unanimously adopted.

In answer to the summons obtained at the instance of the Anti-Vaccination Society against Mr. Dunlop, the medical officer of the St. Pancras Workhouse, that gentleman has appeared twice at the Clerkenwell Police-court, before Mr. Hosack, to answer the charge of "killing and slaying" an infant born in the workhouse, and vaccinated by him in the course of his professional duties. Upon the first occasion, Mr. Besley, on behalf of Mr. Dunlop, requested the magistrate to give his opinion as to whether there was any evidence to support the charge. In reply, Mr. Hosack said he was told there was medical evidence to be taken which might be vital, and he adjourned the inquiry for a week. On the second occasion Dr. Chalmers, of Caledonian-road, was called to give evidence upon the post-mortem examination of the infant conducted by him; and at the conclusion of this examination the case was adjourned until the 28th ult., when the summons was dismissed.

The annual court of the Governors of the Sussex County Hospital was recently held at Brighton, under the presidency of Mr. H. Hebbert. The report and balance-sheet—both of a satisfactory character—having been adopted, a discussion took place on the provision made by the Committee for supplying sleeping accommodation for medical pupils in the neighbourhood of the institution, in order to place them under better supervision. The course pursued by the Committee was endorsed; and after the officers had been elected, a long conversation took place on the subject of a proposed home for convalescents, and the suggestion for providing such an institution was heartily adopted.

The National Association for the Promotion of Social Science are holding a conference, the 1st and 2nd inst., on the Bringing-up and Education of Pauper Children; Mr. Rowland Hamilton, the Hon. Secretary of the Education Department of the Association, contributes a paper describing the various systems at present in vogue for the bringing-up and education of pauper children. This will be followed by a discussion, in which Mr. Hastings, M.P., Mr. Wainwright, Captain Bourchier, and several other gentlemen will take part.

THE LONDON HOSPITAL.—PROPOSED RESIDENT COLLEGE FOR STUDENTS.

A MEETING of the House Committee and Medical Council was held on Tuesday, the 20th ult., in the Committee Room of the London Hospital, for the purpose of discussing the question of providing a resident college for the students connected with the Hospital. Mr. J. H. Buxton presided, and explained that the notion had long been in the minds of many interested in the Hospital. Dr. Andrew Clark (Senior Physician) then moved the following resolution:—"That, in the interests of the London Hospital and Medical College, it is expedient that a suitable resident college for students be provided." After referring to the intimate connexion between medical and surgical practice and medical and surgical education, and also to the value of the stimulus received by professors and teachers from contact with the younger minds of students, Dr. Clark spoke of the difficulty of managing the increasing number of students, owing to the character of the neighbourhood of the Hospital, and consequent difficulty in finding suitable lodgings for them, and said the time had come for some effort to provide these students with a place of residence which should give them that unity and solidarity that was desirable for their success. It would also provide for the Hospital a certain number of young men always at hand, who could be enlisted in the various services required in the Hospital, which are now, as regards surgical subjects, somewhat inadequately done. A resolution to the effect—"That a committee be appointed to inquire into the best method of carrying out the above resolution, and to report to a subsequent meeting at an early date," was then carried unanimously, and the said committee was nominated. It was understood that the carrying out of the scheme was in no way to interfere with the funds of the Hospital, as the money would be obtained either by the formation of a company or by some other suitable means.

AN AMERICAN PHYSICIAN ON THE MEDICAL PROFESSION IN AMERICA.

DR. O. W. WIGHT, a distinguished member of the medical and legal professions, and a leading medical jurist in New York, in a paper on "Expert Testimony," says: "In this country we have no legitimate medical profession. Learned, able, and conscientious physicians and surgeons we have, but they are a melancholy minority in the great froth ocean of practitioners. In the United States there are nearly a hundred medical colleges, a majority of which are only chartered doctor-factories. To them flock every year green young men, many of whom could not write a sentence of correct English if the salvation of their souls depended on the effort, who obtain certificates of study from easy-going practitioners, listen to miscellaneous lectures for twice fourteen weeks, and are graduated as doctors. The schools compete with one another for students by the ease with which they induct them into a learned profession. And this is not the worst of it. In most States an enterprising fellow who fails as a minister, a lecturer on phrenology, schoolmaster, or tin pedlar, is allowed [without any diploma] to put out his 'shingle' as a doctor, and he is pretty sure to get fools to employ him, for he has cheek, brass, push, pretension, and the audacity of ignorance. From such a heterogeneous crowd . . . . parties in litigation find experts to testify to anything they desire."

PROFESSOR SCHROEDER ON MYOMOTOMY.

A RECENT number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains an article by Professor Schroeder, of Berlin, on the extirpation of uterine fibroids, or myomotomy, as he prefers to term it. Although hitherto in this operation better results have, as a rule, followed the extra-peritoneal than the intra-peritoneal treatment of the pedicle, Dr. Schroeder thinks that, as in ovariotomy, the extra-peritoneal method will have to give way to the intra-peritoneal, and that the operation will not have been perfected until a satisfactory method has been devised of securing the pedicle in such a manner that it may with safety be left in the abdomen. The plan which Professor Schroeder has followed is briefly this:—First he ligatures, and then divides, the broad ligaments; then he cuts through the uterus, first peritoneum, then muscular tissue, in such a manner as to leave a strip of peritoneum like a frill around the muscular surface of the stump. Then the surfaces of the stump are brought together; first the mucous membrane is united by sutures which are cut short, then the surfaces of muscular tissue are firmly secured in contact by sutures not involving the peritoneum; and finally the projecting ring of peritoneum, which has been left for the purpose, is brought together over the stump. An elastic ligature is put round

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the cervix before cutting away the uterus, and removed when the suturing of the stump is complete. If the tumour is so situate that it can be removed without opening the uterine cavity, of course the proceeding is simpler. Professor Schroeder has operated sixteen times for uterine myoma, with thirteen recoveries. Of the three deaths, one took place from hæmorrhage from the pelvic cellular tissue, one from sepsis, and the other was a case of Martin's operation. A notice of another case of this latter operation will be found in our number for January 13.

THE MEDICAL AND DENTAL REGISTERS.

We have received the Medical and Dental Registers for 1883. These useful and official volumes have been published much earlier this year, thanks to the energy and industry of the Registrar, than has been the case heretofore; and in them will be found several improvements on former editions. Each work has, as usual, been subjected to very careful revision—a matter of no slight labour—in order to secure, as far as possible, accuracy of entries, and the Registrar's editorial experience and skill have enabled him to obtain improvements as well in the arrangement and appearance of the contents. The several Medical Acts up to the present date, and the Dentists Act, are given in the Medical Register; and a table is given showing the exact number of persons registered. From the latter we learn that the present edition of the work contains the names of 23,801 persons; of whom 16,262 registered in the local Register for England, 3861 in that for Scotland, and 3678 in that for Ireland. During the year 1882 the names of 311 persons were removed from the Medical Register, and the names of 199 were restored to it under Section 14 of the Medical Act—processes which caused some expense, and a large amount of trouble and vexation of spirit, all of which would have been avoided had the persons concerned had the good sense to keep the Registrar informed of their respective addresses. The Dentists' Register contains, in the introductory matter, similar data with respect to dentists. There are 5257 registered dentists, of whom 5252 are "United Kingdom dentists," and 5 only are "foreign dentists." The latter are all American, 4 being Doctors of Dental Medicine of the University of Harvard, and 1 a Doctor of Dental Surgery of the University of Michigan. Of the United Kingdom dentists, 759 are Licentiates in Dental Surgery, and 4493 are persons registered, on their own declaration, as having been in *bonâ fide* practice of dentistry before the passing of the Dentists Act. It is to be added, however, that 21 of the 4493 are now registered with "additional surgical qualifications."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

On Tuesday evening last there was an important discussion on the Etiology and Prophylaxis of Scurvy. It arose from the reading of an interesting paper by Mr. Neale, M.B., B.S., the medical officer of the late *Eira* Arctic Expedition. Among those present we remarked Sir Wm. Smart, K.C.B.; Inspector-General Donnet; Inspector-General Colan, who accompanied Sir George Nares; Dr. Rae, the well-known arctic voyager; Dr. de Chaumont, of Netley; and many other members of the profession who are specially interested in scurvy. The following are some of the chief points insisted on by Dr. Neale. We shall reserve the discussion for future publication. The object of the paper was to discuss the etiology of scurvy, and to consider whether the experience of the late *Eira* Arctic Expedition could throw any light on the question as to how scurvy may best be prevented during an arctic winter. The recognised predisposing causes of scurvy were bad hygienic conditions, long confinement, want of exercise, monotony, anxiety, exposure to cold and fatigue, to which might be added, in the opinion of the author, the use of an inferior quality of meat, whether preserved or not. The exciting causes were the insufficient supply of fresh or of good preserved vegetables, and, in default of vegetables, the want of lime-juice. Anæmia was one of the first symptoms of scurvy, and it was not difficult to account for its production if it were remembered that the life of a body of men shut up in a ship for at least six months must lead to a deterioration of the quality of the blood. Though every attempt was made, during the last Government expedition, to provide for good ventilation, the general opinion was that the results were not satisfactory. With regard to the action of an inefficient quantity of vegetable food, statistics were very contradictory. The author proceeded to compare the dietary of the two most recent English expeditions to the arctic regions. In the expedition under Sir George Nares the hygienic conditions, though not entirely satisfactory, were so good that the outbreak of scurvy could not be attributed to any defect in them, and compared favourably with those under which the crew of the *Eira* passed their winter. With regard to diet and ventilation, however, there were distinct differences in the two cases. From a consideration of the dietary, it was evident that the absence of scurvy in the *Eira* expedition could not be ascribed to the employment of a larger total weight of food, and in particular not to the use of a larger quantity of vegetable food, nor to lime-juice, which was not used for a whole year. No case of scurvy occurred among the crew of the *Eira*. But the diet of the two expeditions differed widely in the kind of meat used. In the Government expedition the crew lived almost entirely on preserved meats; while the crew of the *Eira* lived exclusively on *fresh* meat from animals killed on the spot. All flesh obtained in the arctic regions can be kept in a state, though frozen, chemically like that in which it was when the animal was killed, and must therefore supply to the body those ingredients which are known to be diminished in scurvy, far more readily and abundantly than the best *preserved* meats can do. The importance of using the blood as well as the flesh was much insisted on. Blood obtained from the jugular vein immediately after death, becomes frozen solid before any acid fermentation has taken place, and in it exist all the components of healthy blood, some of which are deficient in scurvy. The author made the following suggestions with regard to the conduct of future arctic expeditions:—1. That the crews should spend the winter in huts rather than on board ship. 2. That the albuminoid food should be abundant, and consist as much as possible of the flesh of recently killed animals. 3. That the meat should be cooked in the form of stews or hashes, to which the blood of the animals should be added. 4. That preserved vegetables should be mixed with every meal, to aid the digestion of the meat rather than because they possess in themselves any special, exclusive, antiscorbutic properties. 5. That lime-juice may be dispensed with, if fresh meat can be obtained.

HOW SCARLET FEVER IS SPREAD IN NOTTINGHAM.

The Nottingham Board of Guardians recently instituted proceedings against a man named John Bentley, for having on December 16 last made a false declaration to Joseph Hardy with respect to a house of which he was tenant, and which he guaranteed to be free from infectious disease. The Town Clerk, who appeared to prosecute, said the charge had been brought under the Public Health Act of 1875, and was a most serious one. There was the less excuse, inasmuch as the Health Committee undertook the disinfecting of houses where there had been cases of infectious disease. The defendant wished to leave the house, and he transferred the tenancy to Hardy, stating positively, in answer

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to questions, that the premises were perfectly healthy. Hardy then moved in, but had not been there many days before his son was attacked with scarlet fever. It was afterwards found that the defendant's daughter had suffered from the same disease a few days before his leaving the house, and the medical evidence supported the allegation that Hardy's son had contracted the fever through entering the house before proper disinfection had been carried out. Dr. Seaton, Medical Officer of Health, also proved that he had arranged for the disinfection of the premises as soon as the termination of the illness was reported, but no such report was ever received. The defendant, who endeavoured to shift the responsibility to his medical attendant, was ordered to pay a fine of £4 and costs; and the magistrate, in giving his decision, commented upon the serious nature of the offence.

DEATH OF BARON JULES CLOQUET.

Baron Jules Cloquet, member of the Académie des Sciences, the last surviving of the original members of the Académie de Médecine, Commander of the Legion of Honour, and Honorary Professor of the Faculty of Medicine, died on February 23, in his ninety-second year. In the earlier portion of his career he published a large number of writings on anatomy, surgery, physiology, surgical and pathological anatomy, etc.; but was at that time best known for his celebrated "Anatomie de l'Homme," the great text-book of descriptive anatomy of the period.

SURGEONS FOR THE MERCANTILE MARINE SERVICE.

The whole subject of the position of ship surgeons in our mercantile marine has recently been brought into public notice by an opportune resolution of the Manchester Medico-Ethical Association to the following effect:—"That this Association is convinced that the medical and sanitary departments of the mercantile marine are in a highly unsatisfactory condition, and that the lives of passengers are frequently endangered thereby. That this Association desires to press upon the Government the necessity of an immediate inquiry into the position, status, and efficiency of surgeons upon passenger-ships." As a general principle, we apprehend that there will be very few indeed who would not entirely agree with these resolutions, and it will not be necessary for us to do more than say a very few words upon the subject. And, in the first place, we must admit that the medical men in question are not always all that they might be. In some of the leading lines the managers succeed in securing and retaining the services of able men competent to cope with the difficulties that must from time to time arise. But the number of lines thus having a permanent medical staff is small, and for the vast majority of ships the owners have no regular surgeons, and trust to chance to find one at the last moment. The result is that two classes of men are employed—one composed of young men, whose practical experience has been in most cases limited to a three months' dressership, and who, having just got their diplomas, are anxious to see a little of the world before settling down to the stern realities of a professional career. The chief objection to such men is their youth and inexperience, together with the fact that they have not sufficient interest in their work. The other class of surgeons employed in this promiscuous manner comprises men who have failed in practice, mostly through bad habits, and who look upon going to sea as a means of gaining a living without having to work for it. Let us, however, now glance at the other side of the picture, and see what sort of treatment medical men receive at the hands of shipowners. And in the first place as regards pay. When we read that in some instances it is £5 per month, or in others £9 conditional on the satisfactory behaviour of the officer, we can only express astonishment that any men should ever be found willing to undertake the duties at all; and it is certain that until a respectable salary is offered to start with, and the certainty of a steady increase in pay, good men will not be induced to join the service, and certainly not to remain in it. On the lines where the medical men receive this miserable pittance the rest of their treatment is quite in keeping, and the cabin allotted to the surgeon is usually the worst in the ship, sometimes even without any window or porthole. He has no assistant, no dispenser, and, in fact, no one to help him in his work, nor is he allowed to have any voice in the ventilation or sanitary arrangements of the ship. How long this state of things is to last depends in great measure upon the public. As soon as the sea-going portion of the travelling community take to using those lines only where the medical officers are more or less permanent, the other lines will find it worth their while to treat their medical officers in such a manner as to secure their permanent services; but, until some such step is taken by the public, we fear that the directors of companies will continue to hold that the doctor is an item of expenditure that must be kept as low as possible. We have purposely avoided alluding to the subject of surgeons on board emigrant ships, but we doubt whether any plan short of their being Government officials would be really satisfactory.

SMALL-POX IN THE UNITED STATES.

"From all parts of the country" (the *Louisville Medical News* of February 10 states), "east, west, north, and south, come reports of fresh outbreaks and alarming spread of small-pox. State health boards everywhere (except Kentucky) are active in measures to control and prevent the spread of the disease. In this visitation of a preventable disease we are reaping in this country from the seeds sown among the peasantry of Europe by the anti-vaccination fanatics. The mortality from small-pox among our immigrant population is heavy. During last week eleven cases were reported to the Health Office of Louisville. There are forty cases in hospital, and five in the city."

THE INDIAN GAOLS IN 1881.

The following are some interesting facts taken from the official "Review of the Statistics of the Gaol Departments in British India for the Year 1881," published in the Government *Gazette* of the North-West Provinces and Oudh, December 23, 1882. The prisoners received into the gaols in 1881 amounted to 295,046, being a decrease of 6·7 per cent. as compared with 1880. The daily average number of prisoners was 91,218. The number of prisoners remaining at the end of the year was 86,598, of whom 82,104 had been convicted. Of these 59·49 per cent. were classified as Hindoos, 29·53 as Mohammedans, and 10·93 as of other religions. The number of Hindoo convicts in 1881 bore in the case of all the provinces (except British Burmah, where peculiar conditions exist) a smaller percentage to the total gaol population than the Hindoo population in each province bears to the total population, gaol and free. On the contrary, the Mohammedans in gaol showed a larger ratio than the ratio which the Mohammedan population bears to the total population. In some cases, as in Bombay and the Punjab, the differences thus shown are very striking. Of the total number of convicts, 95·57 per cent. were males and 4.43 females; 1·05 per cent. were under 16 years of age; 77·10 between 16 and 40; 18·86 between 40 and 60; and 2·99 above 60. As compared with recent years, the death-rate of prisoners during 1880 and 1881 shows a very marked improvement, having fallen

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to 4·8 and 4·4 per cent. in those two years, this having reached, in 1878, a maximum of 8·1 per cent.—probably due in part to the famine which had prevailed in some parts of India in 1877. Of the three Presidencies, the Madras returns are, upon the whole, the most favourable, though as regards the mortality the percentage was identical in Madras and Bombay, viz., 4·2 per cent. In the Bengal Presidency the ratio was slightly higher, 4·4 per cent. Of the five provinces of Bengal, the gaols of the North-West Provinces and Oudh have furnished the most favourable statistics. The death-rate in these two combined provinces was only 2·4 per cent., or nearly one-half the ratio returned by the gaols of the Presidency as a whole. The Central Provinces yielded the next most favourable death-rate, 2·9 per cent. against 6·0 per cent. in 1880. Assam stands third on the list with 3·9 per cent. In the other two Presidencies, Lower Bengal and the Punjab, a marked decrease has taken place, although the percentage of deaths in both provinces, 6·5 per cent., continues very high. On the whole, the departmental reports on the administration of the gaols of British India for 1881 appear to the Governor-General in Council to show generally satisfactory results, and in some respects decided progress, as compared with the previous years.

HOSPITAL SUNDAY AND THE MIDDLESBROUGH HOSPITALS.

At the recent annual meeting of the Middlesbrough Hospital Saturday and Sunday Fund Committee, to determine the division of the fund, the question as to the desirability of dispensing with the giving away of free tickets of admission in return for and equal in value to the moneys collected, was considered. It was stated that whereas the cost of each patient in the two institutions at Middlesbrough—the North Riding Infirmary and the Cottage Hospital—amounted on an average to £7, tickets were distributed on a basis of two guineas only for each patient. A member of the Committee had taken the trouble to place himself in communication with various large hospitals in the kingdom in reference to this subject, and while he found that in a great many instances no tickets were given in return for collections, in none was so ruinous a system as that in force at Middlesbrough. He showed that under the present system the annual collections were a serious drain upon the funds of the two Middlesbrough institutions, instead of being, what their promoters intended them to be, a benefit. It was ultimately agreed that in future the division of the fund should be made on the basis of the expenditure of each institution.

THE OPPOSITION TO THE METROPOLITAN ASYLUMS BOARD.

The adjourned meeting of the representatives of the Metropolitan Boards of Guardians, summoned to consider what action should be taken on the report of the Royal Commission appointed to inquire into the present working of the Metropolitan Asylums small-pox and fever hospitals, assembled on Monday, in the Board-room of the City of London Union, Bartholomew-close, and, as upon the former occasion, was not very numerously attended. The chair was taken by Mr. Sly, and the first resolution was moved by Mr. Judd as follows:—"The Royal Commission on the hospitals of the Metropolitan Asylums Board having reported that in their opinion the hospitals of the Board had increased the spread of small-pox, and, as the death-rate from small-pox had doubled since the formation of that Board, and three millions of money having been spent, and a million and a half of liabilities incurred, this conference is of opinion that, should the Government still contemplate to retain the Metropolitan Asylums Board as at present constituted, an inquiry should previously be made into the constitution, expenditure, and management of such Board, and legislation withheld until the result of such inquiry is made known to the Government and the public." After an effort to adjourn the debate again, on the ground of the paucity of the attendance, the resolution was seconded and unanimously carried. Eventually a second resolution was put and carried, to the effect—"That a sub-committee of this conference be appointed to prepare a scheme for the future care and maintenance of cases of infectious disease in the metropolis, and submit the same for the approval of the members of this conference; and upon such approval being obtained, that the conference should then appoint a deputation to wait upon the President of the Local Government Board, to place before him the views set forth in such scheme." It was then agreed that all the members then present should constitute the sub-committee, which is to assemble in the same place in a fortnight's time. It cannot be concealed that the present conference has not exactly proved a success; the metropolitan boards have not, apparently, entered into the subject with any unanimity, and the present proceedings will run the risk of being regarded in many quarters as the action of a clique.

THE FRENCH SOCIETY OF OPHTHALMOLOGY.

A society has lately been formed in Paris under the above title, composed of those interested in the study of diseases of the eye. The first session was held on the last three days in January, and the Society is to meet annually about the same date. The Society is to be in the hands of a committee of eight, and the following gentlemen compose it at present, viz.:—MM. Panas, Gayet, Chibret, Meyer, Poncet, Abbadie, Armaignac, and Coppez. The Society has our good wishes or its success.

PAYING-PATIENTS AT ST. THOMAS'S HOSPITAL.

The wards, known as St. Thomas's Home, adapted for the reception of forty-one of these patients, male and female, have been opened and in working order for twenty-two months up to December 31 last. During the first ten months ending December 31, 1881, 261 patients availed themselves of this opportunity. The number for the year 1882 increased to 371, and the daily average in the Home in 1882 in round numbers was thirty-five, as compared with twenty-three in 1881. The majority of the patients were from London and the vicinity, but there were several from the country, and some from the colonies, India, and the United States, and were from a class for which the Home was principally intended, viz., from those living in chambers and lodgings, strangers and visitors to London, and persons arriving from abroad in ill-health, or suffering from accidents or other injuries. The number of applicants has frequently been in excess of the accommodation, and the governors of St. Thomas's Hospital are so satisfied, not only with the good done, but with the financial results, that at the termination of another year they may deem it advisable to seek authority to open another ward for the admission of this class of patients.

LEAD-POISONING FROM THE TINNING OF A COPPER KETTLE.

Dr. Königschmied reports (*Centralblatt Allg. für Gesundheitspflege*, zweiter Jahrg., 1e Heft) an outbreak of lead-poisoning among 150 men of the 7th Regiment of Infantry, at Tione, in the Southern Tyrol, one case ending fatally, and forty-five requiring to be treated in hospital, besides others who were not disabled from duty. The symptoms varied greatly in intensity, but were generally pallor, a blue line on the gums, metallic taste and odour of breath, blue-grey loaded tongue, obstinate constipation, and loss of appetite. All complained of dragging pains in various groups of

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muscles (especially in those of the thorax), a sense of contraction of the chest, and difficulty of breathing; to which were added, in the severer cases, painful tetanic spasms of all the extremities, rigidity of the lower limbs, muscular tremors, anæsthesia of the fingers and toes, and in the two worst cases strangury. In three there was nightly fever with heavy sweats, but in all the rest the pulse and temperature were normal. In none was there wooden hardness of the abdominal walls or the usual colicky pains, notwithstanding the obstinate constipation. In the single fatal case these symptoms were strongly marked from the first, when on the second day the strangury was followed by complete suppression of urine, and the most powerful drastics failed to produce any action of the bowels. The whole body was rigid and motionless, only the head being capable of the least movement, but sensibility was not impaired. On the third day a pleuritic effusion was detected on the left side; the pulse was 120, small and weak; the temperature not raised; countenance pale and cyanotic; somnolence came on, from which however the patient could be easily roused, and consciousness was not lost; but the dyspnœa steadily increased until death, which took place on the eleventh day. The post-mortem examination showed compression of the left lung by a copious pleuritic exudation, with intense œdema of the right lung, and traces of lead were found in the strongly contracted large intestine. The first cases admitted were supposed to be muscular rheumatism, but so soon as lead-poisoning was recognised, suspicion fell on two new copper kettles tinned throughout. The apothecary of the town, Domenico Boni, applied Carpani's test—viz., a drop of strong nitric acid, followed after a couple of minutes by a concentrated solution of potassium iodide,—and the yellow colouration produced, compared with Carpani's scale, indicated considerably over 20 per cent. of lead in the alloy. Unfortunately a more exact analysis was not made, the commanding officer having at once ordered the kettles to be retinned; but a number of men in the 5th company, stationed at Cieto, were attacked in like manner, after using kettles made by the same smith, and it was believed tinned with the same alloy. Boni found in five grammes of the tinning 3·0209 of tin and 1·979 of lead, or 39·6 per cent. of lead. It is but fair to say that the coppersmith at Condino did not know the composition of the alloy he employed.

THE PARIS WEEKLY RETURN.

The number of deaths for the seventh week of 1883, terminating February 15, was 1206 (661 males and 545 females), and among these there were from typhoid fever 39, smallpox 14, measles 14, scarlatina 2, pertussis 6, diphtheria and croup 55, erysipelas 5, and puerperal infections 6. There were also 65 deaths from acute and tubercular meningitis, 214 from phthisis, 43 from acute bronchitis, 79 from pneumonia, 70 from infantile athrepsia (25 of the infants having been wholly or partially suckled), and 33 violent deaths (26 males and 7 females). This return of deaths is the highest noted during the present year, and notably exceeds the mean of the preceding four weeks, which was 1135. In regard to epidemic diseases, there was a slight increase in the deaths from measles and diphtheria, and a slight diminution from typhoid fever. Affections of the respiratory organs, especially among the aged, have caused a large number of deaths this week. The births for the week amounted to 1380, viz., 739 males (539 legitimate and 200 illegitimate) and 641 females (460 legitimate and 181 illegitimate): 101 infants were either born dead or died within twenty-four hours, viz., 67 males (44 legitimate and 23 illegitimate) and 34 females (24 legitimate and 10 illegitimate).

THYMOL AS AN ANTIPYRETIC.

Fiori has made investigations on the action of thymol on the circulation of febrile and non-febrile patients with diseased or sound hearts (*Centralblatt f. Klin. Med.*, No. 2). The points that received attention were the temperature, the pulse, the blood-pressure, and the respiration. Three- to four-gramme doses lowered the temperature and the frequency of the pulse and respiration, without exercising any injurious action on the contractile power of the heart. The arterial blood-pressure, as measured by Basch's apparatus, was found to be invariably raised.

His Royal Highness the Prince of Wales has graciously intimated that he will preside at the sixty-ninth anniversary dinner of the Royal Hospital for Diseases of the Chest, City-road, to be held in May next.

A misreading of an awkwardly penned announcement, made in the House of Commons by Lord Hartington on the 19th ult., with reference to a Bill "for the amendment of the law relating to medical matters," led us to state that the Bill is to be introduced into that House. His lordship in reality referred to the House of Lords; in which august assembly the Earl of Granville declared, on the same evening, a Bill "with regard to the Medical Council" will be introduced. The difference in the terms employed by the two Ministers in naming the Bill is curious, and noteworthy as possibly indicating that it will not deal with all the chief subjects inquired into by the Royal Commission on the Medical Acts.

It is reported that Mr. Duncan Vertue, of Edinburgh, who was formerly a surgeon in the East India Company's service, and who died about a fortnight ago, has left about £80,000 to the Royal Infirmary of Edinburgh; and as a condition the money must be capitalised, and the interest only used.

Professor Grainger Stewart, whose illness has compelled him to give up work for some months, has announced to his class, through his assistant, Dr. Ritchie, that he will be unable to meet it this winter session. He is now, we are glad to say, very much better, but has found it advisable to go to the South of France to recruit his strength.

Many Cambridge graduates will regret to hear of the unexpected death of Dr. G. M. Bacon, of Fulbourn, at the age of forty-eight, from intestinal obstruction, after a very short illness. He had been for many years Superintendent of the Cambridgeshire County Asylum, where he won the respect of all who knew him. He had not contributed much to medical literature, but his pamphlet on "The Handwriting of the Insane" proved him to be a close and careful observer. A few years ago the University conferred upon him an honorary M.A. degree in recognition of his long-continued readiness to afford clinical instruction in lunacy to such students as chose to avail themselves of the opportunities afforded by the county asylum at Fulbourn. He was one of the most prominent members of the Cambridge Medical Society and a constant attendant at the meetings of the Psychological Association.

Iodoform in Diabetes.—Dr. Paolucci, encouraged by the testimony of Moleschott in favour of iodoform as a remedy for diabetes, has employed it without any good effect, whether given in small or large doses. In *Il Morgagni* for December he gives four cases in detail to show its want of influence either on the quantity of urine or the amount of sugar.

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"BARBARISMS IN MEDICAL PHRASEOLOGY."

Professor Virchow contributes to the last number of his *Archiv für Pathologische Anatomie* an interesting article on "Barbarisms in Medical Phraseology." So long, he says, as scientific medicine was in the keeping of the Greeks, medical phraseology was simple, intelligible, and correct. Only very exceptionally did a word of foreign derivation creep in. When, however, Greek physicians began to wander towards Rome, and the Latin language became more and more used in medicine as in general life, an amalgamation of terms at once began. Numerous technical Greek expressions were introduced into the Latin language: indeed, so strong has this old tradition been, that, although the ordinary language of medical men has been Latin, even down to our own times, there has continued a strong disposition to borrow technical terms from the Greek language. Celsus and the Roman writers were always careful about this point whenever they used Greek terminations; they added the Greek word in Greek characters, so that error was avoided—a practice which continued with the best writers until the end of the middle ages, similar to what has obtained with the French in recent times. When the French school was leading the way, not only in surgery, medicine, and pathological anatomy, but also in experimental pathology, German writers adopted their terms, and not merely the technical ones, but they wrote them and printed them in different type. In speaking, no difference was made, the French words being pronounced as German, and often accompanied by a wrong article [as to gender]. In this respect might even now be mentioned the difficulties which attended the correction of this mistake in the use of the words "contour" and "plaque." This way of changing the gender is bad enough, but it is bearable when compared with the constant changing of words as soon as they pass out of scientific into vulgar use. Thus, as the result of amalgamating the old Greek term "kynanche" with the early middle-period Latin "synanche," and more recently with the Italian word "squinantia," we get the present English "quinsy." In proper names very curious changes have taken place: Joannes is first changed into Johannes, and then the word is abbreviated either into Hans, Jan, John, Iwan, etc.—changes, by the way, which are not nearly so unintelligible or so mutilating as the conversion of Robert into Bob. It is difficult to draw the line at what is distinctly barbarous, and that which to a certain extent is justifiable. In composite languages, such as English, it is more allowable, but it is questionable whether in purer languages the same practice should be allowed.

If the English, in order to save time, choose to cut off three syllables from the word "cabriolet," in order to get "cab," it appears as justifiable in Germany to reduce "arytænoid cartilage" to "ary-cartilage." And yet there is a great difference. Cab is a sufficiently expressive word to be used in, and indeed transferred to, any language. On the other hand, no one would think of proposing "ary" alone for "ary-cartilage"; even this compound word could not be transferred to Latin without some adjective to qualify it, and thus arytænoid has come to be used.

Many difficulties attend the use of the word *εἶδης*, and for a long time it has been a question whether we could substitute its Latin equivalent *ideus*. Unfortunately, however, such a word did not exist in the 'old Latin. Celsus and the Latin writers all use the Greek word. Thus *processus mastoideus* and *coracoideus*, *tunica arachnoidea*, and *choroidea* are newly invented words, and very barbarous. The barbarism, however, is not the worst part of the mistake. A process may be shaped *like* a nipple, and hence we call it mastoid (*εἶδης*); but when we speak of a muscle which is only attached to such a process by the same name we have quite another meaning in the word *ideus*. The word "diphtheritis" is about as bad as it can be. Bretonneau wished to signify a membranous inflammation; but the word means, really, an inflammation of membrane. "Diphtheria," which has been proposed, is a much better term. The term "papilloma" is unscientific, not simply because it is half Latin and half Greek. "Papilloma" could be translated "papillary tumour"—but to what purpose? An ordinary wart, a syphilitic condyloma, a cancer, may all present themselves in the form of a papilloma. On the other hand, a papillary fibroma or papillary carcinoma would be justifiable and expressive.

Finally, monads, vibrios, bacteria, though well differentiated, were all considered as infusoria. When, however, one after the other were found to belong to the vegetable kingdom, it was not sufficient to call them all fungi; monads and vibrios were struck out, and the term "Kugel-bacteria" introduced—*lucus a non lucendo*. Then came Mikro- and Makro-bacteria, Bacteridiæ, and Bacilli; so that at the present time no one has an idea that the old vibrios and monads are included in these categories, and that many of the old researches would be available, if we were to strike out "vibriones" and put in the word "bacteria." The genetic settlement of the allied species can alone afford us sure lines for a new terminology, while it would at once impose the duty and give the justification of change of term. Many other similar illustrations are given in the original article from which this is abstracted; but they apply chiefly to the German language, and would only be intelligible to those who are well acquainted with it. Such persons, however, we would refer simply to the original.

MEDICAL MATTERS IN PARLIAMENT.

House of Commons.—Friday, February 19.

The Lunatic Harrison.—In reply to a compound question by Dr. Cameron, the Lord Advocate replied that it was substantially true that in June last Thomas Harrison, formerly an inmate of the Cheadle Lunatic Asylum, was illegally seized and put in care of the police by an attendant from that Asylum; that the attendant had had the assistance of one of the Sheriff-substitutes of Lanarkshire, and of the police; and that attendants from the Asylum had forcibly and illegally, without any warrant, seized the alleged lunatic and carried him back to Cheadle. No complaint had, however, been made to the Crown authorities, nor had they known that such an occurrence had taken place till notice of the question had been given. He thought that, anyhow, the case would be one rather for civil action on the part of the Crown. —Dr. Cameron then asked the Secretary of State for the Home Department whether the facts of the case had been communicated to the Lord Chancellor; and whether, considering the state of the facts and the illegality of Harrison's arrest, an independent investigation had been, or would be, ordered into his mental state.—Sir William Harcourt replied that the Lord Chancellor stated that if a person is detained without authority, the proper way to release him is by *habeas corpus*. The Lord Chancellor had made inquiry into the case. It appeared that the recapture of Mr. Harrison had been effected by the Superintendent of the Cheadle Asylum, over which the Lord Chancellor has no authority: as regards Mr. Harrison himself, the visitors' report stated that he was dangerous to himself and to others. He had been regularly visited since 1877.

Naval and Military Medical Appointments.—Mr. Gibson asked the Secretary of State for War whether the candidates for medical appointments in the Navy, Army, and India had to give their names and qualifications to the Board of Examiners instead of being known to the Examiners by numbers only; whether there was any member of the Board of Examiners with an Irish qualification or having any connexion with Ireland; and whether, having regard to the dissatisfaction and discontent which existed among Irish candidates as to the results of recent examinations, he would see that Ireland should be represented on the Board, or that candidates should be known to the Examiners by numbers only.—The Marquis of Hartington stated, in reply, that one of the four Examiners is an M.D. of Dublin; that no complaints upon the subject had reached the War Office; but that the Government would consider how far it is desirable to substitute numbers for names.

Monday, February 26.

Working Men's Dwellings and the Railway Companies.—Sir Richard Cross inquired whether the attention of the President of the Board of Trade had been directed to the Railway Bills brought in this session, with a view to proper facilities being afforded by the railway companies if they pulled down

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houses inhabited by the working-classes in London; and Mr. Chamberlain replied that he had no power to secure that object. He could only call attention to the matter, but he proposed to have the Bills carefully examined with that view.

The Navy Sick-berth Staff.—In answer to a question by Sir H. Wolff, the Secretary to the Navy stated that no decision had yet been arrived at respecting the pay and position of the Sick-berth Staff. The matter was part of a large question under consideration, and extending to the whole system of attendance on the sick, both in naval hospitals and afloat.

The Census Returns.—Sir Charles Dilke, replying to a question by Mr. James, stated that the first two volumes of the Census Report will be printed and ready for circulation before the end of April. The Registrar-General had reported that all the remaining portion will be circulated before November.

THE INFLUENCE OF BOARD SCHOOLS ON THE SPREAD OF SCARLET FEVER.

Information having reached the Local Government Board that scarlet fever had for some time been prevalent in the town of Potton, in the Biggleswade Rural Sanitary District, and that its rapid spread was attributed to the mingling of children from infected households with others at the Board schools, Dr. Parsons was instructed, in connexion with the general question of the influence of schools on the spread of infectious disease, to inquire into the circumstances of the case. Potton is a small market town of 2640 inhabitants; Dr. Parsons found it to be well sewered, and provided with a water-supply of good quality, derived from wells about forty feet in depth; on the whole, he reports the sanitary condition of the town to be satisfactory. Before August, 1882, Potton had been free from scarlet fever for two or three years, but on the 6th of that month a child five years old, son of a hairdresser and beerhouse-keeper, was attacked with the disease, and in the course of a few days it extended to five others in the same family, with fatal results in two cases. Some of these children attended the Board school at Potton, but never went there after August 6. On September 29 a child attending the Board school left school ill with ulcerated sore-throat, which proved to be scarlet fever, but the nature of the illness was kept secret, the brothers attending school until a fortnight later, when three of them were taken ill, and all four with their mother had to be removed to hospital. Mr. Walker, surgeon, of Potton, told Dr. Parsons that on October 6 a child was at school whose skin was peeling after scarlet fever, and that on the same day another child was sent home, having the scarlatinal rash well developed. In the middle of November a sudden outburst took place, thirteen households being attacked from the 10th to the 19th; the first case in all these being a child attending the Board school. Altogether up to November 25, sixty-seven cases of scarlet fever were heard of, with nine deaths, the number of households invaded being twenty-nine. On October 11, Mr. Walker recommended the closing of the Board school. The School Board, however, with whom the Medical Officer of Health concurred, did not think that at that time the outbreak was sufficiently severe to justify such a step, but they passed a resolution that all children from houses affected with scarlet fever should be excluded. This might have been sufficient, Dr. Parsons observes, if all the cases of scarlet fever had come to be known in time; but in a considerable proportion of even well-marked cases no medical advice was called in, and he himself saw several smartish cases upon which no medical man was in attendance, and there were doubtless other milder ones of which the nature was not recognised. On November 22 it was decided to close the Board school until after the Christmas holidays, and the proprietors and managers of the other day-schools and of the Sunday-schools in Potton agreed to do the same. The result of this action was, that whereas between November 1 and 22 (the date of the closing of the schools) twenty-two fresh households were invaded by scarlet fever, from November 23 to December 19 (upon which latter date Dr. Parsons revisited Potton) only five fresh households were invaded. In conclusion, Dr. Parsons is of opinion that the attendance at school of children in an infectious condition as regards their person or apparel has been the principal means by which the disease has been spread; and this case appears to show that when an epidemic of scarlet fever threatens, it will not always be sufficient to exclude from school the children of households known to be affected with the disease, but that it may become necessary to close the schools for a time, in order to guard against the presence of children affected with slight and unrecognised forms of the fever, or carrying about infection in their clothes, and who, intermingling with their fellow-scholars, may infect them with the disease in a grave or dangerous form. This further action is also the more likely to become requisite when the existence of the disease is wilfully concealed.

FROM ABROAD.

Treatment of Spinal Diseases.

From a lecture by Prof. Bartholow, of the Jefferson Medical College, Philadelphia, and reported in the *Phil. Med. News* for December 16, we take the following observations:—

He begins by stating that much as has been written upon the pathology and diagnosis of these diseases, their treatment is usually very summarily disposed of. From a therapeutical point of view they may be comprehended in three groups: acute inflammatory, chronic inflammatory, and nutritional diseases; the fixing the exact seat of the inflammation not being of importance, as the principles of treatment remain the same. For a just appreciation of the curative effect of remedies a true idea of the spinal circulation is requisite, the capacity of the numerous and tortuous veins exceeding that of the arteries as four to one. The blood current, therefore, which is sent into the canal through the arteries must be "slowed" there to fill out the veins; and it may unhesitatingly be affirmed that this peculiar anatomical condition affects the operation of remedies.

"One of the remedies most relied upon to affect the intra-spinal circulation is ergot. I hold that its administration in acute spinal inflammation is improper, because of the peculiarity of its action. It induces an anæmia of the arterial distribution—an ischæmia, properly speaking—but the blood thus driven from the arterial side accumulates on the venous side; and hence it follows that whilst arterial supply may be reduced, the veins of the spinal cord are distended unduly. The compression thus exerted on the cord has, as I conceive, a most hurtful effect on its nutrition, and hastens the progress of the changes inaugurated by the inflammation. If ergot is inadmissible in acute inflammation of the intra-spinal organs, to what remedies shall we then resort? You may not be at all prepared for the statement I have to make; but, speaking from the standpoint of my personal experience, I have to say that aconite, digitalis, veratrum viride, opium, and bromide of potassium are the most useful remedies in acute spinal inflammation. Each, however, has its special range of activity. All agree in the power to limit the blood-supply to the spinal canal, but in what degree, if at all, does each affect the intra-spinal venous circulation? Far more than ergot, if I may again refer to my own experience, I can recommend the use of digitalis first, and, if this disagree with the stomach, aconite. You will find it most useful to begin with an infusion of digitalis, administering from a teaspoonful to a tablespoonful every four hours, until the conditions for which it is used cease, or the stomach fails to retain it. If the irritability of the stomach is a bar to its internal use, it may be effectually employed topically, the leaves being steeped in hot water, placed in a porous bag, and applied to the spine or abdomen. This remedy, you will find, will do more to restore the normal balance of the circulation than any other now at our command. Next to it in point of utility is tincture of aconite root, which must be given until the characteristic tingling is produced, or until the pulse-rate is lowered. Acting both on the skin and kidneys, it favours the excretion of the products of inflammatory waste. Veratrum viride is not so useful as aconite, its action extending little beyond the hydrostatic effects. Opium, especially morphia, hypodermically, becomes indispensable in all cases where pain is a pronounced feature, and experience has shown its utility in meningeal inflammation. The bromides, and especially the bromide of potassium, are indicated when reflex convulsive

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phenomena are present, such as muscular cramp, twitchings, etc., indicating irritation of the motor tract.

"Are there any data by means of which we may fix the time for the administration of arterial sedatives? As these remedies only affect the vessels primarily, and secondarily the structure of tissue, when shall they be discontinued? A correct conclusion may be reached by careful consideration of the symptoms indicating the occurrence of exudations—symptoms whether of excitation or depression of function. So long as the symptoms of excitation—hyperæsthesia and spasm—continue, there can be no doubt that those remedies will be useful which have to do with the blood-supply. When exudations occur, and pressure is thereby brought to bear upon the intra-spinal organs, the symptoms of depression or arrest of function come on—anæsthesia and paresis. Arterial depressants can do no possible good, only injury indeed, when the local status is no longer that of hyperæsthesia and excited action. When the process of effusion and exudation comes on, we have to deal with the depression of functions. Remedies having very different powers then come into use. Absorption of merely fluid exudations may be effected by a judicious combination of purgatives and diaphoretics, especially of Epsom salts and pilocarpin. The dispersion of solid exudations is more difficult. Considerable experience with the use of ammonia, especially the acetate and carbonate, has given me very positive confidence in the power of this remedy. The most convenient mode of administering it is to dissolve the carbonate in the officinal *liq. ammon. acetat.*, so that five grains of the former will be given in a tablespoonful of the latter. At or about the same time, when the symptoms of depression, due to the pouring out of an exudation, come on, the solution should be administered. The important point is to alkalinise the blood, so that local thrombus and solid exudation may be reabsorbed. When the case is seen at the very time of its inception, the best results are to be expected from the administration of a maximum dose of quinine and morphia—twenty grains of the former and half a grain of the latter. Cases of acute spinal inflammation, however, are not often seen at their beginning. Chronic inflammation may succeed to acute, or it may arise *de novo*. . . . . The alterations extend over many years, but they are, properly speaking, of the chronic inflammatory type. It is obvious that some of the most important therapeutical questions are concerned in the management of these affections. The means employed are partly topical, partly systemic. A daily morning and evening hot douche to the spine, of fifteen minutes' duration, I have found to be exceedingly effective. When the proper appliances for the douche are not obtainable, a sponge dipped in hot water and passed over the part rapidly for fifteen minutes at a time may be accepted as an equivalent."

Prof. Bartholow speaks highly of the treatment of spinal sclerosis by Strumpf of Düsseldorf, by means of cutaneous faradisation employed for half an hour at a time. His experience of massage has not been favourable, anything like violent rubbing or kneading having been found to do harm. He thinks highly of the galvanic current, as employed by Erb in chronic spinal affections, and supplies some valuable details and cautions, for which we must refer to the report of the lecture. As to *internal remedies* in chronic cases, while rejecting nitrate of silver, owing to the danger attending its employment, Prof. Bartholow states that in the scleroses, and in connective-tissue hyperplasia of organs in general, he has seen excellent results from the internal use of chloride of gold and sodium, given in a granule containing one-twentieth of a grain, three times a day. The corrosive chloride of mercury has similar effects, but it does not seem to be equal in curative power to the gold chloride. After adverting to the influence of metallic poisoning (due to the frequent domestic employment of noxious metals) and of syphilis in the production of locomotor ataxy, he goes on to observe:—

"I have long entertained the notion that the utility—the remarkable utility—of iodide of potassium in some cases is due to one of two conditions: to an overlooked syphilitic infection, or to metallic poisoning. This is so certainly a fact that in doubtful cases I advise the use of full doses of iodide of potassium as a preliminary to further treatment. In all distinctly specific cases there can be no possible doubt in regard to the efficacy of anti-syphilitic treatment. Now let me tell you a fact not generally known, or, if known, not sufficiently appreciated. Mercury in syphiloma of the nervous system, tertiary in type, is, in some instances, quickly curative when the iodides fail utterly. When there is reason to suspect mineral poisoning, and in all doubtful cases, the iodides should be administered in full doses, either tentatively or as the major treatment."

Of what he terms "nutritional diseases," Prof. Bartholow speaks as follows:—

"The third group, from the therapeutical point of view, consists of those spinal disorders not due to a recognisable inflammatory process, but to some change in the form of nutrition. In this position may be placed the changes that are senile, whether of time or prematurely. The most important therapeutical point in these cases is to supply the material in which the tissues are deficient. A combination of the lime-salts—the phosphates especially—with a fat (cod-liver oil) is most useful in these cases; but good results can be reached only by persistent use of the means of treatment. In these cases of senile degeneration much good is accomplished by the use of ammonia to prevent the formation of thromboses, or to effect their solution if formed. Strychnia and quinine, to stimulate the organic functions, render important service also. The subcutaneous use of strychnia is often remarkably effective in all of the chronic spinal affections characterised by loss of muscular power. It is, of course, inadmissible in those stages of these maladies having an active state of the local circulation—in all acute cases, and in chronic cases with acute exacerbations. The quantity to use in this way ranges from one-sixtieth to one-thirtieth of a grain daily once, or on alternate days. The hypodermic injection of strychnia may, indeed, serve as a means of distinguishing the character of the spinal trouble. It increases the paralytic symptoms when an inflammatory condition is present, and improves functional and chronic diseases. Galvanism, applied as already pointed out, to stimulate the spinal circulation, and faradism at the periphery, contribute to the nutrition of the cord by promoting the action of the circulation in general. By a proper combination of these expedients we can often effect very decided improvement.

"I have not alluded to the treatment of the large group of so-called functional disorders of the spinal cord. The consideration of this is a sufficiently fruitful topic for a lecture—for many lectures, indeed,—and I must postpone it to a more convenient season."

REVIEWS.

Practical Medical Anatomy. A Guide to the Physician in the Study of the Relations of the Viscera to each other in Health and Disease. By Dr. Ambrose Ranney. (Low's Library of Standard Medical Authors.) London: Sampson Low, Marston, and Co. 1882. Pp. 339.

Anatomy must always be the groundwork of all medical knowledge, since by it alone we are able to understand the various functions of the human frame; for disease is but a departure from this normal standard, and if we would become learned in the treatment of disease, we must obviously be well acquainted with the conditions we call health.

In the preface to this work our author says that the work has cost him "many hours of research." We trust that this means original study of the living body, for mere recapitulation of other previous writers on this subject would hardly justify a work of 300 pages. One reason why there have been so many previous works "in the same field" is perhaps to be found in the fact that each successive work has been influenced by previous publications more than by actual observations on the living subject, and hence it is that much still remains to be done in this most important branch of medical literature. The work before us treats the subject matter in regions—a convenient and very accessible method. There is a long chapter on "The Human Face in Health and Disease, and its Value as a Guide in Diagnosis." The reader will here find some valuable remarks on the importance of the physiognomy in diagnosis and prognosis in various diseases—indications which we think are a little too apt sometimes to be either overlooked or ignored in favour of more physical signs. On the whole, we are inclined to look favourably on the book. It is freely illustrated, clearly printed, and of a convenient size for easy reference.

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The Liverpool Medico-Chirurgical Journal, No. 4, January, 1883,

Contains, amongst others, the following papers, viz.:—Two cases of enteric fever complicated by gall-stones, by Dr. R. S. Archer. The first patient died from hæmorrhage at an early date; the second patient also had hæmorrhage, but survived that, dying later from perforation. Dr. Archer is inclined in both cases to attribute the hæmorrhage to reflex irritation from the gall-stones, and further thinks that the perforation in the second case may have been due to the lodgment of a minute fragment of a gall-stone in the floor of an ulcer. The possibility of such an occurrence having happened cannot of course be denied, but as regards his explanation of the hæmorrhage we hardly feel inclined to admit even its probability. As the typhoid fever was contracted from the same source and at the same time in the two patients, it is not surprising that it ran much the same course in each. The feature of the cases, to our mind, is the coincident occurrence of gall-stones in a husband and wife. Mr. Bernard gives an analysis of the primary site of the chancre in 194 cases of syphilis. Only once was it observed in the urethra. From his remarks in the text we should infer that it is very unlikely to occur here except in one who has been circumcised, which it would be important to bear in mind when searching for a scar in a doubtful case.

The diseases of women come in for a large share of the original matter in this number; we have only space here to notice Dr. Wallace's case of stricture of the female urethra. The whole urethra seems to have been more or less affected, but the stricture was narrowest at the neck of the bladder. There had been urinary troubles for the long period of seventeen years. Mr. Wm. Berry contributes a note on the treatment of wounds with dry absorbent dressing. The other papers are—one on division of the cervix for dysmenorrhœa, by Dr. Campbell; one on hepatic and renal disease, by Dr. Gibson; and one on absence of the uterus, by Mr. Cameron.

Chromatoptometrical Table. By Dr. Ole B. Bull. London: Trübner and Co. 1882.

The object of this table is to permit of the estimation of the colour sense in any given person, in, so far as may be, a ready and reliable manner. The table itself consists of an oblong piece of cardboard (in size and shape resembling that on which Snellen's types are mounted), which may be hung up on the wall. Its surface is perfectly black, and on it are placed ten rows of small coloured squares, each row containing ten squares of the same size, and equidistant. The colours used are blue, red, yellow, green, and grey, and the four first are mixed with the last in varying proportions, and they are then arranged so that the lightest shades of colour are in the top row, and the next in the next, and so on. These rows are numbered from above downwards, 1, 1·5, 2, 3, 4, 6, 8, 11, 14, 18, so that the colour-sense, as tested by this table, can be as accurately recorded as the vision after the use of Snellen's test-types. Each square is one centimetre across. A person who can correctly distinguish the shades of colour of No. 1 at a distance of one metre may be said to have a normal colour-sense. We append Dr. Bull's directions for examining patients, only premising that "C" is used for colour-sense in just the same way as "V" is used for vision. "The table is hung in a well-illuminated spot, but not in actual sunshine. The person whose C is to be determined is placed at a distance of one metre from it. He is told that in each line on the table different coloured squares are placed indiscriminately amongst grey ones. Having been pointed out the latter in the top line, the patient is requested to point out in succession the coloured squares in the same line. If in doing so he makes any mistakes, his C may be abnormal in a qualitative and in a quantitative respect, and a close examination then has to be made. Without naming the colours, any coloured or grey square is pointed out in any of the lower lines, and the patient is told to point out another which appears to him like or most like this. In all cases in which we find a distinct perception of all colours in No. 18, we may be tolerably safe in excluding physiological colour-blindness. In pathological cases we may find a diminution of C alike for all hues (as in some diseases of the optic nerve), or a diminution for one pair of complemental colours; and then, in by far the most cases, for red-green, as in most cases of primary atrophy of the optic disc; or lastly tints, and especially faint ones of red are confused with those of yellow, and green with those of blue (as in all affections by which perception of light is diminished)." Dr. Ole Bull showed his original models of these tables at the International Medical Congress in 1881, and they were very highly thought of by those competent to form an opinion. In its present form the table should find favour with ophthalmic surgeons, for we believe that when used in conjunction with Holmgren's wools the practitioner will have the means of forming an accurate and complete opinion as to a person's colour-sense. This combination will, we believe, be found as useful as Stilling's pseudo-isochromatic tables.

GENERAL CORRESPONDENCE.

OVARIOTOMY STATISTICS.

We have been requested to publish the following letter from Mr. Spencer Wells to Professor Gross:—

3, Upper Grosvenor-street, London,
February 27, 1883.

My dear Professor Gross,—You have published in the *Philadelphia Medical News* a statement comparing the results of my operations of ovariotomy in 1088 cases with those of three other operators in 381, 328, and 226 cases respectively, making a total of 935 cases. The mortality of my cases is given correctly at 22·15 per cent.; and that of the other operators as 10·76, 10·67, and 11·94 per cent. On this plain statement, as you have published it, anyone would conclude that I am a less successful operator than my juniors. Indeed, the author of a very eulogistic review of my last book in the *American Journal of Medical Sciences*, of January, 1883, misled by a false statement in the *American Journal of Obstetrics* (vol. xv., page 547), that I "had gone on for twenty years operating on hundreds of cases with a mortality of 25 per cent.," takes the trouble to give what he believes to be a true explanation of the "high range of mortality in his [my] ovariotomies." He says that I had laboured for an "ideal success"; but "his [my] own practice fell short of this ideal." If it were true that after twenty years' operating I had gone on operating with a mortality of 25 per cent., while others did not exceed 10 or 12, some such explanations as those proffered by my able and kindly reviewer might serve as my excuse. But it is not true. When I had been operating for twenty years, I had reduced my mortality to 11·62 per cent. The results of successive series of 100 cases had been made known, from 34 in the first, and 28 in the second, to 17 in the ninth, and 11 in the tenth series of 100 cases. My cases of 1879, 1880, and 1881 had been published, with results of 11·62, 9·57, and 10·7 per cent.; and in the preface to my book, published in May, 1882, I afford proof that, "notwithstanding the fact of my being often called upon to treat patients rejected by other surgeons as unfavourable cases, the progressive diminution of the mortality still continues." I added, "It is still more gratifying to be able to add that this increasing success is not confined to myself nor to British surgeons, but is also established in Germany, France, and Italy." There really can be no excuse for this attempt to discredit me with a high mortality after twenty years' experience, as in my book (pages 214-15) I had shown very plainly how in successive periods of five years the mortality progressively diminished, and that in the

First five years...	about 1 in	3	died.
Second and third five years ...	„ 1 in	4	„
Fourth five years	„ 1 in	5	„
Last two years	„ 1 in	10	„

Or, putting it in another form, that in the

First five years...	70 per cent.	recovered.
Second five years	74 „	„
Third five years	78 „	„
Fourth five years	80 „	„
Two last years	90 „	„

I trust, my dear Professor, that you will accept my desire to stand well with my American brethren as a sufficient excuse for this long letter. And, with sincere respect,

I am, &c., T. Spencer Wells.

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INVALID TRANSIT AT THE WESTMINSTER HOSPITAL.

LETTER FROM MR. R. DAVY.

[To the Editor of the Medical Times and Gazette.]

SIR,—As I have endeavoured since 1874 to impress on our profession the advantages of slinging patients during locomotion, may I ask you to kindly publish the following facts:—

On February 24, 1883, I wanted to send a young lad into the country, on whom amputation of the right hip-joint had been performed, and who was slowly but surely losing ground by reason of the discharge arising from pelvic necrosis. The neighbourhood of the acetabulum was encircled by sinuses, and the lad was intolerant of local interference, and of any pressure on his right side or buttock. His home was at Harlington, Middlesex (fifteen miles from town), so I ordered one strong horse, and drove my invalid van to the Westminster Hospital. The lad was placed in one of my stretchers on a hair mattress at his bedside, carried down to the van, and slung to its roof by two elastic cord suspenders. The journey occupied two hours and a half, and he was carried into his own home, not only delighted by the drive, but also unhurt by one single jolt or concussion. I personally sat by his swing-bed during the whole journey, and gave him sandwiches and port at half-way distance; on the return journey I laid in the stretcher, and dozed off luxuriously. I may also remind charitable benefactors that ambulance work was not unknown to the Good Samaritan, for, in addition to other kindly services rendered to the wounded man, *he set him on his own beast and brought him to an inn.* (*πανδοχεῖον*) (*δέχομαι* [I receive] *πᾶς* [everyone])—a singularly expressive word for a hospital.

I am, &c.,

RICHARD DAVY,
Surgeon to the Westminster Hospital.

VIVISECTION.

LETTER FROM MR. J. DIXON.

[To the Editor of the Medical Times and Gazette.]

SIR,—Mr. Spencer Wells in his admirable Hunterian Oration has devised a term so truly expressive as to constitute him a public benefactor.

Those persons who denounce as unlawful *all* experiments on animals, even if performed with the object of benefiting mankind, he calls "misanthropic zoophilists." Perhaps *philozoists* would be more analogous to misanthropic in its etymology; but the combination of words is extremely happy, and cannot fail to commend itself to the genuine advocates of scientific research.

I am, &c.,

February 24. J. DIXON.

TREATMENT OF HYDROCELE.—Dr. Melillo, of Rio de Janeiro, recommends (*Il Morgagni*, December) as an improved mode of treating hydrocele the employment of a small syringe capable of holding ten grammes, graduated into ten equal parts, each capable of holding a gramme of a mixture of equal parts of chromic acid and water. After the puncture with the trocar has been made, and the liquid begins to flow out, the point of the syringe is immediately substituted for the trocar, before any more of the liquid escapes, and two grammes of the dilute chromic acid are slowly injected for every eight grammes calculated to exist in the tunica vaginalis. After five minutes the syringe is withdrawn, and nearly all the liquid allowed to escape, after which the canula is withdrawn. Any other irritant may be substituted for the chromic acid, and any sized syringe may be used; the object being only the securing the liquid of the hydrocele as a menstruum for the irritating substance employed.

TREATMENT OF GLEET BY ELECTRICITY.—Dr. Blackwood, of the St. Mary's Hospital, Philadelphia, in an article in the *Philadelphia Medical Times*, November 4, states that he has found the treatment of gleet by the agency of electricity a most beneficial procedure, and describes in some detail the method of its application. He was led to its employment in this affection by the great success he had derived from it in the treatment of bad strictures.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 20.

J. W. HULKE, F.R.S., President, in the Chair.

DISSEMINATED SARCOMA.

MR. BUTLIN read the report of the Morbid Growths Committee (signed by Dr. Goodhart and himself) upon Dr. W. B. Hadden's case of disseminated sarcoma of the heart and other viscera. Portions of the heart, arachnoid, and right kidney had been submitted to them, as well as mounted sections. They agreed with the general description given by Dr. Hadden, but, on account of the cyst-formation in the kidney, they had thought that possibly there might be something of a parasitic nature in the case, and had therefore submitted the specimens to Dr. Spencer Cobbold, who reported that there was a close general resemblance to the organisms of psorospermal sacs, but that there was not enough evidence to enable him to decide positively as to the existence of a parasite. The Committee thought that sarcoma was the best name to give to this new growth, as it consisted mainly of nucleated cells, round or oval, varying in shape and size, with very little intercellular substance.

CASES OF ANEURISM OF THE AORTA.

Dr. SAMUEL WEST showed two specimens:—1. An aneurism of the first part of the arch which had ruptured into the pulmonary artery, taken from the body of a man aged thirty-eight, who had come to the Victoria-park Hospital for Diseases of the Chest, suffering from severe pain in the chest, cough, and dyspnœa, of which the onset was said to have been sudden. There was increased cardiac dulness both to the right and left, but no evidence of mediastinal tumour. A murmur was heard all over the heart's area, but not specially conducted along any of the vessels. Its point of greatest intensity was in the third left intercostal space; it commenced during the latter part of the diastole, and extended through the whole systole. On post-mortem examination there was general enlargement of the heart. In the pulmonary artery, just above the valves there was a circular hole with sharp, clean-cut edges, leading into a sacculated aneurism of the first part of the arch of the aorta. 2. An aneurism of the middle part of the arch, death having occurred from embolism of the aorta. The patient was a man aged thirty-seven, who had been ill for seven months with dysphagia and dyspnœa. The physical signs were somewhat indefinite, but it was thought that he had a small aneurism of the aorta. There were severe paroxysms of dyspnœa, and during one of them the patient sprang out of bed and fell back dead. There was found to be a sacculated aneurism arising from the highest part of the arch of the aorta, and extending upwards so as to occupy the space between the two carotids. The left recurrent laryngeal nerve was firmly adherent to the posterior wall of the sac. A large decolourised laminated clot, five inches broad by one inch long and one-eighth of an inch thick, was found lying in the aorta. On careful examination of this it was evident, from the markings on it, that it had been formed in the left ventricle, and had spread thence into the aorta, and, having become detached, had caused sudden death. He was of opinion that such clots were formed during slow death.

Dr. SILCOCK exhibited an aneurism of the descending aorta opposite to the origin of the superior mesenteric artery. The bodies of the twelfth dorsal and first two lumbar vertebræ had been eroded by it. It had burst into the sheath of the left psoas muscle, and tracked down this to form a fluctuating tumour beneath Poupart's ligament. The dura mater over the spinal cord was exposed for about half an inch. He referred to a somewhat similar case published by Sir William Fergusson in vol. xx. of the Society's *Transactions*. During life the case had been supposed to be one of malignant disease; the man had complained of pain first in one hip and then in the other; he had been ill two years. In reply to questions from Mr. George Lawson, Dr. Silcock said that there was no discolouration of the integument. He could not say when the rupture took place, but, as some of the clot was laminated, it was probably of long standing.

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Dr. Wilks wished to ask Dr. West for further particulars as to the bruit in his first case. He remembered two similar cases, one under Dr. Addison, the other under Dr. Fagge, in which a correct diagnosis had been made. The murmur in the latter case had been presystolic at the base.

Dr. Frederick Taylor asked Dr. West whether the acute symptoms just before death were due to the rupture. He had shown a similar case some years ago, but the rupture was of some standing. Lately he had had under observation a man aged thirty-nine, accustomed to carry very heavy weights, who had been ill one year with dyspnœa. There was a systolic murmur at the base, and a slight diastolic murmur, and some pericardial friction. These two last disappeared, but there remained a localised systolic murmur at the base, and increased cardiac dulness. There was no suspicion during life that the aneurism had ruptured. At the post-mortem examination the aneurism was found opening into the pulmonary artery just as in Dr. West's case. On the surface of the vessel just opposite the opening there was marked endarteritis, this being the spot upon which the blood coming from the aorta impinged. There was no sudden attack of any kind during the two months he was in the hospital. He did not think the occurrence of rupture in this situation was so very rare.

Dr. West felt certain that in his patient the rupture did not occur during the month he was in the hospital; he dated it from his sudden attack of dyspnœa ten weeks before admission. He had not seen the patient during life himself, but he knew that the diagnosis of aneurism of the aorta had been made, although the rupture had not been suspected.

Sarcoma of the Femur.

Mr. Arthur Durham exhibited a little boy aged nine, with an enormous swelling of the whole of the left thigh dating back from an accident in May last. At first there had been pain, but not lately. The swelling was increasing very rapidly in size. He was of opinion that the bone itself, and not the periosteum, was the primary seat of the disease.

Recurrent Cartilaginous Tumours of Head and Neck.

Mr. George Lawson exhibited some tumours removed ten days previously, and also the mass he had removed in 1877 (a full report of that operation would be found in the *Lancet* for 1878), and a photograph of the patient previous to his first operation. The patient was a lady who, in 1865, had come under the care of Sir William Fergusson for a large tumour below the lower jaw. This had been removed, but a second operation was performed three years later, and two others were subsequently performed by the same operator. When she came under his care, at the age of fifty-seven, in 1877, the tumour extended up to her ear and down to the clavicle; her breathing was laboured, but there was no difficulty in swallowing. He removed the tumour and part of the lower jaw. Dr. Thin examined it for him, and reported that it was a chondroma, but that the cartilaginous tissue was of a low type. Since then there had been five operations for recurrence in the neck. At each operation the tumour was largely composed of cartilage. He suggested that it should be referred to the Morbid Growths Committee.

Mr. Hulke remarked that this was a very unusual case; probably it was not a typical enchondroma; usually when these growths recurred they were found to be chondro-sarcomata.

Mr. Barwell thought that it would have been right in this case to remove the whole of one half of the jaw, instead of only a small portion.

Mr. Butlin was glad to hear that the specimen was to be referred to the Morbid Growths Committee. From Mr. Lawson's account of the case his impression was that it was what he would prefer to call a chondrifying sarcoma—that is, a round- or spindle-celled sarcoma rapidly undergoing cartilaginous change. He inferred that it originated in the outer layer of the periosteum (the parosteal tumour of Virchow). He alluded to a case of his own where the tumour was connected with the radius and was thought to be very malignant, but, in the belief that it was a parosteal tumour, he had decided not to amputate, and had removed the tumour with a very good result. He considered that the sub-periosteal tumours were far more malignant than those arising from the outer surface of the periosteum.

Mr. F. S. Eve fully agreed with Mr. Butlin as to the probable nature of this tumour, and remarked how easy it was in disease of the testicle to study the transformation of sarcoma tissue into cartilage.

Abnormality about the Shoulder-Joint.

Mr. C. B. Lockwood showed this preparation, taken from the dissecting-room at St. Bartholomew's Hospital. The scapula was normal; the humerus presented a process just below its greater tuberosity, attached to which was the infraspinatus muscle; the teres minor passed under this process and was partly attached to it. Congenital abnormality in this situation was very rare, and it was in favour of injury that there was some flattening in the usual site of the greater tuberosity. He thought a piece of bone might have been chipped off, and the periosteum and muscular attachments dragged down. The other humerus showed a well-united fracture.

Mr. Barwell said that the appearance of the humerus closely resembled the condition of the femur that had been described as the result of locomotor ataxy.

Bone Diseases.

Mr. Sutton showed the skeletons of a lizard, a rhea, and four monkeys. In the lizard all the long bones were more or less affected: there were swellings not only at the junction of the ribs and their costal cartilages, but along the shafts of the ribs; the bones of the skull were particularly soft; there were cartilaginous tumours all over the skeleton, two on the humerus each containing a long nucleus. In the rhea the skull was very soft, whereas normally it would be very hard; in the metatarsal bone at the junction of the epiphysis there was a cartilaginous nodule. The first monkey was said during life to have been paralysed; its chest was deformed; there was no beading of the ribs; the crests of the iliac bones were doubled over by the action of the abdominal muscles, and the scapulæ by the action of the serrati. The long bones were very soft at their extremities; the epiphyses were enlarged and showed a small zone of proliferating cartilage, but it was not so bluish as in ordinary rickets. In the trabecular spaces of the medullary cavities he had found fat. In one of the long bones the medullary cavity extended quite down to the epiphysis. In the second monkey the bones presented much the same characters as in the previous one: the skull showed very marked craniotabes, which had even gone on to perforation; the forearms showed swellings like those due to old fracture, but a careful examination showed that there had been no fracture. The third monkey was shown on account of the osteoporosis of the skull, which could not be recognised before the examination was made. The fourth monkey had, he considered, osteitis deformans: there was slight lateral curvature; the radius and ulna were markedly curved, but not at all after the manner of rickets. He had drawn up a table which he thought would show how the several changes of osteophytes, osteomalacia, and osteitis deformans might be brought about. In his view, osteitis, osteoporosis, and osteomalacia all owned a common cause, viz., inflammation.

Mr. Bowlby showed the right femur of a man aged sixty-five. It was much curved forwards and outwards. There were some old adhesions of the knee-joint, attributed to a fall when he was ten years of age, after which he had had bad health for a long time, with sinuses about his knee-joint, discharging. It was not known when the bowing of his femur commenced, but his wife said that during the thirty years she had known him there had been no change in it. The medullary canal was partly blocked up by a mortar-like substance. He also showed the left femur of a man aged sixty-four, very much curved outwards and forwards. The affection had been coming on for ten years, and the patient had been subject to gout for some time. The shaft was very much increased in circumference, and was rough and uneven, less so towards its lower part. The neck was at right angles to the shaft. Some parts of the head and neck presented changes exactly similar to rheumatoid arthritis. The bone was easily sawn; the compact tissue was found to be greatly thickened, and in the centre of the bone there was a small cavity containing a hard sequestrum. The only point in common between the two cases was the periosteal character of the change. In the first case, notwithstanding the curvature, the limbs were of the same length. The second case he regarded as one of true osteitis deformans. The points especially worthy of note were that only

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one bone was affected, that there was a distinct history of gout, evidence of rheumatoid arthritis, and the presence of a small sequestrum, all pointing more or less to inflammation.

Mr. Barwell thought that bone diseases ought to be further differentiated. Many different conditions were included under the head of rickets. He had brought two children that evening as illustrations of the necessity of this. 1. A boy, aged eleven years, whose left tibia was one inch longer than the other and much thicker, and a little bent. The bone had been trephined last summer by one of his colleagues, but no dead bone had been found. 2. A little girl, aged four years and a half, markedly rickety, whose right tibia was more bent than the left; measured on the convexity it was one inch and a quarter longer than the left. The outer side of the right tibia was often found to be tender. His view was that in these cases there was a hyperplastic malady affecting by preference certain regions of bones, which he thought might be produced by other diseases than rickets. He also showed a young man, aged twenty-two, who had had good health up till five years of age, and then a fever set in, after which his bones began to get bent. There was marked genu valgum. The bones were not much bent, but there was a very curious twisting of the left radius. The lad was much stunted.

The President thought Mr. Sutton's specimens very interesting, but it was not to be forgotten that these changes had occurred under unnatural circumstances of life, food, exercise, and climate, all tending towards perverted nutrition.

Mr. Treves considered that Mr. Sutton had not in any way shown that osteoporosis was the result of inflammation; and alluded to the lions' skulls at the College of Surgeons, in which there was marked osteoporosis, due almost certainly to malnutrition. He did not think that osteomalacia could be a result of osteoporosis.

Mr. R. W. Parker agreed that the animals from which these specimens were taken had probably been exposed to just such influences as were generally believed to predispose to bone disease in young subjects. Roloff had recorded a series of experiments which were intended to illustrate the identity of osteomalacia and rickets, and to show how this disease, in its most typical form, could be produced, without other damage to the animals, by simply feeding them on a diet deficient in phosphates. It would have been very interesting if Mr. Sutton could have traced any such cause in his cases, for they seemed to be cases of true osteomalacia, both in their naked-eye and microscopic appearances. He could not accept Mr. Sutton's views on the clinical analogies and relations of the different forms of bone disease shown. It remained, in the first place, doubtful whether, under normal circumstances, there existed beneath the periosteum a new growth which could become an osteophyte under the condition of irregular growth: for he had seen many osteophytes from which apparently normal periosteum could be peeled off. Again, if osteoporosis were an antecedent stage of osteomalacia, the latter disease should be much more common than it actually was. Osteoporosis was frequently seen in the post-mortem room—especially in the skull bones of young subjects,—but osteomalacia was a rare disease even in adults. And, finally, as regarded epiphysial over-growth, he deprecated the idea of calling that rickets, for rickets was a much more general disease, and not always or chiefly connected with bone disease at all.

Mr. Eve remarked that it was important to bear in mind that Mr. Sutton's cases were all diseases of development, whilst some of the affections that had been alluded to were disorders of adult life or even old age. In reference to Mr. Barwell's theory he observed that in rickets, as a rule, the new bone occurred on the concave aspect of the bone.

Mr. Sutton, in reply, said that he considered that all pathological processes were exaggerations of physiological ones. The chief signs of inflammation in his cases were increased vascularity, and that the periosteum was intimately adherent to the bone. The cases he had examined presented the usual appearances of osteomalacia.

Royal Institution.—Mr. H. Heathcote Statham will give the first of two lectures on "Music as a Form of Artistic Expression," on Saturday, March 10. The subject of Professor Tyndall's discourse on Friday evening, March 16, is "Thoughts on Radiation, Theoretical and Practical."

THE MIDLAND MEDICAL SOCIETY.

Wednesday, January 24.

E. Malins, M.D., President, in the Chair.

Dr. Suckling exhibited a man suffering from Primary Lateral Sclerosis of the Spinal Cord. Two years ago he first noticed a weakness and trembling in his limbs, which had increased ever since. Sensation was intact. There was great exaggeration of knee-reflex, and marked ankle-clonus. The optic discs were normal. There was a history of syphilis.

Mr. Eales showed three cases in which the Lens had been Dislocated, in each case inwards, and somewhat upwards, as the result of blows on the eye. In the first case (a little boy aged four years) the lens still retained its transparency intact, though nearly five months had elapsed since the injury. The pupil, moreover, remained completely dilated, and would not contract even under the application of eserine drops (gr. iv. ad ʒj.). Myopia and astigmatism, due apparently to the shifting of the lens, were present in the second case (a man aged thirty). The lens was quite opaque, in addition to being dislocated. There was also a rupture of the sclerotic coat just behind and parallel to the corneo-sclerotic; the iris being incarcerated in the wound. The eye was blind, and T = −2. In the third case (a man aged eighty-three years) the lens had been opaque and dislocated for thirty years. In spite of the age of the patient, and the long time since the injury, the lens, and also its capsule, had been removed successfully.

Dr. Malins showed two Ovarian Cysts which he had removed a few days previously—one, a simple one, from a girl aged sixteen years, weighing, with its contained fluid, eight pounds, remarkable for the rapidity of its growth, which extended over only three months. The other was of a dark colour, and its walls were considerably thickened, and showed signs of much inflammatory action; while the pedicle had become completely severed in consequence of rotation of the tumour causing strangulation of the pedicle.

Mr. Bennett May read a paper "On Operative Treatment in Cases of Intestinal Obstruction," in which he laid stress upon the difficulty and importance of making an accurate diagnosis in this condition, and alluded to the various operations that a surgeon may be called upon to choose between in his attempts to relieve this condition, which he arranged in the following order, as regards subsequent mortality, in an increasing ratio:—1. Colotomy in the loin. 2. Enterotomy, by a small incision in the right groin, through which the first distended and presenting bit of intestine is secured and made the site of an artificial anus, without exploration. 3. Inguinal colotomy, by opening the sigmoid flexure in the left groin. 4. Laparotomy, by median section, the cavity being explored, the cause of obstruction removed, and the wound closed again. Laparo-enterotomy, if completed by opening the small intestine. He thought the reasons why enterotomy gave such a much lower death-rate than laparotomy or laparo-enterotomy were, firstly, because the conditions for which it is typically applicable are themselves less acute and lethal; secondly, the injury inflicted by the operation is far less; while, thirdly, it is undertaken earlier; and he regarded it as a compromise between colotomy, which in some cases was the better operation, and laparotomy, and one which many surgeons invariably adopted in all cases where the indications to open the colon were not clear and distinct. There were, however, cases in which laparotomy was the only suitable operation, and in many of these it was wise to open the small intestine as near the lower end of the ileum as possible, and stitch it to the median wound, thus performing laparo-enterotomy, and not to trust entirely to the removal of the apparent cause of obstruction. In many such cases the artificial anus after a while closed, fæces passing by the natural passage. In impacted gall-stone results had been uniformly bad; and in this condition, if slight force failed to dislodge the calculus, he would perform laparotomy. If there was great local pain or tumour he would not confine himself to the median section, but would open the abdomen near the apparent seat of trouble. In chronic obstruction, if due to obstruction in the small intestine from various causes, such as tumour, etc., and in many cases of obstruction in the large intestine where the cause could not be localised, he regarded enterotomy as the best operation. In conclusion he alluded

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to the difficulty experienced in exploring these cases in consequence of the great distension of the intestines generally present. After a comparison of these various operations, he gave a short history of four consecutive cases, attended with great difficulty in diagnosis, on which he had operated in his private practice during the latter half of 1882. In three of these he explored the abdomen by the median section, finding in one strangulation by a diverticulum, in another stricture of the large intestine, while the third had a small ventral hernia; in the fourth case he performed colotomy.

THE ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, FEBRUARY 5.

JOSEPH WALKER, M.D., President, in the Chair.

DR. WALKER, the newly elected President, took his seat for the first time, and delivered his inaugural address, in which he reviewed the present state and future prospects of the Society, and suggested certain changes with the view of rendering the meetings more attractive and useful to the general body of the profession.

Mr. NATHANIEL STEVENSON showed an electric lamp for illuminating the cavity of the mouth, which had been made for him by the Swan Electric Light Company; the strength of the current, which was generated by a bichromate battery of four cells, was regulated by a very ingeniously devised rheostat of his own invention.

Mr. BOYD WALLIS also exhibited a lamp of similar design and purpose, but the light was produced by the incandescence of a carbon filament *in vacuo*, instead of by the heating of platinum wire. In the latter case, if too strong a current was used the platinum would melt, and the lamp was thus rendered useless; hence the necessity for the ingenious, but complicated, rheostat described by Mr. Stevenson. The carbon filament being practically indestructible, little attention need be paid to the strength of the current. Mr. Wallis also showed a double induction electric motor, of American manufacture, which, with a six-celled bichromate battery, would run a dental engine or lathe at any speed required.

Mr. HENRY SEWILL then opened a discussion on the following question:—"Do the incontrovertible facts which we now possess as to its etiology and pathology fully account for the phenomena of Dental Caries?" He thought there could be no doubt that this question should be answered affirmatively. He thought it had been satisfactorily proved that caries was essentially a disintegration of tissue due to the action of external causes. The fact that caries occurred in dead teeth, and in artificial teeth made of ivory, was of itself sufficient to show that the disease was not of constitutional or of local inflammatory origin. The chief agent in this disintegration was certainly *acid*, derived from the decomposition of food, from deranged secretions, acid mucus, etc. The predisposing causes were whatever rendered the enamel and dentine more easily acted upon by acids, as fissures and malformations of the enamel, soft badly-formed dentine, crowding and irregularity of the teeth, which favoured the lodgment of decomposing *débris* and interfered with proper cleanliness, and anything which favoured the formation of acid within the mouth, as a bad state of the secretions, chronic dyspepsia, etc. Mr. Sewill then reviewed the authorities on the subject, showing that Messrs. Tomes, Wedl, Leber and Rottenstein, Magitôt, and others all favoured the view that caries was the result of ordinary physical causes acting from without.

Mr. COLEMAN replied that if acid was the sole cause of caries the result would be a more general action upon the teeth than was commonly met with. He had tested the condition of the mouth in some hundreds of cases of acute caries, but could not detect any unusual acidity. The statement that caries in living and in dead teeth was identical had been denied by some observers, and Dr. Frank Abbott had asserted that he found distinct evidence of inflammatory change in carious dentine, and it appeared to be a fact that the changes found in carious cementum were precisely similar to those which occurred in bone during the progress of undoubted inflammation. He thought also that the appearance of caries in previously sound teeth, which not unfrequently occurred after severe illness, pointed to the influence of a constitutional and not merely a local cause.

At this point the discussion was adjourned until the next meeting.

ACADEMY OF MEDICINE IN IRELAND.

PATHOLOGICAL SECTION.—FRIDAY, FEB. 2.

J. M. PURSER, M.D., President, in the Chair.

EXHIBITION OF SPECIMENS.

DR. C. F. MOORE exhibited a living patient, a strong woman, aged seventy-one, suffering from molluscum simplex. Neither her children, her grandchildren, nor any relative, had a similar disease. The growths commenced twenty-five years ago, without pain or injury to her health, in size varying from a small shot to that of a small grape, some sessile, some pendulous, growing on the face, neck, hands, chest, and arms; none on the lower limbs.

PENETRATING WOUNDS OF THE BLADDER.

Mr. STOKES exhibited the bladder of a patient who had been recently under observation in the Richmond Hospital, suffering from an exceptionally rare form of penetrating wound of the bladder. The patient, a youth aged sixteen, employed in an iron foundry establishment, was playing with a companion at vaulting over a pair of long forgers' tongs. Failure attended one of his attempts to clear the instrument, and one of the long handles passed through the anus into the rectum a considerable distance. The boy fell, and the handle of the tongs was promptly removed by his companion. When brought to hospital he was in a state of great collapse. His sufferings were extreme. There was some slight hæmorrhage from the rectum; and the urine, when drawn off, was found deeply tinged with blood. On the second day all the symptoms were much aggravated. The abdomen became tympanitic and swollen, the pain agonising, and there was great vesical irritability. On the third day the patient became delirious, in which condition he remained until released from his sufferings, seventy-four hours after the accident happened. The autopsy revealed a perforation of the anterior wall of the rectum, about one inch and a half from the anus. Here the instrument had passed into the bladder through the trigone, and emerged at the fundus of the organ opening into the peritoneal cavity, in which there was a large quantity of sero-purulent fluid. There were well-marked signs of extensive peritonitis. The author referred to the three somewhat analogous cases published by Mr. Prescott Hewett, Mr. Buée, and Mr. Bryant, giving the leading particulars of each; and also to the cases mentioned by M. Howel and M. Joubert de Lamballe. The question as to what is the chief factor inducing peritoneal inflammation in these cases was likewise discussed, the author inclining to the belief—from the evidence afforded by several instances of vesical rupture, intra-peritoneal gunshot wounds of the bladder, and also the experiments of MM. Vincent and Murzel—that urine, when first extravasated, and before any decomposition of its constituents takes place, is comparatively innocuous; and the practical deduction would be, provided no distinct contra-indication existed, the desirability in such cases of promptly securing a free exit for the urine, by cystotomy or laparotomy, before the changes take place, which, as a rule, lead to such disastrous consequences. In the case the author brought under the notice of the Section, neither of these operations could be contemplated, owing to the extreme condition of prostration the patient was in when admitted into hospital—a condition from which he never rallied.

In the discussion which followed, Mr. CROLY directed attention to the value which he assigned to præcordial anxiety as a diagnostic symptom of ruptured bladder—a view which was not sustained by the facts of the case which Mr. Stokes recorded.

DIAGNOSIS OF PHTHISIS BY MEANS OF THE MICROSCOPE.

Dr. PURSER exhibited the viscera of a man who had died of phthisis. In the lungs there were tracts of dense fibrous tissue surrounding the bronchial tubes and pulmonary vessels and extending to the neighbouring portions of the pulmonary tissue. This was extensively consolidated by fibrous thickening of the alveoli. There were numerous tubercles which

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had for the most part undergone fibrous changes. Caseation was not present to any great extent, but there was a large cavity due to this cause at the base of the right lung, and smaller cavities at both apices. The bronchial glands were indurated, and contained tubercle. Tubercles were abundant in the liver and spleen, both of which organs were amyloid. In this case the *Bacillus tuberculosus* had been detected in the sputum five weeks before unequivocal signs of phthisis had been detected by the stethoscope.

Dr. FINNY said the patient in question, when under his care, was the subject of amyloid disease of the liver. The point of greatest interest on that part of the case was the evidence it afforded bearing on the view of Schüppel and others, as to where amyloid disease began. It was not amyloid degeneration springing from small arteries in the liver, and in which the whole enlargement was due to the liver-cells being involved in the disease: here the liver-cells were pushed aside by the growing of the amyloid disease, the result of which was a sort of infiltration, which caused atrophy and degeneration of the liver-cells, and the destruction of their functions.

Dr. WALTER SMITH said this was the first case published in Ireland in which a microscopical diagnosis of phthisis had been made, and that five weeks before the ordinary signs of the disease could be detected by a skilled ear. He did not know whether they could hold that the converse proposition was true—namely, that the absence of bacilli argued the absence of phthisis. A gentleman came under his care with evidence of an intra-thoracic tumour. The evidences of that disease subsided, and the gentleman got well; but he got a cough, began to expectorate a quantity of purulent fluid, and got thinner, and it became evident that there was mischief at the right lung. He (Dr. Smith) forwarded some of his sputum to Dr. Purser, who, having examined it, informed him that he had been unable to detect any bacilli in it. That was several months ago, and the patient had not since developed any symptoms of phthisis.

The Section adjourned.

MEDICAL NEWS.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 22:—

Hubbard, Frederick Edmund, Guy's Hospital.
Lichfield, James William, West Kensington.
Llewellyn, Ernest Evan, 152, Mile-end-road, E.
Maddison, Thomas Harwood, 70A, Osnaburgh-street, N.W.
Seymour, John Rushy, 76, Stamford-street, S.E.
Sheppard, Henry Anderson, Southampton.
Stubbs, Robert Pickering, Sunderland.

The following gentleman also on the same day passed his Primary Professional Examination:—

Williams, Morris James, St. Bartholomew's Hospital.

APPOINTMENTS.

BICKLE, L. W., M.R.C.S., L.R.C.P.—Non-Resident House-Physician to St. Thomas's Hospital.

FELL, W., M.A., M.B. Oxon., M.R.C.S., L.R.C.P.—House-Physician to St. Thomas's Hospital.

HAIG BROWN, C., M.B., C.M. Aberd., M.R.C.S., L.S.A.—House-Physician to St. Thomas's Hospital.

HULL, W., M.R.C.S., L.R.C.P., L.S.A.—Assistant House-Surgeon to St. Thomas's Hospital.

MILTON, H. M. N., M.R.C.S., L.S.A.—House-Surgeon to St. Thomas's Hospital.

SAVILL, T. D., M.D. Lond.—Resident Accoucheur to St. Thomas's Hospital.

SHEPPARD, W. J., M.B. and M.S. Durh., M.R.C.S., L.R.C.P.—Assistant House-Physician to St. Thomas's Hospital.

WELLS, A. E., M.B. Lond., M.R.C.S., L.R.C.P.—House-Surgeon to St. Thomas's Hospital.

BIRTHS.

BARLOW.—On February 23, at 10, Montague-street, Russell-square, the wife of Thomas Barlow, M.D., M.R.C.P., of a son.

MOUAT.—On February 4, at Bangalore, India, the wife of Surgeon-Major Mouat, M.D., A.M.D., of a daughter.

PRINGLE.—On January 29, at Meerut, North-West Provinces, India, the wife of R. Pringle, M.D., Surgeon-Major H.M.'s Bengal Army, of a daughter.

MARRIAGES.

BOSWELL—MACCOLL.—On February 28, at Kensington, Alexander Boswell, M.D., of Ashburne, to Janet Helen, second daughter of the late Rev. Dugald MacColl, of Kensington.

MURPHY—DAVIDSON.—On February 21, at Fort Bellary, Ceded Districts, Madras Presidency, F. H. S. Murphy, Surgeon Army Medical Department, son of Surgeon-General M. W. Murphy, Army Medical Department, to Eveline Constance, only daughter of Lieutenant-Colonel A. A. Davidson, A.K.C. and F.L.S., Madras Staff Corps, Bellary.

DEATHS.

BACON, G. M., M.D., M.A., at the County Asylum, Fulbourn, Cambs., on February 22, aged 47.

BABER, ROSA SELDON, wife of John Baber, M.D., at 34, Thurloe-square, S.W., on February 22.

CHRISTOPHERS, JOHN CROWEN, F.R.C.S., at 22, Westgate-terrace, South Kensington, on February 26, aged 70.

DUKE, WILLIAM ALEXANDER, Surgeon-Major, at Meerut, India, on January 13.

REID, JAMES, Surgeon-Major (retired) Her Majesty's Madras Army, at Ashbury Dale, Torquay, on February 25, aged 85.

VACANCIES.

BOSTON UNION.—Medical Officer. (*For particulars see Advertisement.*)

CAMBRIDGE FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Principal Medical Officer. Salary £175, with house free of rent, rates, and taxes. Candidates must not be more than forty-five years of age. Applications, stating age, qualifications, whether married or single, and with testimonials, to be sent to Mr. W. P. Littlechild, 5, Queen's-lane, Cambridge, of whom further information may be obtained, not later than March 28.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, PARK-PLACE, CHEETHAM, MANCHESTER.—Honorary Surgeon. Candidates must be Fellows of one of the Colleges of Surgeons of the United Kingdom, or hold a degree in surgery, granted after examination by a University recognised by the General Medical Council. Applications, with testimonials, to be sent to Mr. E. W. Marshall, Secretary, 36, Barton-arcade, Manchester, on or before March 6.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, LONDON, N.—Junior Resident Medical Officer. (*For particulars see Advertisement.*)

MIDDLESEX HOSPITAL, W.—Assistant Dental Surgeon. (*For particulars see Advertisement.*)

PARISH OF ST. MARY, ISLINGTON.—Resident Assistant Medical Officer and Dispenser. (*For particulars see Advertisement.*)

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD, E.C.—House-Physician. Candidates must be registered under the Medical Act, and must not engage in private practice. A private sitting-room and bedroom, with attendance, coals, and gas, are provided, and an allowance of £30 per annum is made in lieu of board. The post is tenable for six months. A copy of the bye-laws may be had of the Secretary, to whom applications and testimonials should be sent by March 8, by twelve noon.

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, WELBECK-STREET, W.—Casualty Physician. (*For particulars see Advertisement.*)

YORK LUNATIC ASYLUM.—Resident Medical Superintendent. (*For particulars see Advertisement.*)

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

THE STEAM DRAFT INHALER.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have arranged, by the kindness of Messrs. Benham and Son, of Wigmore-street, for the public inspection of the inhaler made by them in 1875 for the Children's Hospital, under my directions, side by side with one of Allen's (or rather Mr. Parker's) ventilating kettles, brought before the Medico-Chirurgical Society in 1879 as original. Mr. Parker can take any of his friends to see these machines, and he will probably perceive more clearly than he has yet been able, that his is a very poor imitation of my old one.

I am, &c.,
ROBERT LEE.

6, Savile-row, W., February 27.

"MASSAGE."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following advertisement appears in a newspaper:—

"MASSAGE.—An M.D., residing in a fashionable seaside southern healthy resort, receives into his house a few resident patients, with a view of carrying out this plan of treatment with perfected mechanical arrangements. Terms, &c., M.D., care of ——"

(You will not care to publish the address given.) Can you inform me what is the nature of this treatment, and what it is supposed to cure? Also, whether it can only be administered to wealthy patients in a fashionable locality by wide-awake physicians?

I am, &c.,
SANGRADO, M.D.

D. A. Patvardhan, L.M.V.S., Prince of Wales's Hospital, Jamkandi, India.—Letter and enclosure received.

Measles, Orkney.—A serious epidemic of measles has broken out in one of these islands, and the public schools have been closed in consequence. The disease is said to be of a mild type.

Mr. Williams.—The celebrated William Cheselden lectured at the early age of twenty-two. The Royal Academy of Surgery in Paris was opened in 1731. You will find a paper on Œsophagotomy in "The Memoirs." The first to perform the operation in this country was Dr. Scott, F.R.C.S., of Portsmouth.

A Curious Fact.—One outcome of the temperance movement is the arrival of a shipload of 464 pipes of lime-juice from Montserrat. It is said to be used for cordials.

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L.S.A.—Sir Hans Sloane gave the Botanic Garden at Chelsea to the Society of Apothecaries in perpetuity.

The New Infirmary at Ayr.—This establishment has just been formally opened. The General Hospital has accommodation for forty-five patients besides children, while the isolated hospital for infectious cases provides for twenty-four patients. The cost has been £11,500, of which £2600 is still required.

Serious Depreciation of Public-house Property.—From the last *London Gazette* it appears that the number of bankruptcies and liquidations of liquor-sellers, variously described as licensed victuallers, hotel-keepers, wine and spirit merchants, etc, was the largest of all the trades and professions. Of seven London taverns of the approximate value of upwards of £90,000, offered for sale a few days since, not one was sold, all of them being either bought in or withdrawn. There are thirty public-houses within half a mile of the Liverpool Custom House closed, and tenants cannot be found to go in. It is stated by the Brewers' Association that the houses would not pay the outgoings of rent, taxes, and licence duty.

Hygiene and Sanitation.—An exhibition of hygienic dress decorations and sanitary domestic appliances, under the auspices of the National Health Society, is to be held in June next in the Knightsbridge Hall. Miss Lankester, of 44, Berners-street, will give any information.

A Flagrant Breach of the Workshops Act.—A nailmaker has been charged before the magistrates at Halesowen with infringing the Act under the following circumstances. The inspector, on visiting the defendant's nail factory at nine o'clock at night, found children at work, who admitted they began to work at seven o'clock in the morning. These children had never attended school. Wholesale violations of the Act were, it was stated, taking place, and great difficulty was experienced in bringing the offenders before the magistrates. The defendant was fined £4 15s.

M.A. Cantab.—Dr. John Addenbrooke, who graduated M.D. at Cambridge in 1712, and died June, 1719, at the early age of thirty-nine, bequeathed £4000 "to erect and maintain a small physical hospital," which is now the well-known Addenbrooke's Hospital at Cambridge.

Vaccination Items.—It appears that the Great Council of Berne has decided by a small majority to continue the law rendering vaccination compulsory. But it is stated this success is not of a kind to justify much elation, the votes being: for, fifty-seven; against, fifty-six—a majority of one.——A Bill, it is announced, has just been laid by a Dr. Stower before the Massachusetts (U.S.) Legislature for the entire repeal of the Vaccination Laws, on the ground of the evils arising from the use of animal virus.——At West Bromwich small-pox is prevalent, and the vaccination officer reports to the Board of Guardians that at three of the public schools he was informed that he could not be allowed to inspect the children without the consent of the clergymen and managers, and in one case the managers declined to allow him to make the examination. It appears an idea had got abroad among the poorer classes that black men were going round to examine the children. The Guardians have decided that the required information as to the successful results of vaccination and the health of the children should be obtained from the masters and mistresses of the schools, to whom forms will be supplied for that purpose.

Violating the Factory Act.—At Oldham the Central Mill Company have been fined £78 12s. for an infringement of the Factory Act. The inspector found forty-five women and young persons in the mill at seven minutes past the hour for stopping. The illness of the manager at the time was the defence.

Great Infantile Mortality, Dundee.—The Sanitary Inspector has reported to the Sanitary Committee of the Dundee Police Commission on the cases of diphtheria and other diseases in the town, as well as on the great mortality among children under five years of age. In reference to the latter, the Sanitary Inspector was instructed by the Committee to examine forthwith, in regard to its drainage and sewerage, every house in which diphtheria had occurred. All the deaths from diphtheria during the month were those of children.

A Curiously Ignorant Coroner.—In the case of a young woman whose death was caused by puerperal fever, accelerated by want of skilful medical attendance, and who had been attended by Mr. George Jackson, chemist and druggist, 870, Rochdale-road, Manchester, the coroner, addressing Mr. Jackson, said, "The jury have hesitated to pass a vote of censure upon you, but they have expressed their opinion that you did not attend the woman as frequently as the case required. You have shown great ignorance of the profession in not taking the temperature of the body or making local application. I am going to caution you myself—I don't care what the jury do,—but if another case comes before me as coroner, in which you are implicated, I shall certainly advise the jury to send you to the assises for manslaughter. I don't think you are at all capable of taking care of such cases." If the Coroner's remarks are correctly reported, he displayed crass and, it is to be hoped, a rare ignorance as to the functions, duties, and required education of a chemist. The poor woman appears not merely to have had no "skilful medical attendance," but no medical attendance at all. We do not remember to have heard before of "a chemist and druggist" presuming to undertake such a case.

F.R.S.—Dr. John Woodward was often elected on the Council of the Royal Society, from which he was expelled in 1710 for his grossly insulting remarks to Sir Hans Sloane. When the question of his expulsion was discussed it was pleaded in his favour that he was such a good-natured philosopher, but Sir Isaac Newton, who was in the chair, remarked that "in order to belong to that Society a man ought to be a good moral philosopher, as well as a good-natured one." Woodward brought an action against the Council to be reinstated, but did not succeed. He afterwards quarrelled with the celebrated Dr. Mead, and, meeting him accidentally under the gate of Gresham College, they drew their swords. Woodward's foot slipped, and he fell. "Take your life," said Mead. "Anything but your physic," replied Woodward, with his usual sarcasm.

New Waterworks, Dover.—These works, which have been in progress for the past two years, have just been opened. The cost has been nearly £10,000.

Unregistered Sick-Benefit Societies.—The son of a deceased member of a sick benefit society at Gravesend sought to recover in the county court from the society the amount of sick-pay and funeral-money which had been withheld. On the commencement of the hearing of the case the solicitor who appeared on behalf of the society took a preliminary objection that the judge had no jurisdiction, on the ground that the society was not registered. The objection was fatal, and the plaintiff was nonsuited. As to the validity of the claim no evidence was in consequence produced. These societies are composed chiefly of poor persons, and it would be some protection to the members if medical practitioners would require proof of the society being legally registered before becoming the "club doctor."

The North London Nursing Association.—It appears from the second annual report of this Association that 1133 cases of accident and disease were attended by the trained nurses of the society during the past year. The total number of visits paid was nearly 17,000. There are several similar nursing institutions in the metropolitan districts, all of which are more or less carrying out the same beneficent work.

Dr. Drake.—We can only refer you to a "History of the Fourth Estate," by the late Frederick Knight Hunt, M.R.C.S., one of the founders of the *Medical Times*, where you will find an account of the proceedings. Your namesake, Dr. James Drake, of Cambridge, was prosecuted by the House of Lords for publishing, in 1702, "The History of the Last Parliament," etc. He was brought to trial, but acquitted. He was a clever and learned writer, and a bitter political partisan.

T. Chandler.—The result of the voting for the triennial elections of Poor-law guardians in the Ulverston Union is a large majority in its favour.

Obesity.—In a case attended by Dr. Gregory, of Edinburgh, the patient weighed twenty-three stone, and by a regular system of diet was brought down to fifteen stone. Brown bread with a certain quantity of bran in it was employed. The English made prisoners by Tippoo Saib were fed on a scanty pittance of bread and water, and were in better health than before; some of them during their captivity were cured of liver complaints of long standing.

Student.—It is a French proverb that "Vin sur lait, c'est souhait; lait sur vin, c'est venin." You will find the work to which you refer in the Library of the College of Surgeons, and a paper on the subject in the *Medical Times*, vol. xviii.

COMMUNICATIONS have been received from—

The Secretary of the Epidemiological Society of London; The Secretary of the National Association for Promotion of Social Science; The Secretary of the Sanitary Assurance Company; Messrs. Street Brothers, London; Mr. Henry Grey, London; Mr. E. J. Colston Fear, London; The Editor of the "Freeman's Journal," Dublin; The Registrar of the Apothecaries' Hall, London; Mr. J. Chatto, London; The Honorary Secretary of the Medical Society of London; Mr. Edward East, London; Mr. J. Dixon, Dorking; Mr. John Bellamy, Local Government Board, London; Mr. T. K. Underwood, London; Mr. R. Davy, London; The Registrar-General for Scotland, Edinburgh; The Secretary of the Royal Institution, London; Mr. E. Nettleship, London; Mr. J. T. W. Bacot, Seaton; Dr. J. W. Moore, Dublin; Mr. Spencer Wells, London; Dr. Willoughby, London; Dr. Mercier, Dartford; Dr. J. R. Wolfe, Glasgow; The Secretary of the Clinical Society of London; Dr. Robert Lee, London; The Secretary of St. Thomas's Hospital, London.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Sanitarian—Therapeutic Gazette—Band of Hope Review—British Workman—Philadelphia Medical Times—Italian Times, February 20 and 24—Ciencias Médicas—Canada Lancet—Letts's Illustrated Household Magazine—Roman News, February 21—Leisure Hour—Boy's Own Paper—Girl's Own Paper—Sunday at Home—Friendly Greetings—New York Medical Journal—Midland Medical Miscellany—Philadelphia Medical News—Edinburgh Medical Journal—Revista de Medicina—National Anti-Compulsory Vaccination Reporter—Indian Medical Gazette.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, February 24, 1883.

BIRTHS.

Births of Boys, 1397; Girls, 1372; Total, 2769.
Corrected weekly average in the 10 years 1873-82, 2749·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	807	747	1554
Weekly average of the ten years 1873-82, corrected to increased population ...	941·6	911·3	1852·9
Deaths of people aged 80 and upwards ...	...	...	61

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	3	4	4	4	...	1	2	2
North ...	905947	2	3	10	3	2	...	7	2	4
Central ...	382238	...	5	1	2	2	...	1	1	3
East	697738	...	8	11	4	5	1	...	1	...
South	1265927	4	9	10	5	15	...	4	...	3
Total	3816483	6	28	36	18	28	1	13	6	12

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·224 in
Mean temperature	42·6°
Highest point of thermometer	55·0°
Lowest point of thermometer	32·0°
Mean dew-point temperature	39·5°
General direction of wind	S.W.
Whole amount of rain in the week	0·54 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, Feb. 24, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Feb. 24.	Deaths Registered during the week ending Feb. 24.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values.	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2759	1554	20·5	55·0	32·0	42·8	6·00	0·54	1·37
Brighton	111262	65	29	13·6	50·0	32·4	41·6	5·34	0·13	0·33
Portsmouth ...	131478	76	48	19·0	...	...	...	...	...	...
Norwich	89612	70	40	23·3	...	...	...	...	...	...
Plymouth	74977	56	25	17·4	53·8	31·6	43·3	6·28	0·52	1·32
Bristol	212779	132	73	17·9	53·9	33·3	44·1	6·73	0·35	0·89
Wolverhampton .	77557	68	48	32·3	54·7	31·6	41·4	5·22	0·00	0·00
Birmingham ...	414846	334	183	23·0	...	...	...	...	...	...
Leicester	129483	108	59	23·8	56·5	33·0	43·6	6·45	0·04	0·10
Nottingham ...	199349	166	96	25·1	54·8	33·5	42·9	6·06	0·38	0·97
Derby	85574	65	23	14·0	...	...	...	...	...	...
Birkenhead ...	88700	76	38	21·2	...	...	...	...	...	...
Liverpool	566758	438	307	28·3	...	...	...	...	...	...
Bolton	107862	61	66	31·9	52·0	32·1	41·8	5·45	0·48	1·22
Manchester ...	339252	288	190	29·2	...	...	...	...	...	...
Salford	190465	151	70	19·2	...	...	...	...	...	...
Oldham	119071	99	51	22·3	...	...	...	...	...	...
Blackburn	108460	88	66	31·7	...	...	...	...	...	...
Preston	98564	95	52	27·5	...	...	...	...	...	...
Huddersfield ...	84701	45	38	23·4	...	...	...	...	...	...
Halifax	75591	52	32	22·1	...	...	...	...	...	...
Bradford	204807	117	93	23·7	54·0	35·4	43·6	6·45	0·02	0·05
Leeds	321611	241	147	23·8	55·0	36·0	44·7	7·06	0·30	0·76
Sheffield	295497	218	153	27·9	57·0	35·0	44·4	6·89	0·05	0·13
Hull	176296	117	103	30·5	56·0	32·0	42·9	6·06	0·10	0·25
Sunderland ...	121117	91	69	29·7	59·0	36·0	46·0	7·78	0·13	0·33
Newcastle	149464	113	66	23·0	...	...	...	...	...	...
Cardiff	90033	75	40	23·2	...	...	...	...	...	...
For 28 towns ...	5620975	6244	3757	22·7	59·0	31·6	43·3	6·28	0·23	0·58
Edinburgh	235946	119	91	20·1	54·1	32·0	42·9	6·06	0·18	0·46
Glasgow	515589	399	330	33·4	52·0	29·5	44·0	6·67	0·47	1·19
Dublin	349885	222	239	35·7	58·6	26·5	44·2	6·78	0·05	0·13

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·22 in. The lowest reading was 29·79 in. at noon on Sunday, and the highest 30·67 in. at noon on Friday.

APPOINTMENTS FOR THE WEEK.

March 3. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Dr. W. H. Stone, "On Singing, Speaking, and Stammering."

5. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies." (Lecture IV.)

Royal Institution, 5 p.m. General Monthly Meeting.

Medical Society of London (General Meeting, 8 p.m.), 9 p.m. Ordinary Meeting. Mr. Broadbent will report "Two Cases illustrative of the Successful Employment of the Cold Douche."

Odontological Society of Great Britain, 8 p.m. Casual Communication by Mr. Ackery. Adjourned discussion on the following question, propounded by Mr. Sewill:—"Do the Incontrovertible Facts which we now possess as to its Etiology and Pathology fully account for the Phenomena of Dental Caries?" Paper by Dr. John C. Thorowgood, "On Therapeutic Agents for the Promotion of Osseous Development."

6. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. R. S. Ball, "The Supreme Discoveries in Astronomy: The Law of Gravitation."

Pathological Society, 8½ p.m. Mr. C Heath—Hypertrophy of Ramus of Lower Jaw (living specimen). Dr. N. Moore—Rheumatoid Arthritis. Mr. Lane—Fracture of Sternum. Dr. Hale White—1. A Peculiar Process from the Fibula; 2. A Sacculated Bladder. Mr. Roger Williams—Sarcoma of Bladder (two cases). Dr. Finlay—1. Sarcomatous Change in Uterine Fibroid; 2. Columnar Epithelioma of Stomach. Mr. Barker—Disease of Bladder and Kidneys. Mr. Clutton—Tumour of Bladder and Skull. Mr. Eve—Simple Ulceration of Bladder. Mr. J. H. Morgan—Multiple Growths in Bladder. Mr. Swinford Edwards—Bladder after Cystotomy.

7. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

Royal College of Surgeons of England, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies." (Lecture V.)

Royal College of Physicians, 5 p.m. Dr. J. E. Pollock, "On the Modern Theories and Treatment of Phthisis." (Croonian Lectures—III.)

Epidemiological Society, 8 p.m. Surgeon-General John Murray, M.D., "On the Delhi or Oriental Sore." Deputy Surgeon-General Joseph Ewart, M.D., "On the Causes of the Excessive Mortality among the Women and Children of the European Army of India."

Obstetrical Society of London, 8 p.m. Specimens will be shown. Inaugural Address by the President, Dr. Gervis. Clinical Cases of interest by Dr. Godson.

8. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Spectroscope and its Applications."

9. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies." (Lecture VI.)

Royal College of Physicians, 5 p.m. Dr. A. B. Garrod, "On Uric Acid in its Relation to Renal Calculi and Gravel." (Lumleian Lect.—I.)

Clinical Society of London, 8½ p.m. Mr. Godlee, "On a Case of Fracture of the Radius and Dislocation forwards of the Ulna at the Wrist, in which the Lower End of the latter Bone was removed to effect Reduction." Dr. Pearson and Dr. Broadbent, "On a Case of Acute Necrosis of the Right Orbital Plate of the Frontal Bone, giving rise to Thrombosis in the Frontal End of the Longitudinal Sinus, in the Cavernous Sinus, and Ophthalmic Vein." Dr. G. Johnson, "On Picric Acid as a Test for Albumen and Sugar in the Urine." Mr. R. W. Parker, "Contused Wound of the Thigh and Leg in a Young Child; Gangrene of the Limb; Death. Dr. Dyce Duckworth will exhibit—1. A Case of Remarkable Hardness of the Ears; 2. A Case of Rheumatismal Subcutaneous Nodules. Dr. S. Mackenzie will show a Case of Subcutaneous Nodules without Definite Rheumatism."

Ophthalmological Society, 8½ p.m. Dr. C. E. Fitzgerald, "On the Connexion between Uterine and Eye Diseases." Mr. Adams Frost, "On Pulsating Exophthalmos." Dr. David Little, "Sarcoma of Iris Successfully Removed." Mr. A. H. Benson, "On Paresis of Ocular Muscles after Diphtheria." Living and Card Specimens at 8 o'clock. Mr. J. E. Adams—On Embolism of both Retinal Arteries. Mr. A. H. Benson—Ophthalmoscopic Drawings. Mr. Adams Frost—A Case of Double Pulsating Exophthalmos.

Royal Institution (Council Meeting, 8 p.m.), 9 p.m. Prof. G. D. Liveing, "The Ultra-Violet Spectra of the Elements."

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ORIGINAL LECTURES.

CROONIAN LECTURES
ON
MODERN THEORIES AND TREATMENT OF PHTHISIS.

Delivered at the Royal College of Physicians, Feb. 28, 1883.

By JAMES EDWARD POLLOCK, M.D.,
Consulting Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

Lecture I., Part I.

Mr. President and Gentlemen,—When your kindness committed to me the charge of laying before you in these lectures some subject of more than passing interest to our practical profession, I had to consider whether I should attempt an addition to the knowledge we already possess, or, taking the standpoint of critical experience and placing you upon it, I might not with more advantage review the labours of others, and the ever-varying features of opinion. In the former case I should have been able to add but little to the great mass of knowledge contributed by many observers, and by several whom I see before me; whereas in the latter I should but make an appeal to the experience and judgment of all, and, if fortunate, might not only give expression to the doubts and difficulties of some, but possibly afford more firm ground for conclusions on subjects of grave import to every practitioner of our art. This method of reviewing and taking stock of our knowledge has much to recommend it, provided it be not too frequently practised. There are transition periods in which it is a wise, almost a necessary, act of mental impartiality to look back and see both what has been *done* and *thought* by our predecessors. There is a natural proneness to a belief in the superiority of our own views to those who have gone before us. We are, in fact, their critics, and the critic always fancies himself higher than the criticised. We are the inheritors of their labours and their intellectual accumulations, and our first step as heirs is to value at what we think a just estimate the legacy of their knowledge. Of course every student has to place himself on a level with the past of that branch of Science or Art which he proposes to acquire; but every impartial critic has not only to know what has been observed and thought, but should study the causes which led up to the various opinions recorded. The art of which we are ourselves students is essentially transitional; it has derived its form and colour from the errors as well as the wisdom of past generations, while occasional great leaders have stamped upon it the impress of their own genius and individuality. To see with any degree of clearness, as the great observers of the profession saw one or more generations back, we should, like them, emerge from the comparative darkness of the age in which they lived, and from the mists of false teaching and imperfect science in which they were trained, into the light which emanated from their own genius. Around everyone who has added something real to knowledge there is a luminous atmosphere which enables him to see what others did not recognise; and to us living in the far distance of time, it is not always easy to distinguish this increased illumination shed by genius from the more steady light of gradually increasing knowledge. What I mean is that the discoverer and propounder of a new theory or observations tending to reverse the opinions of the time is surrounded by a halo, into the zone of which we may scarcely enter, but which largely affected the results of his teaching at the time. Our medical knowledge, but especially our medical theories, have, as we know, received the impress of many a great name; and as successive generations continued to teach these doctrines, the whole community of the profession became impregnated with the views of certain great masters. The advance of medical knowledge has ever been—as is indeed the case with all the sciences—a record of the work of many observers and labourers, but illuminated here and there by the genius of a few who from time to time stood out from the crowd, generalising the knowledge and opinions of the many, and thus became the representatives of theories which were to bear their name, and give form and colour to the knowledge of the day. It is, indeed, well for us that our art is transitional, and that we hold to no teaching which can be disproved; but these masters did a good work in crystallising and so transmitting definite propositions for our reception or refusal.

Now, it is because our knowledge is essentially transitional and progressive that I venture to think I may occupy your time not unfruitfully in reviewing some of the changes of opinion through which we have passed, and are passing. I believe that we are now exactly in one of those periods of thought when some think that all old things are passing away, and "that all things must become new before we are nearer truth." I believe that the wisdom of past observers, which is only a synonym for their knowledge, is being slighted because it is old, and that the *eureka* of modern observers and theorists threatens to disturb much that is venerable, not alone from its age, but from its deep foundation in truth. I see in much of the present day a tendency to generalise from a few facts instead of accumulating great stores of evidence from which to deduce something like a general law. We cannot but recognise a tendency to refer all morbid influences to a few observed microscopical objects in diseased matter, and from these to rush to a conclusion affecting the very roots of our social life, that all such matter is transferable, and may be propagated from individual to individual. Much that was believed—nay, much which was proved—is brought up into the focus of argument, where theories are sometimes more prevalent than facts. We are almost asked to believe that all diseases have a common nucleus. In the midst of our modern light a disbelief has crept in of ancient lights, which, not the less, "were lights shining in darkness."

It may be that the tendency of the hour is not to incredulity, indeed it is rather to an over-advanced faith in some things, but it is shaky on some ascertained points, and, as all young life, is mixed with imaginative speculations which tend to error. We have discovered some things, and much that is great and useful: we can prevent germs of disease from entering the system; we can prevent secondary infections: but it does not follow that all disease is of germ origin, or that all secondary disorders are from septicæmic sources. We have by careful pathological work made it clear that many broken-down lungs have never had a trace of tubercle, and that many tubercular deposits have never broken up the lung structures, yet it does not follow that every case of phthisis is of inflammatory origin, or that innumerable cases do not progress from tubercle to caseation and softening and cavity with their known train of events. The contagiousness and inoculability of phthisis are now the received faith of many, and the treatment proposed has, of course, varied with the theory of the proposer. Some are sent to snowy heights, others to relaxing river-beds. Disinfectants and antiseptic remedies are more in vogue than nutrients, and surgical principles are applied to cavities in the lung. I mention these not to disparage them, but to justify my assertion that we are actually in one of those transitional periods when thought is rife on the subject of phthisis, its cause and its extirpation. In the days, sir, when you and I were students, we found it difficult to get a word spoken about phthisis. It slew then, as it slays now, about one-fifth of the adult population, but few lecturers spoke of it, and no student was examined on it. We never asked then if hæmoptysis were a cause or a consequence of any of the other events of phthisis; of the nature of its peculiar fever and waste; of the cause of its secondary disorders; of the retarding structural alterations which nature erects as barriers against its local mischief. But those have become subjects of investigation, and inquiry is awake; and good, and not evil, must be the result. There is, doubtless, no disease so hopeless in its progress and results that we shall not find it to be capable of alleviation or prevention, and the prospect is not bad for an improved knowledge where there are so many inquirers. It is from stagnation of opinion, hopelessness of more knowledge, that the thoughtful mind recoils as from the death of all improvement in our art.

These form some of the considerations which have weighed with me in selecting "Phthisis, its Modern Theories and its Modern Treatment," as the subject of these short

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lectures. The young among us will not hesitate to reconsider the researches and opinions of former great men, while the older may excuse a reconsideration of questions with which they are already familiar, from the vast importance of the results, if results we are to have from newer teaching. It is also evident, as is indeed the case with all medical subjects, that this disease does not stand alone, that it is impossible to isolate it from considerations of general pathology, and that the laws which regulate its progress and results are conditions common to many diseases. There is here no special pathology, as there should be no special treatment; and we may well quote the well-known saying of one of the most thoughtful of our predecessors, that "it demands a higher discipline than any mere knowledge of auscultation rightly to comprehend it." I propose to consider briefly, then, the older doctrines of phthisis, and to compare them with the later; to point out the morbid changes, their causes, and their relation to the progress of the affection; to inquire into the causes of the secondary disorders, and to consider what has been advanced as to the germ origin of phthisis, and the evidence in existence as to its contagiousness. I shall also ask, as arising from these considerations, how its treatment is to be guided; on what principles we should advise the various climates; and whether the local disease in the lung be the main condition to combat, or if we are to rest contented with remedies of a nutrient and general character. If in this review I should appear to generalise rather than to descend into too much detail, you will, sir, I hope, attribute it to the largeness of the subject, and to a desire to bring before you such salient points as come in prominent relief before each of us in daily practice. I am also addressing, and with much secret diffidence, an audience most highly informed on this very subject, many of whom are the advanced pioneers of our knowledge.

Reviewing the literature of phthisis from the earliest times of which we have any record, we may say that the Greek word for *waste* expresses the idea of the disease when it was uppermost. The wasting of the bodily tissues was the earliest, the latest, and the most marked symptom of the disease throughout. It became evident before cough and expectoration, it fluctuated with the patient's other conditions, and it ended by exhausting him to the grave. We know now from auscultatory signs that this waste is greatest when the morbid product in the lung is breaking up, but before stethoscopes were invented the fact could only be proved by the increased amount of expectoration which then occurred. Fever, indicated by chills, heats, and sweatings, also coincided with increased waste of tissues. The correlation of these symptoms with waste was not understood. We now know that the waste itself and the *débris* of tissue poured into the blood are direct causes of the high temperature, and that there is a strict coincidence between three conditions—(1) active lung irritation, (2) tissue waste, and (3) high temperature. But we may take it that the ancient view before stethoscopes was that waste was the leading and most incorrigible symptom.

It remained for Laennec, Bayle, and their followers to describe and map out by physical signs the nature and amount of lung disease. We are familiar with their teaching. The grey miliary tubercle deposited sparsely or thickly in portions of the lung underwent degenerative changes. The masses caseated, ran together, softened, and in their softening broke down the surrounding tissues of the lung, strangled its nutrient bronchial as well as the pulmonary proper vessels, cut off the circulation, and caused the death of the part. A cavity, more or less irregular in size and shape, resulted. Inflammatory products surrounded, and were a consequence of, this softening and disintegration. The secondary congestion so commonly observed in advancing cases of disease at the base of the same or opposite lung were fresh deposits of tubercle, only to be accounted for by the lowered constitutional state of the patient—the tubercular cachexia, as it was called. He got an unhealthy inflammation, involving all the tissues of the lung, though why he should have had any affection of the opposite lung does not appear from Laennec's reasoning. In like manner the well-known changes in the intestines causing tubercular inflammation of the mucous glands took place, and diarrhœa precipitated the fatal issue. The constitution or diathesis in which this occurred was called scrofulous, and glandular swellings, tending to slow inflammatory change and caseation, took place in the cervical, mesenteric, and other lymphatics. These, like the tubercle in the lung, were the secondary results, so to speak, of a primary cachexia or constitution, and of the tubercular habit. I take it that this is a fair description of the theories of Bayle and Laennec. After an investigation of many thousands of cases of phthisis I do not think it can be taken to account for all the phenomena of that disease, but this I shall again notice. What the discoverers of auscultation did prove was this. They recognised certain morbid changes in the lung which they called tubercle. They noticed its physical alterations and its tendency to degenerate, and they gave us a means of defining and even measuring the progressive destruction of lung tissue, which resulted as these masses softened and involved the surrounding parts. I do not know that auscultation has added much to what Laennec taught us about phthisis. He was wonderfully accurate and perfected physical examination in a marvellously short time. What more do we know now of the signs of cavity or of pneumothorax than the knowledge he left us? We have refined on his teaching no doubt, especially in the diagnosis of incipient disease, and some phenomena of effusion into the pleura and pericardium, but he gave us a masterly method of identifying changes of lung structure. Nor was his pathology at fault. He did not go far enough. So far as his description of tubercle goes it is verified by daily practice, but it was all tubercle with him. He did not allow cases of phthisis which were originated in inflammatory change, and in which there was no tubercle at all. It would be unjust to the memory of Addison not to point out that he in England was the first to hold that inflammation is an occasional and common cause of phthisis. His beautiful illustrations are accurate pictures of the results of inflammatory change. There is, then, a phthisis without tubercle, and in many post-mortem examinations no tubercle is to be found. Again, the secondary deposits of tubercle, which often surround old inflammatory products breaking up in the lung, do not appear to have a fair place in Laennec's descriptions. The secondary congestions in the base of the same or the opposite lung were regarded as fresh tuberculous attacks, and the mechanical theory of morbid matters carried and deposited on the pulmonary tissue is modern, and found no place in his work. The influence of hæmoptysis, as now recognised by many, cannot be said to have been noticed fairly by the French school. The mechanical effects of effused blood insufflated into the pulmonary tissue, and forming clots which lose colour and become encysted, or undergo the changes of caseation, were no doubt often mistaken for tubercle.

Again, in criticising the French school of that period by the light of experience at the bedside, I fail to discover in their teaching the division of cases according to their progress and duration and according to the structure of lung invaded, and the changes of a fibroid nature undergone. This I hold to be entirely due to the modern English school. In Laennec's time a cavity in the lung meant the third stage, the final consummation of the disease, the almost immediate death of the patient, and the abandonment of all hope. We now sit down to treat cases of cavity, to promote their shrinking, to diminish their secretion, to attack them surgically and drain them, and some of the most prolonged instances of invalid life with which I am acquainted are in persons with a single cavity in the lung. I had one such case under my notice for thirty years, many for periods of ten and fifteen years; and I have no doubt that the experience of all of us will bear out this statement.

Again, the whole series of chronic changes in lung tissue which have been called fibroid, and in which the lung is condensed and contracted and fresh fibroid tissues developed throughout its structure, extending in bands from the thickened pleura, closing up old cavities, strangling its bloodvessels, and leaving, in fact, only bronchial tubes which undergo dilatation,—this condition, which supervenes more or less in every case of chronic phthisis, and which often prolongs life indefinitely after the patient has undergone thickening of the lung, softening of tuberculous or inflammatory deposit and cavity, had not been described till modern English observers depicted it.

In contrasting more recent views and observations with those of the Laennec period, there is one of surpassing importance which seems to pervade the theories of all lung affections, and its consideration leads us to review the modern German pathology. There was so much of form, consistency,

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and precision in the French doctrines. It was so convenient to have found one single element—tubercle—with definite form and history, which underwent changes uniform and calculable, to each of which a stage of disease might be assigned, and from which the duration and result might be calculated, that it is easy to see now why it was accepted both by pathologist and practitioner. To the former it was a concrete idea, a unique morbid product, recognisable by its history and its appearance; it had a definite life, or underwent changes, sooner or later, which converted it either into cheesy or chalky matters, and if a new crop appeared a like process could be predicted: while to the practitioner it was also a definite quantity; he could explain it to his patients' friends, and appear to be precise where, perhaps, he was not quite true! But to the whole profession, and to the public, its very precision and the known and invariable course which tubercle follows when once established in the lung, stamped it as incurable and hopeless. Now, this state of things was the death of all progress in medical knowledge, and the stagnation of all hope of a remedy. The very precision with which the malady was known rendered investigation useless and advances impossible. It will be in our memory, however, that of this hopeless mass of cases, all of one gloomy aspect, there stood out certain ones which refused to follow the given course to death,—in whom, if there were tubercle, it neither killed nor prostrated them. Persons were known to live for years with cavity in one lung, and eventually, perhaps, to die of something else. Was it, then, possible that if this tubercle always runs a certain course there might not be other morbid products in the lung giving rise to the symptoms and signs of phthisis, which run a different course, some of which may tend even to recovery, and others simply to alter lung structure, but not to destroy it? I doubt not but that some such reasoning as this struck anxious observers who were sick of regarding the sphinx of phthisis, and, unable to answer its questions or account for all its phases on the old French theory, were not content to be absorbed by the problem, but rather received a new impulse towards its solution. The modern German mind, pretty commonly in opposition to the French, rushed at once to the conclusion that if there be such a thing as tubercle its presence was only an occasional result, and not a primary cause of phthisis. Tuberculosis is a danger incurred by the phthisical, but the disease is seldom initiated by it. All Laennec's teaching was wrong. Tubercle was not a new growth of specific nature which formed the essence, so to speak, of phthisis. The cheesy transformation so commonly found in consumptive lungs did not result from tubercle; they might be due to many causes, but chiefly to inflammatory products. That bronchial, peribronchial, and pneumonic deposits often pass for tubercle; that the miliary form is the only tubercle; that those masses of infiltrated lung which Laennec called "stuffed" with tubercle are really masses of inflammatory products, the result of catarrhal pneumonia; that in many cases there is not a single tubercle in phthisical lungs. Then, as to the origin of the disease, Laennec had been precise in assigning it to a constitutional cause. It never arose out of acute or chronic pneumonia; hæmoptysis is never a cause, though a frequent result, of phthisis. It never arose out of a catarrh or neglected cold—a bronchitis developing phthisis being not a primary genuine cold, but catarrh caused by irritation of the lung from already existing tubercle. His mistake was not that tubercle is a new growth, but that condensations of lung which have quite a different origin are also products of a development of tubercle. In enunciating these startling propositions, the well-known German, Niemeyer, naïvely remarks that "pathological anatomy is in advance of clinical medicine." Well for its truth if it be not sometimes in opposition to it! In estimating the influence of the various theories of phthisis on its treatment, I shall have occasion to call your attention further on to this opposition in views, and to ask you whether, in your observation, phthisis arises from neglected colds, or whether the catarrhal symptoms have become developed in the course of the phthisis.

HEIGHT OF WAVES.—In the Atlantic waves have been known to reach to 24, 32, and even 43 feet. In the Pacific Ocean a height of 32 feet has been observed, 14½ feet in the Mediterranean, and 13½ in the North Sea.—*Rev. Scientifique*, January 17.

THE LETTSOMIAN LECTURES

ON THE

TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

By A. ERNEST SANSOM, M.D. Lond., F.R.C.P.,
Physician to the London Hospital; Senior Physician to the North-Eastern Hospital for Children, etc.

LECTURE III.—MITRAL STENOSIS.—FEBRUARY 5.

(*Concluded from page 239.*)

AND now let us consider the evidence which clinical observation affords us of the mode of onset of the obstructive mitral lesion. I will give, as briefly as possible, some cases illustrative of the various ways in which the clinical signs indicate the disease to arise.

I. *Presystolic murmur developing insidiously without signs of Rheumatism.*—A lady (Mrs. M.), aged fifty-two, came under my care in 1876 for dyspepsia with very slight jaundice. She manifested no history of, nor predisposition to, rheumatism. I had frequent opportunities of examining the heart, and there were no signs whatever of lesion. In January, 1877, there having been no symptoms other than an occasional slight dyspepsia previously, the patient complained of "fluttering at the heart," and I found just right of the apex a rough presystolic murmur abruptly terminated by the impulse. I do not think it possible that such sign could have been overlooked in my previous examinations. I can have no doubt that the lesion of stenosis developed gradually without any subjective signs to mark its onset. I have watched the case at intervals ever since: there have been no articular phenomena. The presystolic murmur has been attended with quasi-reduplication of the second sound, and a few months after its first becoming evident a short systolic murmur at the apex was observed also. The systolic murmur increased in intensity, the presystolic continuing to be entirely characteristic. During the whole period until the present there have been no articular troubles, and the cardiac complication, though giving rise occasionally to very slight symptoms, is for the most part, and for long periods, accompanied by no signs of discomfort. This case affords evidence that, in adults, the morbid change can occur in a gradual and insidious manner, with no rheumatic nor other notable phenomena to mark its onset and progress. I have previously given many illustrations to show that a similar course is often manifested in the cases of children who come under treatment for the *consequences* of the cardiac lesion which has been so insidiously effected.(a)

II. *Systolic murmur at apex becoming changed to presystolic murmur.*—The following notes are condensed from a report by my former house-physician, Dr. J. Needham, by whom the case was carefully watched. John W. D., aged eighteen, was admitted under my care at the London Hospital on October 17, 1877. Patient had had so little subjective symptoms that he said that, with the exception of chicken-pox, he had never been ill in his life until eight weeks ago. He had, however, been under treatment for *psoriasis* at intervals for nine years. His present illness was attended with pains in the limbs and abdomen. There was no effusion into the joints, and the temperature never rose above 100·2° Fahr. On admission a soft systolic murmur was noted in the mitral area, the outline of the heart, as determined by percussion, not differing from the normal. Two days after admission the systolic murmur was described as loud and conducted towards left axilla. Seven days after admission there was slight thrill at apex. Fifteen days after admission, the note says: "The cardiac conditions are considerably altered. There is now a well-marked thrill at apex, and, instead of the systolic murmur, there is a well-marked harsh murmur, increasing in intensity and terminated by a clear first sound. About two inches nearer the sternum a blowing systolic murmur is distinctly audible." The systolic murmur (which was in the tricuspid area) subsequently disappeared, and the presystolic became louder, terminating with a sudden uncomplicated first sound. The patient improved under treatment, but suddenly, six weeks after admission, became epileptic.

(a) "Clinical Lectures on Diseases of the Heart in Childhood," *Medical Times and Gazette*, December 27, 1879, page 711.

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In this case there was no history of acute rheumatism, though probably the psoriasis was an indication of a rheumatic tendency. In other cases we have distinct evidence that the murmur of mitral regurgitation developed in relation with acute rheumatism may be, in course of time, accompanied by the murmur of mitral stenosis. We may take, as an example, the case of Lydia Grace P., a child of eight, admitted under my care at the North-Eastern Hospital in 1872. She suffered from acute rheumatism. Whilst under observation a systolic murmur developed at the apex. She was discharged convalescent, and re-admitted in January of the following year with a second attack of rheumatic fever. There was now evidence of mitral regurgitation, with cardiac hypertrophy. She was again discharged convalescent, and re-admitted on August 13, 1873, with a third attack of acute rheumatism. She now manifested well-marked *presystolic*, as well as systolic, murmurs at the apex. She was again discharged convalescent. I do not think it necessary to multiply examples—I have observed many such—of this mode of induction of the condition of mitral stenosis. I may add, however, that it would appear that in some cases the condition of regurgitation is *replaced* by that of stenosis. For example, in a child of nine (Elizabeth M.), a systolic bruit in July, 1869, was found to be accompanied by a presystolic in November; and two years afterwards a presystolic alone was audible, terminated by a sharp and loud impulse.

III. *A presystolic murmur developing insidiously may subsequently be found to be accompanied by a systolic murmur.*—Arthur V., aged eight, was admitted under my care at the North-Eastern Hospital for Children on December 30, 1874. He had never suffered from any definite disease, save measles and whooping-cough at three years of age, but he had frequently been ailing. He manifested a highly pronounced presystolic thrill at the apex, and the presystolic impulse of the left auricle was easily demonstrated on the surface of the chest-wall. A well-marked presystolic murmur was abruptly terminated by the impulse of the ventricle. There was evidence of enlargement of the right chambers, but not of the left ventricle. On January 5 of the following year symptoms of subacute rheumatism became manifest, and then a systolic murmur became evident at the apex. Subsequently the systolic murmur increased in loudness, and was heard over a wide area, whilst the presystolic was only audible at a point just below and internal to the left nipple. Signs of want of compensation now became more marked, and œdema—which, however, disappeared under treatment—supervened. Such a history is by no means uncommon; the signs of regurgitation supervene on those of stenosis, and the double lesion becomes manifest.

I hope that the evidence which I have brought forward may enable us to see in a clearer light the mode of development of mitral stenosis. This evidence, as I consider, tends to show that in a considerable number of cases the origin and course are insidious and gradual. The disease is not independent of rheumatism, but is often unaccompanied by pronounced rheumatic phenomena; it is initiated by the form of endocarditis which I sketched in my first lecture as manifested by no subjective sign, accomby no prominent symptom, and yet differing in no essential feature from that which occurs in obvious relation with rheumatism. The endocarditis which results in mitral regurgitation is more violent, so to speak, whilst that which initiates stenosis is more protracted, giving rise to a slower formation of fibrous, quasi-cicatricial tissue that under the even pressure of blood in the auricle tends to form the smooth septum which has erroneously suggested a possible congenital causation.

Not all the cases of mitral stenosis, however, originate in this manner. In some there has been first the induction, in association with the phenomena of acute rheumatism, of the lesion of mitral regurgitation; then has occurred probably a slow welding of the curtains; and in the repeated attacks of endocarditis the changes have been slower than those which result in retraction of curtains, cords, and columns to the ventricular wall.

By either of these modes produced, it is probable that secondary changes take place in the diseased tissue—under the tension of blood the fibrous septum thickens, for it has to bear the chief strain of the auricular pressure, and not the ventricle, as in the case of mitral regurgitation. In some cases it undergoes calcareous degeneration, and probably in others, where gouty signs are manifest, it becomes infiltrated with the earthy lithates.

Compensation in cases of mitral stenosis may be maintained, as in mitral regurgitation, for long periods. It may be even more simple in the former case than in the latter, for it is only a hypertrophy of the right ventricle, and not of both ventricles, that is needed to sustain it. The left ventricle, not being dilated, continues to afford a sufficient *point d'appui*, and it only needs the *vis à tergo* of a strong right ventricle, aided by a hypertrophied (or at least not enfeebled) auricle, to urge a sufficiency of blood through the narrowed orifice. So long, therefore, as a good nutrition maintains the muscular power of right ventricle and left auricle, any special methods of treatment of a simple condition of mitral stenosis may be unnecessary. In course of time, however, the right ventricle or left auricle, or both, may begin to fail. Usually it is the former, but I have quoted a case in which it was markedly the latter, and in this I have no doubt the muscle failed on account of the great privations which the patient had undergone. The right chambers dilate on account of the pressure which is maintained within them if the compensatory muscular power begins to fail. Then ensue the dyspnœa, the œdema, ascites, etc., with which we are familiar in analogous cases of mitral regurgitation. To restore compensation we may use, for the most part, similar means to those which we have considered in regard to mitral regurgitation. When the gravest troubles of orthopnœa and dropsy have supervened, I have in many cases found that rest, combined with the administration of nutrients and tonics, and with digitalis, have restored the *status quo ut ante*, often for a considerable period.

Coincidently with the use of means for increasing muscular power, I consider that small and repeated abstractions of blood are even more valuable in mitral stenosis than in mitral regurgitation. The tension of the right heart may be sensibly relieved even by a leech or two applied over the præcordium. Dr. Bedford Fenwick has narrated a case which is an amusing as well as instructive example of the value of blood-letting in failure of compensation in mitral stenosis. A patient of Dr. Andrew Clark's, at the London Hospital, manifesting the physical signs of mitral stenosis and aortic incompetency, had not improved by a month's treatment with rest, ether, senega, and digitalis. There was much dyspnœa, with signs of œdema of the lungs. The urine became scantier, the œdema increased, and coma appeared to be supervening. At this time the patient in his half-consciousness struck his own nose and brought on a copious epistaxis. Shortly after, consciousness returned, a copious diuresis followed during the night, and in less than a week the œdema disappeared, and the patient became convalescent. I quite agree with Dr. Bedford Fenwick that abstraction of blood by leeches or cupping is too much neglected in the cases we are considering, and that it is to be justified both by theory and practice.(b)

As regards the special action of *digitalis* in restoring compensation in cases of mitral stenosis, I am not convinced that this is so markedly proved to be beneficial as in the cases of mitral regurgitation. I have found that in some instances, as shown by the sphygmograph, digitalis has restored regularity, whilst in others it has increased irregularity of pulse. I believe it to be most valuable where stenosis and regurgitation are combined. Where the right ventricle is chiefly at fault I do not think its good effect is so manifest; where it can induce an efficient systole of both ventricles and co-ordinate them, then I think it is the more valuable. In failure of the right heart, therefore, in extreme mitral stenosis I look more hopefully to caffeine and to *Convallaria majalis*.(c)

M. Sée has narrated three cases of mitral stenosis in which the extract of convallaria was administered. In the first there was a marked diuretic effect, the quantity of urine increasing under treatment from an average of one litre to two litres and a half and three litres, together with a great amelioration of the dyspnœa which was manifest on exertion. In the second case, evidencing œdema, ascites, and grave signs of cardiac failure, after a dose of one gramme per diem of

(b) "On the Use of Venesection in Cases of Heart Disease," by Bedford Fenwick, M.D., M.R.C.P.: *Lancet*, August 5, 1882, page 179.

(c) I have to thank Messrs. Savory and Moore, and Mr. Brownen, F.C.S., for exhibiting not only the various preparations of convallaria, but the alkaloids (convallarin and convallamarin) obtained from the plant.

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extract of convallaria, marked diuresis occurred, and œdema disappeared in two days. Oliguria returned, and the dose was increased to one gramme and a half. In successive days the quantity of urine passed increased in the following proportions:—600 grammes, 2200 grammes, 2400 grammes, and 3000 grammes; it then fell to 2000 grammes, all signs of œdema and ascites having disappeared. The third case was one in which diabetes mellitus co-existed with mitral stenosis. In this case a very marked amelioration of the symptoms of imperfect compensation is recorded.

Considering the absence of violence in the storm which, involving the endocardium, leaves behind it the condition of obstruction, we may ask whether the result, stenosis, is not more innocent than the result of the more violent storm, regurgitation. The question is a difficult one. We can point to many cases of regurgitation where there has been an arrest of all morbid process, and where fair health has been maintained for long periods of years. Such instances are, I think, less common in mitral stenosis—there is not a like quiescence; and degenerative changes or intercurrent morbid phenomena are more likely to occur. The average age at death in nineteen cases of mitral stenosis observed by myself was thirty-five years. In forty-two fatal cases collected by the late Dr. Hayden it was 37·82 years. In the cases both of mitral stenosis and of mitral regurgitation, however, it is not alone with the simple dynamical problem of the restoration of muscular compensation that we have to deal. In every case we have to weigh the probability of complications arising—complications so intimately associated with the conditions as to present an essential matter for consideration in any question as to treatment. Such are (1) repeated attacks of pericarditis or endocarditis, and (2) embolism.

A patient who has once suffered from rheumatic affection of the endocardium is liable, of course, to a repetition of the morbid process. With such pericarditis is by no means infrequently associated. In children I am strongly of opinion that pericarditis, when resulting in adhesion of the two layers of the pericardium (and often accompanied with fibrous proliferation amongst the muscular fibrils), is a grave cause of danger, spoiling the chance of compensation, and greatly interfering with the beneficial results of treatment. In cases in young people, where compensation fails even under suitable treatment and good nutrition, where evidences of cardiac hypertrophy and dilatation are in excess of those which usually accompany the valvular lesion, we may, I think, generally conclude that the pericardium is adherent.

An accident of this condition both of regurgitation and stenosis (especially the latter), yet intimately connected with them, is the occurrence of *embolism*. The consideration of this is often forced upon us when the question occurs as to treatment.

Let us consider this matter from its *clinical* aspect.

I. A case presents itself to us with symptoms of cough and dyspnœa. The onset of these symptoms has been sudden, perhaps initiated by a rigor. There may have been slight pyrexia or none. The characteristic feature is that, after a short time, when the cough has been attended with mucous and frothy sputa, the expectoration is observed to be coloured with bright blood. In many such instances we may find localised patches of dulness in the upper or the lower thoracic regions, with a few muco-crepitant râles; in others neither dulness nor moist sounds can be detected. We examine the heart, and find evidence of mitral stenosis or (with less probability) mitral regurgitation. The existence of these signs, especially when the lesion is in the upper lobes, may cause us to fear the advent of pulmonary phthisis; but observation shows us that, though the hæmoptysis may occur again and again, the changes of tubercle are not manifest. Or whilst a case is under treatment for the symptoms of ill-compensated stenosis or regurgitation, a sudden attack occurs of dyspnœa with physical signs of a localised broncho-pneumonia. In some cases the outline of dulness can be delineated as a defined triangle. It is broncho-pneumonia differing from the ordinary form, for its origin may be entirely independent of catarrhal influences, and it has a special feature—the occurrence of hæmoptysis. It is rarely that a case of mitral stenosis goes through its course without the manifestation of some such phenomena. Dr. Hayden records that hæmoptysis was noted as a symptom in forty-four cases out of eighty-one of mitral stenosis (54·3 per cent.). The history of fatal cases generally shows the repeated development of such areas of condensed lung. Morbid anatomy affords the clue to the interpretation of these phenomena. In many instances the right auricle is found to contain, adherent to its *musculi pectinati*, fibrinous coagula, and detached masses from these have been found to block branches of the pulmonary artery. From such infarctions result the appearances formerly described as "pulmonary apoplexy."(d) The infarct may in many cases be undiscoverable, for the plug undergoes fatty degeneration and solution, and the lung-tissue may present no naked-eye changes. I am inclined to think, however, that what is true of the grosser is true of the finer changes, and that the hæmoptysis or the limited broncho-pneumonia of mitral stenosis is due to plugging (it may be of small twigs) of branches of the pulmonary artery.

Now as regards treatment when such phenomena are manifest. In the first class of cases, where no sign of ill-health has previously been prominent, I would accept the occurrence as evidence that compensation is disturbed. There is an abnormal retardation of the circulation in the right chambers of the heart, and we are called upon to use some of the means we have described for increasing the power of the ventricles. In all cases it will be advantageous if we can decrease the tendency to coagulation of the blood, even if we cannot promote the solution of that already coagulated. Dr. B. W. Richardson has advised the administration, in cases of fibrinous separation within the heart and vessels of the circulation, of large doses of ammonia (five-minim doses of the liquid ammonia in iced water or iced milk every half-hour in some cases). Where there has been imminent danger from pulmonary embolism I have employed this plan, and the patient has recovered. I think, therefore, that it is applicable in the cases of less imminent danger—of blockings with smaller coagula—which we are considering. Where, in mitral stenosis or mitral regurgitation, there are developed signs of broncho-pneumonia I think it is advantageous to give ammonia, though it may not be in such heroic doses as those administered where there was danger of complete or extensive plugging of the pulmonary artery. Professor Gerhardt advises carbonate of soda administered by inhalation.

II. The phenomena of embolism may be manifest on the *arterial* side of the circulation. As in the case of those which affect the venous, these may be observed (*a*) in patients who have not shown evidence previously of cardiac distress; (*b*) in those who are under treatment for cardiac disease. I have in my Lectures on Diseases of the Heart in Childhood(e) given ten examples of the sudden manifestation of lesions of the nervous system in patients who had never suffered from any rheumatic affection; and of these ten, six showed the signs of mitral stenosis. The nervous lesions were hemiplegia, hemianæsthesia, hemichorea, and epilepsy. In such cases there can be little doubt that fibrinous coagula detached from vegetations about the mitral orifice were carried by the current of blood, and blocked some of the arterial branches distributed to some part of the cerebro-spinal system.

In cases under treatment for cardiac diseases, the one sign which I have found to indicate the probability of embolism is *a sudden rise of temperature* of the body. The locality of the embolism is not immediately indicated by the symptoms. The relative frequency of the sites of embolism, according to the returns from the Pathological Institute of Berlin, are—kidneys (75 per cent.), spleen (51), brain (20), intestinal tract and liver (7), skin (5), spinal cord (3), thyroid body and eye (occasionally). In my own cases the sites were—spleen (11 cases), kidneys (6), brain (5), retinal artery (1), intestines (1).

The occurrence of any of the phenomena of embolism in cases of valvular disease is an indication either of the recent development of endocarditis with the formation of vegetations, or of the detachment of an old vegetation, or of the occurrence of ulcerative endocarditis. In the last case the sites of embolism are usually multiple, and treatment is of little or no avail. In the other cases the first essential for treatment is the maintenance of *rest* and tranquillity of heart. The blood should be rendered as fluid and non-coagulable as possible, and to this end alkaline salts of

(d) Embolism of the pulmonary artery was found in eleven of sixty-eight fatal cases of cardiac disease of which I have records.

(e) *Medical Times and Gazette*, December 27, 1879, page 712.

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ammonia or soda may be administered. The subject of the treatment of the secondary effects produced by the embolism—effects varying according to its site—of course I cannot approach on this occasion.

ORIGINAL COMMUNICATIONS.

PRACTICAL NOTES ON THE ORDINARY DISEASES OF INDIA,

ESPECIALLY THOSE PREVALENT IN BENGAL.

By NORMAN CHEVERS, C.I.E., M.D.

(*Continued from page* 150.)

PERNICIOUS TYPES OF REMITTENT FEVER.

Algide and Diaphoretic Remittent Fever.

I HAVE already(a) stated and illustrated the fact that Indian Remittent has its Algide and Diaphoretic pernicious types. The cold and sweating stages of ordinary malarious fevers vary much in intensity; but, whenever there is a distinct tendency to collapse in either of these stages, the type of fever must be regarded as pernicious in a greater or less degree.

In his report of cases treated at the General Hospital, Calcutta, for April, 1834,(b) Mr. Raleigh stated that there had been "a tendency to sudden collapse in some cases, proceeding to an alarming extent, from which, however, the patients rallied." Thus, in a man admitted on April 18 with "inflammatory fever," determination to the head being the most marked local symptom, "general bleeding, calomel purgatives, and cold applications to the head were directed." On the 14th the head was perfectly relieved, and he was tolerably free from fever through the morning, but at noon had a regular fit of ague—cold, hot, and sweating stages, succeeded by coldness of the skin and small pulse. Five grains of quinine every four hours. 15th: Paroxysm at noon, which left him without uneasiness. 16th: At the morning visit he was found in a state of collapse; the skin cold, wet, and blue; pulse feeble and rapid, with oppression at the præcordia, and restlessness; the tongue foul. He took a scruple of calomel. The collapse lasted until the evening of the following day, when the report was, "He is restless; has oppression of breathing; skin continues very cold, and pulse feeble. Has had no stool; belly distended." On the morning of the 18th the skin was warmer, and he was altogether better. On the 20th his gums were affected by mercury. By the 23rd he was reported convalescent. Mr. Raleigh added that "in some patients despondency, and sensation of sinking and debility, with a quick though weak pulse, prevailed from the first,—here local bleeding by leeches was substituted for the lancet when determination to a particular organ was indicated."

In the following month, May, Mr. Raleigh reported that "at the latter half of the month, when the heat of the weather became intense, the thermometer standing at 96° in the coolest houses, in the day, fevers" [which early in the month had the common inflammatory character, and were easily subdued by antiphlogistic remedies] "assumed a more malignant aspect; the inflammatory and congestive indications continuing long unabated, and after many days' duration declining into a low typhoid(c) state, in which despondency, apprehension of death, irregularity of circulation, extreme prostration of strength, with a dry dark furred tongue, frequent small pulse, hot clammy and often yellow skin, and depraved or arrested secretions, were among the most alarming symptoms. Relapses were frequent and repeated, and convalescence tardy." It is noteworthy that, at this time, Relapsing Fever was prevalent up-country—in Bareilly, Rohilcund, and the districts around Delhi.

Speaking of the fevers of July, Mr. Raleigh wrote that few of the cases observed the *regular* form of Remittent Fever; but had, for the most part, been continued fever with exacerbations at given periods, usually towards evening. In the early stage, the inflammatory symptoms commonly ran high, with marked determination to the head. If not subdued at this stage, the disease passed into a low typhoid condition. In cases proving fatal, the patient usually became comatose, and sank gradually. Mr. Raleigh adds, "Sudden collapse after a paroxysm was not unfrequent, and showed the necessity of strict adaptation of remedies to immediately prevailing states of the system, particularly with reference to general and local bleeding—which, however beneficial whilst a state of inflammatory excitement existed, would probably, if resorted to at too late a period of the disease, or on the decline of a paroxysm, have proved singularly injurious."

In the autumn of the following year Mr. Raleigh had a case which might, at first sight, appear to be of a type intermediate between Pernicious Remittent Fever and Cholera, but which I believe was not so. A European soldier obtained his discharge at Hazareebaugh, and walked down to Calcutta (a terrific journey at that hot season), and then went about his business in the town for three days. He was admitted on September 26. He was found to be in strong fever, with a deep yellow suffusion of the conjunctivæ and violent headache. He was treated antiphlogistically with bleeding, leeching, and calomel, and did very badly until the evening of the sixth day in hospital, the disease having a paroxysmal remittent character, with severe head symptoms during the paroxysms. On the 29th he had "several pitchy stools" in the morning, and "several green, watery stools in the afternoon, after salts and senna." On the 30th he had salts and senna twice, and was "freely purged—the evacuation a bright green fluid." On the afternoon of October 1 "had a short imperfect paroxysm at 2 p.m.; after its subsidence, has been much purged, and he is now greatly exhausted. A cold, clammy sweat on the surface, but the intellect is clear." On the following morning the report was, "Slept well and refreshingly; feels much better this morning." He remained free from fever, and appears to have made a good recovery. Although, in his remarks on this case, Mr. Raleigh speaks of the "risk of collapse from purging at the decline of a paroxysm," he also insists upon "the necessity of calomel and brisk purgation until healthy secretions are procured." True, this man might, had his constitution been feeble, have died in the collapse which followed the great purging; but I believe that there was no perniciousness in this purging and the very temporary prostration which followed it. At Chittagong, I attended an officer's child, about seven years old, with Remittent Fever. She was quite comatose for more than forty-eight hours, during which time her father and I scarcely left her. The bowels were obstinately constipated, and I gave calomel and croton oil with butter placed on her tongue. At length, suddenly, the bed was literally swamped by a great dejection of thin, greenish fluid, upon which, almost instantaneously, the skin became cool and the intellect clear. She recovered without a bad symptom.

These two cases, I repeat, were not, in my opinion, pernicious (the soldier may have suffered from Relapsing Fever); but it is to be remarked that the really Pernicious Remittent outbreak in Calcutta, in May, June, and July, 1834, as described by Mr. Raleigh, was followed, in September and October, 1835, at Deesa, in the Bombay Presidency, by a closely similar malady, which, in some of the cases, assumed the pernicious cholera form. A very full account of this remarkable type of fever is given by Dr. Jackson, H.M. 6th Foot.(d)

In the month of August, common remittent and intermittent were very prevalent, but there were no casualties. Early in September the fever displayed a more serious aspect. Although the disease often assumed a quotidian and tertian type, the symptoms were so violent and anomalous that the three stages of an intermittent were lost sight of. In some cases the disease was ushered in by stupor, syncope, or loss of sense and motion. When the accession was sudden and without premonitory symptoms, the patient had distracting pains in the head, back, and lower limbs. At one time there was an indescribable sense of oppression on the brain; at another the patient fell as if he were drunk. Violent pain in the ear, the eyebrow, or the

(a) In the chapter on Intermittent Fever, pages 523 and 689, vol. ii. of 1862.

(b) *Indian Journal of Medical Science*, vol. i., page 207.

(c) By this term the Indian writers of that day meant Typhus-like.

(d) *Indian Journal of Medical and Physical Sciences*, December, 1836, page 623. Dr. R. Brown has also described this outbreak: *Ibid.*, May 1, 1837, page 261.

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eyeballs, difficult micturition, hemicrania, vertigo, and confusion of ideas were observed. When the chest was principally affected, the accession resembled a fit of asthma: the patient was seized with sudden dyspnœa, gasping for breath. Sometimes there was pain and an awful sense of oppression across the chest, including the hypochondriac and hypogastric regions. In other cases there was abdominal complication—darting lancinating pains in the epigastrium, tenesmus, and umbilical griping pains; a sensation as if the whole body were distended from within and compressed from without. There were sometimes most agonising cramps in the legs.

The disease was most treacherous and fatal when the symptoms did not run high. When the patient had not been in his usual health in barracks for a week or ten days, he reported himself ill, but could not tell what was the matter. He appeared unable or unwilling to answer questions. He had no pain or sickness; he only complained that he could not sleep or eat. For several mornings after admission he would answer, "Very well, sir." Pulse, skin, and tongue healthy. When, however, he was desired to walk, he could not stand, or staggered like a drunken man. He had lost command of his limbs, and nervous energy seemed to have left him.

Subsequently, perhaps, he would have evening exacerbations, somnolency, immobility of pupils, or bilious vomiting, or watery purging two or three days before death. Others lingered and often sank gradually without these symptoms. One of the most usual characteristics of this disease was debility, moral and physical. This was great and out of all proportion to the previous febrile excitement. A patient, after one, two, or three paroxysms of fever of moderate severity, remained for weeks and months in a state of debility, having perhaps an occasional exacerbation of an afternoon, or not. In some cases of this kind the patient walked about, recovered appetite, and had a clean tongue and regular bowels. If discharged to duty, however, he soon had either a relapse(e) or an attack of some other disease. He could not recover his lost strength.

Extreme apprehension of a fatal termination was frequently observed, but not in the most serious cases. The men seemed determined to die—to lose all confidence in medicine. This condition was indicated by the manner, countenance, and tone of voice. When this feeling was unaccompanied by other symptoms, very little danger was to be apprehended. It will be borne in mind that despondency was a marked feature in the outbreak described by Mr. Raleigh.

The most alarming feature was collapse, "which came across the hospital like a blight, prevailed for three or four days, and then disappeared. On these occasions the weather was generally cloudy, rainy, and thundering. This exhaustion of the vital powers seized some men suddenly, who had been in hospital several days for other diseases. It often appeared in subjects convalescent from slight attacks of fever. It often happened that the majority of the patients in hospital had more or less sinking of the vital powers. The thready or imperceptible pulse, the drenched skin, and the prostration of strength reminded one of Cholera."

"The patient did not appear sensible of his awful situation. His tongue and breath were not cold; neither had he cholera evacuations. No patient was brought to hospital in a state of collapse, with the exception of one who, also having congee-coloured evacuations upwards and downwards, was admitted under the head of Cholera."

"When irritability of stomach and collapse co-existed the case was hopeless. It was observed as frequently in intermittents as remittents; was not preceded or accompanied by horripilation or shaking, nor was it consequent upon a febrile exacerbation. With this sudden sinking there sometimes existed internal heat and thirst. The extremities were often deadly cold, while the trunk was warm. Patients did not complain of cold; they seemed to be insensible of the great loss of animal temperature.

"Some remained in collapse from nine to twelve hours. Recovered by stimulants, they had another attack, and got well again." "Could this state of collapse," the able medical officer inquired, "be the cold stage of the paroxysm of a highly congestive form" [of fever], "or is it not more probable that it was some other disease to which the patient was predisposed by fever?"

Tonics, wine, and beer were administered in vain. The collapse, it is urged, was not the effect of treatment, because it occurred in men who had been neither leeched nor bled. Dr. Jackson had no doubt that an ordinary blood-letting would have induced or aggravated this condition. In some cases, severe from the first, there supervened nocturnal perspirations, so profuse as to drench the bedding. This did not relieve, but debilitated the patients, who sank under the disease. There were, in four months, 232 cases of fever, of which 100 were serious, with 22 deaths.

There must have been something very unusual in the zymotic condition of the atmosphere at this time. The Pernicious Remittent Fever in Bengal, described by Mr. Raleigh, occurred in 1834; the Pernicious Fever of Deesa was observed twelve months later; Pali Plague broke out in 1836; and this latter disease, an unusually severe endemic of Mahamurree in Gurhwal, and Relapsing Fever in Bareilly, Rohilcund, and the districts around Delhi, were contemporaneous.

I shall have to speak again of this Deesa Fever and of other similar outbreaks in India under the head of Cholera, when showing that Algide Pernicious Remittent Fever and Asiatic Cholera are closely linked together.

The above history of the Deesa outbreak illustrates a very noteworthy fact, frequently observed in India, viz., that both European and native troops are particularly liable to fever and other disease in the *second* or *third* year of their occupation of a malarious district. The first year this regiment was at Deesa they had no sickness, with the exception of a few cases of sunstroke and bilious remittent fever. As the narrative cited above shows, the second year brought with it a heavy sick-list and many casualties. So also Dr. Finch proved,(f) by ample statistical data, that to Up-country Sepoys "the third year is pre-eminently the fatal year of their residence in the malarious climate of Lower Bengal."

(*To be continued.*)

(e) In describing the Malarious Pernicious Fevers of the Havana, Dr. Sullivan states that a tendency to relapse or recur is one of their marked characteristics.

(f) *Indian Journal of Medical and Physical Sciences*, 1844, page 160, on "The Effect of Change of Climate on the Health of the Native Army."

SULPHATE OF ATROPIA IN CORYZA.—Dr. Gentilhomme, of Reims, relates some cases in the *Union Médicale du Nord-Est*, which are based upon the fact that sulphate of atropia diminishes the secretion of the nasal mucous membrane so as even to dry it up completely. They were examples of habitual coryza which was speedily arrested by the administration of half, or even a quarter, of a milligramme of the sulphate of atropia when the first signs of a new attack manifested themselves. In one case the liability to these attacks disappeared under the use of the remedy. When given in confirmed coryza the atropia gives great relief, but its action is less remarkable when it is administered at the very commencement. The atropia also modifies in a favourable way bronchitis when this is associated with the coryza.—*Revue Médicale*, February 10.

LOCAL ANÆSTHETICS.—When equal parts of chloral and camphor are triturated together, a clear, somewhat viscid, transparent solution results. This solution has considerable solvent power, and will take up a comparatively large proportion of morphia. Chloroform may also be added to it without precipitation of any portion of the dissolved constituents. Thus: ℞. chloral, camphor, āā ʒij., morph. sulph. ʒss., chloroform ʒj.—m. This may be applied with a camel's-hair brush over the area to be incised, allowed to dry, and reapplied as freely as may be necessary to render the part insensible to pain. Amongst the anæsthetic mixtures for surgical purposes proposed by Professor Redier are solutions of camphor in ether and in chloroform. One drachm of camphor may be dissolved in two drachms of ether, or the same quantity in two drachms of chloroform. A useful anæsthetic mixture is prepared by the addition of crystallised acetic acid to chloroform, in the proportion of one part of the acid to twenty parts. These anæsthetic solutions are applied by the brush freely over the part the seat of pain, or to be incised. In some instances it may be better to moisten a cloth, or some cotton, and allow it to remain for a time in contact with the part. Pure carbolic acid has an anæsthetic effect when applied to the skin.—*Phil. Med. News*, February 10.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

EAST LONDON HOSPITAL FOR CHILDREN.

A CASE OF FALL ON THE HEAD—CONVULSIONS—RIGIDITY OF THE LIMBS ON ONE SIDE—DEATH—POST-MORTEM.

(Under the care of Mr. PARKER.)

[From Notes by Mr. PERCY MARSH, Resident Clinical Assistant.]

E. F., aged fifteen months, was admitted on January 26, 1883, on account of an eczematous eruption about the vulva and thighs (which she has had some fourteen days), trouble with her urine, and restlessness.

History.—She was suckled for eight months, until which time she refused all other food. Some months ago was under the care of Dr. Eustace Smith for bronchial catarrh, from which she recovered. Fourteen days ago she had a fall on the head; she has had "convulsions" since. The child has been ailing more or less since her illness.

Present Condition.—A peevish, wasted child, with eczema about the vulva. Labia majora much swollen; lips of urethra pouting. Abdomen greatly distended, but soft. *Tache cérébrale* appears quickly. Pulse and breathing regular. Nurse reports that there has been no vomiting (except occasionally after food) nor any "brain" screams, and that the bowels are acting about three times a day. No worms in the motions. The bladder was sounded, and a stone was not detected. The four pre-molars are all cut through. Nothing abnormal about the teeth to account for the convulsions. There was no squint. Nothing abnormal could be detected in the sensation. Chest signs, beyond some moist râles, were not present. Temperature 102° Fahr.

January 29.—She has been convulsed the whole day; the convulsions were general. A draught of chloral and bromide was repeated without effect. A warm bath and an enema were also given. As no effect was produced, a few whiffs of chloroform were given; the child then became quieter.

February 1.—The convulsions began again at 3 a.m., the temperature being 104°. The child can hardly swallow. The abdomen continues very distended; the skin is inelastic and doughy. She lays fairly quiet, with eyes open, pupils react to light, left more so than right. There is (?) some rigidity of the left arm and leg. She flushes up when disturbed; breathing is not sighing in character. Bowels loose. She is fed through the nose. There is no squint; pupils equal and regular. Fundus oculorum normal. There is no retraction of the head on the spine. A mild mercurial treatment was being carried out.

7th.—Since the atropine was used to the eye for ophthalmoscopical purposes she has flushed more than before, but these flushes are getting less marked. Rigidity has become more marked; abdomen continues distended and doughy. There has been some muco-purulent discharge from the eyes.

8th.—Is said to have had a discharge of glairy fluid from the right ear last night about ten. There were some convulsive movements of the left side early to-day. She does not look quite like an ordinary case of meningitis.

11th.—Child seems worse. More discharge from ear; breathing of a sighing character, especially when the child is disturbed. Pulse 100, regular.

14th.—Discharge from both ears; rigidity of the left side continues; thigh is flexed on the abdomen, and adducted; hand pronated; forearm flexed. She died at 10 p.m.

Temperature has varied from 100° to 102° for the most part (104° on one occasion), while for a dayor two it was found, temporarily, below normal.

Post-mortem Examination.—Body much emaciated. On opening the chest, the lungs were seen to be studded over with tubercles, rather large, and yellow in colour. The lower lobe of the left lung was undergoing extensive broncho-pneumonic changes; it was quite solid, and sank in water; the rest of that lung was undergoing similar changes, but was in a less advanced stage. Right lung in a similar, but earlier, condition; the lower lobe was adherent to the diaphragm, which, in its turn, was adherent to the liver. The abdominal viscera were all adherent among themselves and to the abdominal wall. The omentum could hardly be detached from the intestines. The whole peritoneal surface was studded over with a multiplicity of large yellowish tubercles of the size of small millet-seeds. No fluid or pus. Brain: The ventricles were full of fluid; the brain-substance softer than normal. The pia mater on the vertex was studded over with the same kind of tubercles as the peritoneum. They were particularly thick over and around the upper extremity of the fissure of Rolando on the right side, just posterior to which in the upper part of the ascending parietal convolution there was a small mass of soft yellow caseous matter. Base of brain was similarly, though to a less extent, studded over with tubercles, especially in the interpeduncular space. There was no effusion of lymph at any spot. The tubercles, though very numerous, were all discrete. The brain-substance was not markedly softened. The dura mater was very adherent to the bone, which was thick, highly vascular, and softer than normal.

Remarks (by Mr. Parker).—The case presented some deviations from the normal type of general tuberculosis with meningitis. The "brain screams," often so marked and so diagnostic, were almost absent. There was never any of the purposeless vomiting which is insisted on in text-books as an important sign; neither was the pulse or breathing irregular; and instead of obstinate constipation there was diarrhœa. The post-mortem examination sufficiently explained the distension of the abdomen—another unusual symptom in tubercular meningitis. The presence of a caseous mass in the middle of the centre for the movement of the left limb, together with the crowd of tubercles which radiated from it across the fissure of Rolando towards the ascending frontal convolution, probably accounted for the one-sided rigidity. We all felt that the case was probably one of tubercular meningitis from the very first, but the unusual course which the disease ran could not be overlooked.

USELESSNESS OF STYPTICS.—In a paper bearing this title, read at the Philadelphia Medical Society (*Phil. Med. Times*, January 27), Dr. Roberts stated the three following objections to the use of styptics:—1. Their reputation as hæmostatic agents leads practitioners to resort to them when more trustworthy methods are needed. Thus valuable time is lost; for, after temporary arrest, the hæmorrhage recurs in the already anæmic patient, and is perhaps followed by disastrous results. 2. If they fail to control the bleeding—which they generally do if important—it is often so difficult to get rid of the pasty clots which are formed, that subsequent ligature of the vessels is well-nigh impracticable. 3. Many styptics prevent union by the first intention, because they irritate the raw surface, lead to inflammation, or induce suppuration. "It would be well if the profession could be made to forget the very existence of styptics, for then everyone would treat hæmorrhage by the best methods, and the waters of Ruspini, Pagliari, and Brocchieri would deservedly cease to flow, and would soon sink far from sight. When the physician again treats ague with the bark-jacket, it will be time enough for the surgeon to treat hæmorrhage with styptics."—In a discussion which followed, Dr. Buck said that styptics had a certain degree of practical value, and he had seen life saved by them when other methods did not apply. He instanced a case of hæmorrhage from the frænum in chancre.—Dr. Willard said that some of the worst sloughs he had ever seen were due to styptics. In small bleeding surfaces, mild styptics may possibly be useful, and the best of these is hot water.—Dr. Sheppard believed that cases sometimes arose which could only be treated by styptics, and he instanced a case of removal of a portion of the tongue by the galvano-cautery, in which secondary hæmorrhage occurred and no ligature could have been applied. Monsell's solution was applied, and succeeded well.—Dr. Eskridge was in the habit of using warm water by means of a syringe, or by sniffing up from the hand, in epistaxis, and had found it useful in bleeding from small vessels, especially in plastic operations.—Dr. Roberts admitted that hot water is good for bleeding from small points. It should be used at a temperature of 105° Fahr. It is probable, however, that such bleeding would stop spontaneously or by the employment of pressure.

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The Medical Times and Gazette *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, MARCH 10, 1883.

ON THE RELATION OF PATHOGENIC TO SEPTIC BACTERIA.

The supplement to the Report of the Local Government Board for 1881, giving the Medical Officer's report, contains a very interesting paper by Dr. Klein on the relation of pathogenic to septic bacteria. It is the first instalment of a research upon which he has been engaged, and is still pursuing, with the view to investigate, first, whether, and how far, the *Bacillus anthracis* undergoes any change, morphologically and physiologically, when cultivated artificially; and, secondly, whether ordinary bacteria of putrefaction and septic fermentations can, by artificial cultivations, be so modified as, when introduced into the body of an animal, to be productive of disease; that is, whether it is possible for an innocuous saprophyte to assume the properties of an obnoxious pathogenic organism. The result of Dr. Klein's research so far certainly appears to strengthen the probability that pathogenic and septic bacteria are either not transmutable the one into the other kind, or are, at any rate, less readily transmuted than has been supposed. The Medical Officer to the Board, Dr. Buchanan, gives a clear and instructive summary of the outcome of Dr. Klein's paper, which fills nearly forty pages of small print.

Cultivating disease-bacilli in organic liquids and in gelatiniform organic substances, prepared in his laboratory, Dr. Klein has found (as Dr. Koch found before him) appearance of changes, both in form and potency, to be undergone by the bacilli. Of some such apparent changes, Dr. Klein shows that they were really due to the presence, in the cultivation material, of a new bacillus accidentally introduced; and he points out that a mere overgrowth of the one bacillus by the other, as corn may be overgrown by weeds, is not to be confounded with a true change in the original organism, or in its own inherent qualities.

The specific bacillus of a disease, as illustrated by the case of anthrax, has truly, in the course of its own proper life, times and occasions of remarkable change in its powers. And these are more particularly two. 1. Dr. Klein finds reason for attaching greater importance than had hitherto been assigned to the occurrence of spore-formation in the bacillus. In inoculation with a material containing anthrax bacilli, it is found that an altogether new virulence is acquired by the material as a consequence of the formation of spores in its bacilli; and Dr. Klein, in demonstrating this fact, shows, by some important new observations, that the formation or non-formation of spores in the bacilli is largely a matter of definable circumstance and condition. His results herein appear to indicate some new departure in the investigation of the whole subject. 2. After several weeks of growth of anthrax bacillus in any given specimen of Dr. Klein's cultivation-material, the anthrax bacillus undergoes degeneration—from exhaustion, it would appear, of the pabulum on which it had lived. The change affects more and more threads of the bacillus, and goes on to affect the appearance of the preparation as well under the naked eye as under the microscope. As this degeneration proceeds, the material ceases to injure with certainty the animals into which it is inoculated. But, if any effect at all be produced by inoculation of the degenerating material, it is just the same injury or the same fatal result as would have been produced on the animal by inoculation of the material before degenerative processes had begun in it. The change is in the number of the active bacilli, not in the potency of the several bacilli.

The foregoing changes are those occurring in the course of one cultivation, and in Dr. Klein's observations they were found to occur in exactly the same manner in each of several cultivations made by inoculating successive samples of his cultivation-material, each from its predecessor. Dr. Klein has grown the bacilli of anthrax through ten, twenty, or thirty cultivations, at temperatures ranging between 22° Cent. and 42° Cent., under conditions especially arranged for securing accuracy and intelligibility; and (similar stages of each cultivation being taken for comparison) each successive cultivation showed him, on the rodent animals that he made the subjects of his experiment, results identical with the cultivation that preceded it. In the course of these successive cultivations, made after the manner which M. Pasteur and others believe to produce attenuation of virus, Dr. Klein has not been able to discover any indication of such a diminution of intensity as shall allow of the material of a late cultivation being introduced into the body of an animal without killing it or doing it a serious injury, but with the result of protecting it thenceforth against death from anthrax when the poison of the original disease is inoculated into the animal. Thus, Dr. Klein, without throwing doubt on Pasteur's discovery of a material protective against fatal anthrax in the sheep, would guard us against generalising from Pasteur's experience, and against inferring from it that an "attenuated" virus can be had by the recognised method of successive cultivations in organic liquids at 42° Cent. There seems to be something more than this, Dr. Buchanan remarks, wanted for the production of M. Pasteur's anthrax "vaccin," and the conditions for it have not transpired from M. Pasteur's laboratory.

We hardly need add that further instalments of Dr. Klein's research will be looked for with great interest.

SCIENTIFIC WORK IN LUNATIC ASYLUMS.—I.

In the last number of *Brain*, Dr. Bucknill speaks reproachfully of English psychiatry, which, he says, is passing into a condition of "jejune officialism." If this accusation leaves us in considerable uncertainty as to the precise nature of the charge, the parallel and leading case of O'Connell and the market-woman shows that the gravity of the

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indictment is none the less on that account. Taking it to mean that there is a paucity and scarcity of original scientific work among those who have the care and treatment of the insane in this country, we may well ask if there is not a strong *primâ facie* case to answer. From the scientific point of view, the sixty odd public lunatic asylums in this country are in the position of great special hospitals for the treatment of a particular class of diseases. Yet, while the columns of the weekly medical papers teem with instructive cases from hospitals of every other class, records of cases of insanity are conspicuous by their absence. It is true that a few cases find their way into the pages of the quarterly journals, but they are very few. Original articles by the medical officers of lunatic asylums are rarities in the weekly journals, and although they form the bulk of the quarterly journal devoted to the specialty, and an occasional one appears in *Brain*, yet, having regard to the special advantages which the physicians of lunatic asylums possess over the physicians of other hospitals, the total amount of original work cannot be considered adequate to their opportunities. Let us remember what these opportunities are. When a patient enters a lunatic asylum, he remains, in the vast majority of cases, under the immediate and continual observation of the physicians, often for years together, until death or recovery terminates the case. So long as the patient remains under care, the physician has absolute and entire control over all the circumstances of his life. He has power to prescribe, not only the medical and dietetic treatment of his patient, but his occupations, amusements, companions, and surroundings. While the physicians to other hospitals are immersed in the anxieties and responsibilities of private practice, and are commonly engaged in teaching as well, the alienist physician can devote his whole time and attention to the care of his hospital patients. While in the case of other hospitals the physician lives at a distance and sees his patients only two or three times a week, and then only at special times and in special circumstances, the alienist physician lives continually on the spot, and has the opportunity of seeing his patients at all times and under all circumstances, and as often as he pleases. Yet, with all these advantages for its study, psychological medicine is distinctly and unmistakably behind the other branches of our science, and there are indications that its study is retrograding rather than advancing. Such an indication is the deplorable decease of the West Riding Asylum Reports, in which Dr. Crichton Browne so assiduously fed the flickering lamp of science; but as soon as his personal influence was withdrawn the flame went out. Now, what is the cause of this state of things? Why does this one branch of our science lag behind all the rest? It would be unfair, as well as illogical, to look for it in the character of the men engaged in its pursuit. They are drawn from the same classes, they have gone through the same training as the rest of the profession. Many of them—we speak from personal acquaintance—are men of conspicuous energy and great ability, and their calling necessitates exceptional stability and force of character. The explanation is to be sought in the system upon which they work; and in the system upon which they are compelled to work it will readily be found. Briefly, the fault is that medical superintendents are too much of superintendents and too little of medical men. Of the duties required of them by their committees, the treatment of their patients forms the smallest and least important part. Their office is virtually a combination of the functions of house-steward and farm-bailiff, with a dash of the physician thrown in. They are responsible for the maintenance of the fabric of the buildings, and for the proper condition of all the furniture, bedding, clothing, appliances, and utensils. They have to arrange the work of a host of subordinates. They look after the laying-out of the grounds, the planting of trees, the care of the live stock, and the disposition of the sewage. When structural alterations are made, the superintendent has to see that they are properly carried out—he often draws the plans himself. He is expected to know the prices of materials, to be able to say where bedsteads can be bought cheapest, which is the best form for a steam-valve, what thickness of concrete is necessary for a foundation, and what is the most economical form of fire-grate. When this is done—when he has posted himself in every conceivable question that his committee may require of him—the remainder of his time, if there is any, can be devoted to his patients. Is it fair or just, either to the superintendent or to his patients—is it in any way right that this state of things should exist? Is it creditable that, on visiting a lunatic asylum, we should learn, as has recently happened, that the superintendent was absent "buying cows"? Is it possible that the present generation of the insane can be treated to the best advantage, or that humanity can have the benefit of an advance of our knowledge, under such a system as this? That the patients are cared for as well as they undoubtedly are, and that the case-books are kept up at all, are facts highly creditable to the individuals concerned; but that the science of morbid psychology is at a standstill is a condemnation of our system of treating the insane.

Next week we shall consider how this state of things can best be remedied.

THE WEEK.

TOPICS OF THE DAY.

THE Lord Mayor recently presided at the annual meeting of the East London Nursing Society, which was held at the Mansion House. The Committee in their report appealed to the public for support, in order that they might be enabled not only to carry out their very important work of providing nurses for the sick poor in the thirteen parishes at present forming the area of the Society's operations, but to extend its benefits to neighbouring parishes. The Society, it was urged, endeavoured to promote good nursing, and to co-operate with all charitable agencies, local and general. The nurses, in addition to the other services which they are constantly rendering to the poor, are invaluable in removing cases to hospital, and in carrying out the treatment prescribed for out-patients. They are required to report infectious cases at once to the matron and to the sanitary authorities, and they are permitted to assist in removing them to the fever or small-pox hospitals, due precautions being taken for disinfection after such attendance. During the past year the parishes forming the area of the Society's operations had been divided into two districts, each of which was supervised by a trained matron, whose duty it was to visit each case in her district, with, and without, the nurse, to take charge of medical appliances, and to make special arrangements for the isolation and removal of infectious cases. The Rev. Dr. Ross, rector of St. Philip's, Stepney, moved the adoption of the report, which was seconded by Lord George Hamilton, M.P., and unanimously adopted.

Up to the present time the records of the doings of the Hospitals for Paying-Patients are so favourable, that it is matter for surprise how this great metropolis managed to get on without them for so long. The other day the first annual meeting of the Hampstead Home Hospital was held. Although only recently opened, experience has already shown the necessity of adding to the institution the adjoining building, in order to provide sufficient accommodation

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for the three classes of patients seeking admission, viz., those who can pay 15s., 25s., or 42s. per week. In the course of the proceedings it was mentioned that the experience gained by the managers of the Home Hospitals Association showed that if the general hospitals would open paying wards their financial difficulties would cease. But it was not explained that to do this, in most cases, the sick poor would have to be still further deprived of hospital accommodation, already too scanty. Before the close of the meeting, Mr. Rowlands urged the desirability of raising £5000 to enable the Council to extend the Hampstead Hospital, and it was resolved that steps should be taken to obtain that sum.

We last week recorded the particulars of the second annual meeting of the Sanitary Assurance Association, and we have now to notice the second annual meeting of the London Sanitary Protection Association, which was recently held at the rooms of the Society of Arts, under the presidency of Professor Huxley. The report showed that the total number of houses inspected was 362, and in the greater number of these serious errors in the sanitary arrangements were found and corrected. No less than 6 per cent. were found to have the drains choked up, and no communication whatever with the sewer, all the foul matter sent down the sinks and soil-pipes simply soaking into the ground under the basement of the houses. In 32 per cent. the soil-pipes were found to be leaky, allowing sewer-gas, and in many cases liquid sewage, to escape into the house. In 37 per cent. the overflow pipes from the cisterns were led direct into the drains or soil-pipes, allowing sewer-gas to pass up them and contaminate the water in the cisterns, and in most cases to pass freely into the house. In moving the adoption of the report, Professor Huxley stated that, owing to increasing demands upon his time, he was reluctantly compelled to resign the post of President to the Association; he was glad, however, to be able to say that the Duke of Argyll had consented to succeed him in the post.

In his monthly return for January last the Registrar-General for Scotland reports that during that period there were registered in the eight principal towns of North Britain the births of 3995 children, and the deaths of 2989 persons. The latter number is 116 above the average for this month during the last ten years, increase of population being allowed for. A comparison of the deaths registered shows that during the month the mortality was at the annual rate of 22 deaths per thousand persons in Edinburgh, 23 in Leith, 27 in Paisley and in Perth, 28 in Aberdeen, 30 in Greenock, 32 in Glasgow, and 34 in Dundee. The miasmatic order of the zymotic class of diseases proved fatal to 548 persons, and constituted 18·3 per cent. of the whole mortality. This rate was, however, exceeded in Glasgow, Dundee, and Paisley. Whooping-cough was the most fatal epidemic, having caused 232 deaths, or 7·8 per cent. of the whole mortality; fever caused 38 deaths, of which number 10 were tabulated as typhus, 25 as enteric, and 3 as simple continued fever. The deaths from inflammatory affections of the respiratory organs (not including consumption, whooping-cough, or croup) amounted to 763, or 25·5 per cent. Those from consumption alone numbered 279, or 9·3 per cent. Three males and five females were aged ninety years and upwards, the eldest of whom was a female ninety-eight years of age.

The Conference, of which due notice had been given, on the bringing-up and education of pauper children, was duly held last week in the rooms of the Society of Arts, under the presidency of Lord Aberdare. Among those present during the proceedings were Sir Charles Dilke, M.P., Mr. J. Henley, Lord Norton, Sir Baldwin Leighton, M.P., and Sir W. K. Shuttleworth. Mr. Rowland Hamilton read his paper, as announced, which dealt with the subject historically, and described the various systems at present in vogue for the education and rearing of pauper children. Mrs. Mead, matron of Wolverhampton Workhouse, also read a paper treating of schools within the workhouse. She considered that there was no need for the children to suffer pauper contamination under efficient management. Other papers were read by Mr. R. Humble, and Mr. J. Cropper, M.P., the former stating that in Leeds the whole experiment of boarding-out had been a complete success. The discussion was resumed on the second day, when the President of the Local Government Board was again present, and the Chairman addressed to him some remarks, commending the subject to his attention.

Mr. Payne recently held an inquest at Guy's Hospital, on the body of William Sheppard, aged thirty-three, who died in that institution from the effects of blood-poisoning. The wife of the deceased stated that a few weeks ago he complained of feeling ill, and, as he gradually got worse, he went to the Hospital. Mr. Stevens, House-Surgeon at Guy's Hospital, said that on presenting himself the deceased was found to be suffering from "wool-sorters' disease," a malady contracted by handling hides or hair. In this case the whole system was affected, but had the deceased sought medical aid sooner he would probably have recovered. The illness was caused, not by the materials with which the hides were cured, but by a disease in the hide itself, which became inoculated into the system of the person handling it if he chanced to have an abrasion of the skin. Dr. Steel, the Medical Superintendent at Guy's Hospital, informed the coroner that there had recently been treated in the institution no less than twenty similar cases, but not one had proved fatal. Mr. Stevens suggested that in future, as soon as a man employed in this work fell ill, he should seek medical assistance immediately, and the spread of the disease could then be arrested. The Coroner hoped this sensible suggestion would be acted on; but, singularly enough, he expressed no intention of communicating with the Local Government Board, in order that steps might be taken to warn employers whose men are engaged in preparing hides, and to take any other steps to prevent the propagation of the disease. The Registrar-General will, however, no doubt direct the attention of the Board to the matter.

The churchyard and land attached to the old parish church of St. John's, Bermondsey, was recently opened as a recreation ground in the presence of the parish officials and a large number of the inhabitants. The churchyard, which is an unusually large one, has been laid out with walks and flower-beds. An old watch-house situated at the entrance has been made into a lodge for the caretaker; the ground is shaded by trees, and, situated as it is in the centre of some of the narrowest and dirtiest streets in South London, must be regarded as a great boon to the neighbourhood. This makes the third churchyard in the borough of Southwark that has been given to the public as an open space within the last two years.

THE PARIS WEEKLY RETURN.

The number of deaths for the eighth week of 1883, terminating February 22, was 1198 (620 males and 578 females), and of these there were from typhoid fever 34, small-pox 11, measles 23, scarlatina 2, pertussis 7, diphtheria and croup 38, erysipelas 6, and puerperal infections 3. There were also 59 deaths from acute and tubercular meningitis, 224 from phthisis, 52 from acute bronchitis, 95 from pneumonia, 71 from infantile athrepsia (29 of the infants having

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been wholly or partially suckled), and 26 violent deaths (20 males and 6 females). The return of deaths is higher than the mean of the last four weeks, which was 1153. All epidemic diseases have shown a diminution except measles, the deaths from which increased from 14 to 23. Diphtheria has undergone a remarkable diminution from 55 to 38, and the fewer cases admitted during the week (12 instead of 19) tend to the hope that the diminution will be continued. Measles, however, is on the increase, for not only have the deaths risen from 14 to 23, but the admissions have been 60 instead of 42. The mortality of the week remains a high one, and especially as regards affections of the respiratory organs. The deaths from phthisis, bronchitis, and pneumonia, already high during preceding weeks, have increased during this. The births for the week amounted to 1211, viz., 601 males (426 legitimate and 175 illegitimate) and 610 females (456 legitimate and 154 illegitimate): 101 infants were either born dead or died within twenty-four hours, viz., 53 males (40 legitimate and 13 illegitimate) and 48 females (32 legitimate and 16 illegitimate).

THE DALRYMPLE HOME.

The first annual meeting of the Dalrymple Home for Inebriates was held on Monday. The Committee reported that forty sites had been examined, but a suitable house and grounds had not yet been secured. There was £600 at the bankers, and £1100 more was promised. A member of Committee had also offered £500, if nine other sums each of a like amount were contributed. Lord Shaftesbury was elected President, and Dr. Norman Kerr Hon. Secretary. On the Committee are Dr. Alfred Carpenter, Surgeon-Major Poole, Dr. Hart Vinen, and Dr. Cameron, M.P.

NAVAL MEDICAL DEPARTMENT.

The following is a list of the successful candidates for appointments as Surgeons in the Royal Navy at the competitive examination at Burlington-gardens on February 19 and following days:—

	Marks.		Marks.
B. S. Mends	2600	J. E. Penn	2100
T. J. Crowley	2445	R. H. Nicholson	2050
A. Keess	2415	P. B. Bury	1990
D. Lennox	2250	J. N. Seymour	1975
B. C. E. F. Gunn	2185	J. L. Barrington	1885
D. T. Hoskyn	2150	J. Sugrue	1875

WHAT IS BEER?—LEAH *v.* MINNS.

A question of considerable interest and importance came before Mr. Baron Huddleston and Mr. Baron Pollock, in the Queen's Bench Division of the High Court of Justice, on the 5th inst., on appeal from a decision of a bench of magistrates at Nottingham. The respondent had been summoned, at the instance of the Inland Revenue authorities, for that he, "not being duly licensed to sell beer, cider, and perry, as the keeper of a common inn or alehouse," did sell certain bottles of beer without a licence. The liquor sold was known as "Summer's Botanic Beer," and an analysis of it showed a density of 1028·50, and that it contained 5·80 per cent. of proof spirit. It was stated that the quantity of proof spirit found in beer varied in Bass's pale ale from 10 to 12 per cent., in ordinary table-beer from 2½ to 8 per cent., and in lager beer from 6 to 12 per cent. It was contended upon these facts that the article so sold was "beer" within the meaning of the Inland Revenue Act, 1880. That Act, better known as the Act for the Abolition of the Malt Tax, defines beer as including ale, porter, spruce beer, black beer, and "any other description of beer." For the respondent it was proved that "Summer's Botanic Beer" was manufactured from water, dried herbs, and sugar, but neither malt nor hops; and it was contended the analysis showed that it did not contain more spirit than is often found in ginger-beer. The magistrates held that the article in question was not beer within the Act. The information being dismissed, the Inland Revenue authorities appealed. After hearing the case argued, Mr. Baron Pollock gave judgment in favour of the respondent. He said that it was admitted, on the part of the Inland Revenue authorities, that at one time beer meant malt and hops, and before the Court could say that, when something else had been substituted for these ingredients, the liquor was still beer, it was necessary to see what the Legislature said; but it did not appear that in any of the Acts they had passed they had framed a definition which would include such an article as that sold by the respondent. The Act of 1880 provided that sugar might be used as an equivalent for malt; but this did not say that when sugar was used for fermentation it must mean beer. The justices were right; and the appeal must be dismissed. Mr. Baron Huddleston concurred. How many, or how few, we should like to know, of the "non-alcoholic" drinks sold are really free from alcohol?

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The following is the list of officers and Council for 1883-84:—*President:* John Marshall, F.R.S. *Vice-Presidents:* *John Russell Reynolds, M.D., F.R.S.; *Reginald Edward Thompson, M.D.; *William Scovell Savory, F.R.S.; *Richard Barwell. *Treasurers:* Charles Bland Radcliffe, M.D.; John Cooper Forster. *Secretaries:* *Reginald Southey, M.D.; M. Berkeley Hill. *Librarians:* *Charles Hilton Fagge, M.D.; John Whitaker Hulke, F.R.S. *Other Members of Council:* *George Fielding Blandford, M.D.; *Dyce Duckworth, M.D.; *Samuel Jones Gee, M.D.; *Frederick William Pavy, M.D., F.R.S.; James E. Pollock, M.D.; George Cowell; Henry Power; Howard Marsh; Septimus W. Sibley; *William Spencer Watson. (Those gentlemen to whose name an asterisk is prefixed were not on the Council or did not fill the same office last year.)

DEATH OF DR. BERTILLON.

The death is announced of the able statistician and hygienist, Dr. Bertillon, Chef des Travaux de la Statistique Municipale de la Ville de Paris, and Professor of Demography at the École d'Anthropologie. This took place at the age of sixty-one, at his residence at Neuilly-sur-Seine.

SUDDEN DEATH IN GASTRIC ULCER.

Perforation of the stomach almost necessarily proves fatal by way of peritonitis, but in some instances death has been known to occur even more suddenly from the accident, that is, before inflammation has had time to be set up. Shock, hæmorrhage, or suffocation has usually been accounted the immediate cause at work in this class of cases. Professor Jürgensen has just described another and very remarkable mode by which gastric ulcer may suddenly prove fatal, namely, by entrance of the gaseous contents of the stomach into the circulation (*Deutsche Archiv für Klin. Med.*, xxxi., page 441). A woman, aged forty-nine, suffering from severe symptoms of gastric ulcer, suddenly died, and within twenty-two hours the post-mortem examination was made, no appearance of decomposition being present in the body. A large ulcer was found on the posterior surface of the stomach, its floor being formed by the pancreas, and the splenic vein lay exposed and open. Manifestly as the result of this lesion, air was found in many of the bloodvessels, including the cervical, cardiac, and gastric veins, and the large trunks, and also in the cavities of the heart. Extreme

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interstitial and subserous emphysema could be traced from the seat of disease. *Primâ facie*, there could be but little question of the source of the air and the cause of the sudden death; but to confirm his opinion, Professor Jürgensen tried the experiment of injecting air into the femoral artery of one side in a dog, and watching the femoral vein of the opposite side. In a few minutes bubbles made their appearance, having traversed, therefore, both the peripheral and the pulmonary capillaries.

ARMY MEDICAL DEPARTMENT.

List of candidates who were successful for appointments as Surgeons in Her Majesty's British Medical Service at the competitive examination in London on February 19:—

	Marks.		Marks.
D. Bruce	2630	P. J. Gallwey	2280
H. C. Gordon	2460	R. R. H. Moore	2220
H. L. Bell	2447	P. J. B. O'Shaughnessy	2170
J. Riordan	2435	J. R. S. Robertson	2170
H. A. De Lom	2415	A. E. Tate	2130
R. H. Firth	2400	C. E. Faunce	2130
G. Nelis	2350	W. H. Lendrum	2090

H. J. Wyatt . . . . . 2050 marks.

ADOPTION OF THE NEW YORK NEW MEDICAL CODE.

The *Philadelphia Medical News* (February 10) announces that at the annual meeting of the New York State Medical Society the New Code, which has been viewed with such disapprobation throughout the United States, was reaffirmed by one hundred and five to ninety-nine votes. "The Society in its New Code virtually declares to the people that anyone whom the laws of New York permit to practise physic or surgery, whether he be educated in medicine or not, whether he be an eclectic, homœopathist, herbalist, physio-botanist, Thomsonian, bone-setter, or what not, is in medical matters entitled to the confidence of the community, and that there exists no honourable reason why a physician should not give his endorsement to such a charlatan by meeting him in solemn consultation, and become a party to the treatment of a case in his charge, the management of which may involve the responsibility of the life and death of the patient. The lay press, speaking for the public, will applaud the New Code, because it cannot see beyond the apparent liberality in the expressed willingness to meet in consultation anyone, whatever his knowledge or fitness may be, whose services the patient can command. But it is in reality the public which is most injured by the Code, for it obliterates the broad distinction, which was previously easily recognised, between scientific medicine and medical charlatanry."

ASTLEY COOPER PRIZE.

Our advertisement columns contain, this week, the notice that the next triennial prize, founded by the late Sir Astley Cooper, will be awarded for the best essay or treatise "On Diseases and Injuries of the Nerves and their Surgical Treatment; together with the Operations performed upon Nerve-Trunks in the Treatment of various Diseases, and Descriptions of the Changes which ensue in the Structures as well as in the Nerves themselves from the Operations." The subject is not too large, and is definitely limited; and a good and clear focussing-up of all that experience has taught or indicated with regard to it would be a valuable addition to surgical literature. The essays sent in for the prize, the money value of which is £300, must contain "original experiments and observations, which must not have been previously published; and each essay shall (as far as the subject shall admit of) be illustrated by preparations and drawings)." The successful treatise will become the absolute property of Guy's Hospital. The prize is open to the whole world, with the exception that "no physician or surgeon, or other officer for the time being, of Guy's Hospital or of St. Thomas's Hospital, in the borough of Southwark" (the two hospitals formed almost a continuous group of buildings, and for long officered together only one medical school), "nor any person related by blood or affinity to any such physician or surgeon, for the time being, or to any other officer for the time being in either of the said hospitals, shall at any time receive or be entitled to claim the prize." Competitors must note that "the prize cannot be awarded to any essay that is the joint production of two or more authors." The essays must be sent to Guy's Hospital, addressed to the physicians and surgeons of that institution, on or before January 1, 1886.

THE LOCAL GOVERNMENT BOARD REPORT FOR 1881-82.

The eleventh annual Report of the Local Government Board for the years 1881-82, recently circulated, will be found to contain, as explained at the opening of it by Dr. George Buchanan, the Medical Officer, remarks on Vaccination; Animal Vaccination; the inquiries as to Local Prevalence of Disease, where the same has either attracted the attention, or been called to the notice, of the Board; and auxiliary scientific investigations. Under the first of these heads, Dr. Buchanan remarks that the vaccination officers' returns relating to children born in 1879 exhibit a fractional increase in the percentage of children whose vaccination had not been finally accounted for. This, he says, may be observed alike in the metropolitan and in the country returns, and is principally to be ascribed to the diminished care that people have for this protective measure during a year when small-pox is almost wholly absent. The department has continued during the year under notice (1881) the administration of the National Vaccine Establishment. The demands for lymph were somewhat unusually great, owing to outbreaks of small-pox in various parts of the kingdom; and for a time it was necessary to obtain supplies from other vaccinators than those usually on the staff. Lymph was distributed to practitioners in the United Kingdom, the Army and Navy, India, the Colonies, and foreign services. Representations of want of success with this preserved lymph were received from 4 per cent. only of the practitioners to whom it was issued. Representations as to irregularity of result in the use of the lymph were made by one practitioner only, who, on inspection of a particular child vaccinated in the previous week, found "some eczematous crusts in the place of normal vesicles." Dr. Cory has reported, in the preliminary proceedings of the Animal Vaccine Establishment; lymph from this source, was sent out, on application, to ninety-six practitioners, but of the effects produced it was not, up to the date of the Report, possible to give any useful account. In the few experimental uses, however, he made of the lymph at St. Thomas's Hospital, Dr. Cory succeeded, after a little experience, in obtaining fairly complete results with it when he stored it on points, and used it within five days of its being taken from the calf—the characters of vesicles and of resulting scar being satisfactory; but stored in tubes the lymph did not give him the same degree of success. Dr. Cory further reported on a new lymph furnished by Dr. Dubrenilh, of Bordeaux. The first sample of this lymph was only seventeen removes, through the calf, from a "spontaneous case" of cow-pox. Comparative inoculations with it and with lymph of the Hague stock have led Dr. Cory to give preference to the Bordeaux lymph stock, and at the date of the Report we are noticing, that lymph was being cultivated from calf to calf with excellent results, in super-

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session of the Hague stock. We have not space to follow Dr. Buchanan through his analysis of the deaths in London in 1881 from small-pox amongst vaccinated and unvaccinated persons; but he shows that for the twelve deaths registered in that year as from "cow-pox" and disease occurring after vaccination, 12,000 children's lives were saved which would otherwise have been sacrificed to small-pox (as appears from the statistics given), not to mention any gain of security after childhood afforded by vaccination in infancy. Most, if not all, the reports of the Board's inspectors on local prevalences of disease, mentioned in this Report, have already been published by us for the benefit of our readers.

THE INDIAN MEDICAL SERVICE.

The following is a list of the candidates for Her Majesty's Indian Medical Service who were successful at the competitive examination held at Burlington House on February 19. Twenty-two candidates competed for five appointments; twenty-one were reported qualified.

	Marks.		Marks.
J. M. Young	2555	M. A. T. Collie . . .	2515
G. Jamieson	2525	W. H. Quicke . . .	2255
A. O. Evans	2225 marks.		

THE METROPOLITAN ASYLUMS BOARD MEETING.

The Managers of the Metropolitan Asylums Board, at their last meeting, received a report from the General Purposes Committee with reference to the communication recently received from the Local Government Board. The report stated that the extent of the hospital accommodation was quite inadequate for the requirements of an epidemic of small-pox of even moderate proportions, as the experience of the last fourteen years abundantly proved; and the Local Government Board appeared to recognise the fact when they suggested the establishment on the river Thames, some fifteen miles below London-bridge, of one or more floating hospitals. The Committee were of opinion that it was necessary to supplement these floating hospitals by the establishment of convalescent or other hospitals on land, within a reasonable distance of the metropolis. The Committee recommended that the Managers should urge upon the Local Government Board the importance of introducing a Bill into Parliament, conferring compulsory powers for the purchase of wharves, etc., and for the acquirement of additional sites whereon to erect hospitals for the treatment of cases of infectious diseases; and that in the meantime the Committee be authorised to make inquiries respecting the acquisition of wharf premises, and instructed to report upon the question of the transfer of patients to ships. Sir Edmund H. Currie thought they should get three sites for convalescent hospitals—one in the north, one in the south, and one near the ships; and he believed that would be the most economic and efficient way of dealing with an epidemic. Small-pox and fever cases were not numerous just now, but it would be very different in the autumn. He moved the adoption of the Committee's recommendations. In seconding this, Mr. Talbot, M.P., said it was impossible for them to proceed unless they were protected by compulsory powers, and the necessity for carrying out these recommendations was most urgent, though the expense would be great. This motion, as also another, authorising the Committee to elaborate a scheme for the transfer of patients, was agreed to. The return of fever patients in the hospitals showed that there were 388 under treatment for the fortnight ended 3rd inst., as compared with 408 for the preceding fortnight; while the small-pox patients numbered 88, as compared with 99 for the preceding fortnight.

THE NATURE OF PHTHISIS IN DIABETES.

Immermann and Rütimeyer have put on record (*Centralblatt für Klin. Med.*, No. 8) a case which is of interest in connexion with bacterial pathology. A patient, aged twenty-nine, was brought to the hospital in a state of profound coma and dyspnœa. The urine contained 3 per cent. of sugar and a trace of albumen. The man succumbed in nine hours. At the post-mortem examination, a vomica in the apex of the right lung with caseation was detected. The contents of the cavity yielded bacilli, which behaved to staining fluids just as those from tuberculous cases do. Death was attributed to diabetic coma. In a footnote, Leyden (one of the editors of the *Centralblatt*) states that he has discovered the tubercle bacilli in the sputa in three cases of diabetes complicated with phthisis. The authors speculate on the identity of the pathological process in the lungs of ordinary phthisis and in those of diabetes. The frequency of consumption in diabetes is thought to be explained by the hypothesis that the diabetic constitution affords a specially favourable soil for the growth of the bacillus.

GLASGOW ROYAL INFIRMARY.

A crisis which has been developing for the last six months in the management of the Glasgow Royal Infirmary has now entered upon its acute stage, as manifested by the resignation of the Chairman of the Board. The management of hospitals very often devolves upon one person, who has the chief, or practically the sole, voice in the matter; and it greatly depends upon the disposition of that individual whether he is likely to make or mar the institution. If he happens to be a gentleman of conciliatory habits, anxious to consider what is due to others, things may run on smoothly enough; but be he dictatorial, and determined to play the part of a despot, then the interest of the establishment is exposed to great risks. The Chairman of the Royal Infirmary seems to have treated the medical and surgical staff with, to say the least, scant courtesy: they were given to understand that they were merely servants, and that even in matters purely professional, such as the administration of chloroform, etc., they must obey implicitly the dictates of the Chairman; and as a punishment for what he would probably consider disobedience and insubordination on the part of the staff, he brought forward and carried a resolution to the effect that the salary of the medical officers should be reduced from £100 to £50 per annum, and their tenure of office be restricted to one instead of five years. The feeling of the entire profession was roused, and the solitary medical manager, who happens to be a deputy from the Glasgow Faculty of Physicians and Surgeons, but sided with the chairman, was asked at a meeting of the Faculty to resign. To avenge this slight put by the Faculty upon their deputy, the Chairman of the Royal Infirmary brought forward and carried a resolution of the Board to censure Dr. Ebenezer Watson, the Senior Surgeon, for having taken a leading part in the proceedings of the Faculty. This was too much even for Glasgow. At a meeting held last week, when the chairman and his main supporters failed to put in an appearance, Professors Leishman, Gairdner, and Cleland carried a unanimous resolution of the Board that the minutes passed during the last few months should be erased; and hence the resignation of the Chairman. It is to be hoped that the medical profession in Glasgow and in the West of Scotland will support the medical staff in their endeavour to uphold the dignity and honour of the profession. It behoves laymen of all grades and callings to bear in mind that the support given to medical charities is practically entirely due to the self-sacrificing labours of medical men, and these labours cannot be con-

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ducted satisfactorily in the midst of contentions and harassments—a state of things that must be prejudicial not only to the interests and prosperity of the hospital, but primarily to the poor patients under the care of worried and harassed medical officers. It is to be hoped that this resignation of the Chairman will end the feuds, and restore peace in the management of the Royal Infirmary and its Medical School.

INFANT-FEEDING.

Dr. Wilson, F.R.C.P. Lond., the well-known English physician at Florence, writes to us as follows:—"In Sir Wm. Jenner's excellent and instructive address to the Epidemiological Society (1866-67) he insists forcibly on the fact 'that ignorance of the proper mode of feeding children assists in a larger degree in producing rickets, tuberculosis, and all those diseases dependent on lowered vitality than poverty; andth at it is the duty of the law, by enforcing sanitary education, to attempt the removal of this want of knowledge which leads to permanent and avoidable mischief.' There is an excellent regulation existing at Milan. On registration of the birth of the child the parent is presented with a code of instructions as to the best mode of rearing infants—what to do and what to avoid. As a rule in Italy, when not nursed, children are brought up on pap; that is, boiled bread, mixed with garlic and oil, washed down with sour wine and water. There is generally a prejudice against the use of milk, now fortunately diminishing, owing to the purveyors mixing the unconsumed evening milk with that of the morning, and *vice versâ*, which during hot weather naturally becomes unfit for a child. In Vienna I was struck with the great prevalence of diarrhœa (intestinal catarrh) during the summer months. Thinking that the quality of the milk might be the principal factor, I procured three specimens of morning milk from different quarters. By one o'clock p.m. of the same day they were all unfit for use. As Sir William Jenner says, proper food, pure air, and cleanliness are the three great essentials; but how many of the poorer classes pay the least attention to either?"

THE DUBLIN SANITARY ASSOCIATION.

The "Dublin Victuallers' Association," having taken exception to certain statements contained in the annual report of the Dublin Sanitary Association referring to slaughter-houses, recently passed a resolution calling on the Sanitary Association to expunge the statements in question from the report. The Executive Committee have, however, adopted the following resolution, viz.:—Resolved, "That the Committee decline to interfere with the paragraph in the report of the Association concerning slaughter-houses, as it merely deals with matters of fact, and as the subject was dealt with solely in the interest of public health."

ARSENICAL PIGMENTS.

The attention of the profession and the public has been from time to time directed to the question of the use of arsenical pigments in wall papers, decorations, and materials of clothing, by the occurrence of cases of injury to health caused thereby. The Society of Arts and the Medical Society of London each took up the inquiry about two years ago, but did not proceed further than the collection of cases in proof. Quite recently it has been taken in hand by the National Health Society, and a committee, including Mr. E. Hart, Dr. Lauder Brunton, F.R.S., Dr. Farquharson, M.P., General F. Cotton, Messrs. Heisch, F.R.S., Carr, C.E., Wigner, Jabez Hogg, and others, are actively engaged in the work. The Hon. Sec., Dr. E. F. Willoughby, is collecting evidence in addition to that handed over to them by the Medical Society's Committee, and would be pleased to receive any well-authenticated cases. A circular so precisely worded as to leave no room for hasty conclusions is being prepared by Dr. Brunton for circulation among medical men. Although the new Committee has had but two meetings, they have fixed on a "standard test," a modification of Marsh's, and have drafted a Bill designed to make the use of arsenic an offence in the same way as is a wilful adulteration of food or drugs. At their request, too, Earl Granville has directed Her Majesty's representatives at the various Courts of Europe and in the United States to report on all legislative or municipal enactments restricting or affecting the use of arsenic for such purposes. The proceedings of the Committee seem likely to lead to practical results ere long, and to place this country on the same footing as Germany and Sweden, where the employment of arsenic for domestic purposes is absolutely prohibited, or nearly so.

MEDICAL SOCIETY OF LONDON.

At a general meeting of the Medical Society of London, held on Monday, March 5, the election of officers and Council took place, when the gentlemen named below were duly elected to the several offices:—*President:* Sir Joseph Fayrer, M.D., K.C.S.I., F.R.S. *Vice-Presidents:* J. Hughlings-Jackson, M.D., F.R.S., John Cawood Wordsworth, John Brunton, M.D., Alfred Cooper. *Treasurer:* Alfred Wiltshire, M.D. *Librarian:* William Henry Allchin, M.D. *Hon. Secretaries:* Isambard Owen, M.D., Alfred Pearce Gould. *Secretary for Foreign Correspondence:* Sir William Mac Cormac. *Council:* Henry Francis Baker, Samuel Benton, Sidney Coupland, M.D., John Hamilton Craigie, Henry Radcliffe Crocker, M.D., John Henry Drew, William Ewart, M.D., James Kingston Fowler, M.D., Heneage Gibbes, M.D., David Henry Goodsall, George Lawson, Henry Morris, Francis Mason, Edmund Owen, Arthur Ernest Sansom, M.D., Charles Brodie Sewell, M.D., Thomas Gilbart-Smith, M.D., William Heath Strange, M.D., William Johnson Walsham, C. Theodore Williams, M.D.

VACCINATION DURING PREGNANCY: ITS EFFECT ON THE FŒTUS.

A recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains a laborious article by Dr. Carl Behm, of Berlin, on the above subject. The question whether the blood-changes wrought by vaccinia germs affect the fœtus in utero as well as the mother has been a good deal discussed on merely theoretical grounds. Bollinger formulated the doctrine that the placenta formed a kind of physiological filter by which corpuscular matters in the maternal blood were held back, and prevented from contaminating the fœtus. But since then Spitz and Albrecht have detected the spirillum of relapsing fever in the blood of the new-born infant—an observation which appears to refute the dogma of Bollinger. He has, consequently, since retracted this proposition; and, believing it possible for blood-poisons, whether corpuscular or not, to pass from the mother to the fœtus, he has stated that when a pregnant woman is successfully vaccinated the fœtus participates in the infection, and, it of course follows, in the protection conferred thereby. The same view has been taught by Curschmann. These conclusions are supported by certain published cases in which the vaccination of children, whose mothers had been vaccinated during pregnancy, was effected without result. Isolated cases, however, prove nothing, for the failures may have been due, for instance, to bad lymph, or to unskilful performance of the operation. The most numerous observations are those of Burckhardt, who vaccinated twenty-eight pregnant women;

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but, of their children, in only eight was the inoculation successful. This series, however, was not tested, as it should have been, by the vaccination, with precisely the same kind of lymph and in the same manner, of children whose mothers had not been vaccinated during pregnancy. Opposed to these are the observations of Gast, who vaccinated 16 mothers during pregnancy, and subsequently every one of their children, with success. This divergence in the results of experience led Dr. Behm to investigate the matter. He vaccinated 47 pregnant women, but was only able to get at the children of 33. Of these 33 mothers, 22 were vaccinated in the tenth lunar month of pregnancy, 10 in the ninth, and 1 in the eighth. In 4 the vaccination was ineffectual, in 3 of them the non-success being proved to be due to the lymph employed. In the remaining 29 pregnant women successfully vaccinated, in 7 the vesicles were not good, but in 22 the inoculation produced perfect and typical vaccine vesicles. Of the 33 children, 25 were vaccinated successfully, 8 unsuccessfully. Of these failures, 6 were (by test vaccinations on other children) shown to be due to bad lymph. In 1 of the other two the lymph used, although it produced vesicles in other children, did not produce good ones. In the remaining case the lymph employed was good and potent. But this case, Dr. Behm remarks, ought to be tested by repeated inoculations before concluding that the non-success was due to protection acquired in utero from the vaccination of the mother. The children of the 4 mothers in whom vaccination had failed were vaccinated with perfect success. Of the remaining 21, in 15 perfect vesicles were the result; in 6 the vesicles were slightly modified, being few in number or small, but all ran a typical course. Dr. Behm therefore concludes that vaccination of the mother during pregnancy has little, if any, influence on the fœtus; but it is possible that it may sometimes protect the fœtus. He concludes with an argument for the revaccination of pregnant women, and the vaccination of infants as early as possible.

THE BACILLUS TUBERCULOSIS.

Professor Feltz, formerly of Strasburg, and now of Nancy, whose authority and experience in all matters relating to the production and pathological influence of micro-organisms are generally acknowledged, has addressed a note to the *Gazette Hebdomadaire* of March 2, in which he states that all his attempts at the cultivation of the microbes discovered by Dr. Robert Koch, with the view of testing their specific character by inoculation, have proved utter failures, although he exactly followed the directions given by Dr. Koch for this purpose in his original paper. "In presence of my failures," he says, "I could not be sufficiently thankful if I were furnished with the necessary information to enable me to avoid this kind of misadventure: for I would not cast a doubt, from the facts only which I have just mentioned, upon those which Dr. Koch has so positively affirmed."

THE DEVONSHIRE HOSPITAL, BUXTON.

The annual report of the Committee of Management of the Devonshire Hospital at Buxton, for the year 1882, states that the final details of the extension of the building may now be said to be virtually completed. The baths for the use of the patients of the Hospital have been doubled in number, and an admirable and much-needed drinking-well for the exclusive use of the patients has been completed, the water having been conveyed from the public drinking-fountain in pipes so carefully enclosed and protected, that neither temperature nor gases are believed to have been affected in any degree. It appears, the report goes on to say, to be a justifiable statement that if the responsibilities of the payment for the extension, beyond the large grant from the Cotton Districts Convalescent Fund, could be discharged by the subscribers and friends of the Hospital, the annual burden of its maintenance could be met as heretofore, and the solvency and usefulness of the Hospital be secured. The advantage of the reconstruction to the institution may be summed up as follows:—Improved arrangements, additional comforts, better ventilation, completed drainage, detached buildings for accidents and infectious cases, and last and not least, the removal of the stables which formerly joined the Hospital, to a safer distance elsewhere. Dr. Lorriner, the resident medical officer, has tabulated from the case-books the work of the Hospital during the past year, and the tables show that of the 1856 cases received as in-patients, 1340 were cases of rheumatism, 17 cases of specific rheumatism, 138 cases of rheumatic gout, 130 cases of sciatica, 23 cases of gout, 19 cases of lead-poisoning; and only 180, or less than one-tenth of the whole, were cases of disease other than of rheumatic or gouty character.

In the University of Oxford, on February 27, Convocation passed a decree for conferring the degree of Master of Arts on John Burdon Sanderson, M.D., F.R.S., Fellow of Magdalen College, and Waynflete Professor of Physiology. On the 7th inst., Convocation passed a vote of £1500 for apparatus for the use of the Waynflete Professor of Physiology.

In the University of Cambridge, at a Congregation held on Thursday, March 1, degrees of Bachelor of Medicine were conferred on Ernest Mansford Knowling, King's; John Follett Bullar, Trinity; and Henry Swift, Gonville and Caius.

A conference was held on the 3rd inst., in the Central Hall, Newcastle-upon-Tyne, under the presidency of the Bishop of the Diocese, for the purpose of promoting a Sunday Closing Bill for Northumberland, Newcastle, and Berwick-on-Tweed. Mr. Burt, M.P., is to be asked to take charge of the Bill.

The hospital returns for the week ending March 3, as regards our forces in Egypt, show that 629 men were sick out of a total force of 9307. In the Cavalry only is there again reported an increase in the number of cases.

We regret to record the death of Dr. Ambrose Cecil Hughes, of Liverpool, from the effects of a carriage accident. Dr. Hughes entered on the practice of the profession in 1855; he held several important and arduous medical appointments in Liverpool, and was widely esteemed and respected. In addition to his professional work, he was an active member of the West Derby Board of Guardians.

Dr. Dunlop.—The Council of the Poor-Law Medical Officers' Association has passed a resolution expressing its sincere sympathy with Dr. Dunlop, the Medical Officer of St. Pancras Workhouse, in the unmerited persecution to which he has been exposed in the recent prosecution for manslaughter; and further expressing its satisfaction that the St. Pancras Board of Guardians should have so readily undertaken Dr. Dunlop's defence, whereby he was saved from a severe pecuniary liability.

A Sweet Acid.—At the last meeting of the Franklin Institute a specimen of the sulphamide benzoic acid was exhibited, which was described as a coal-tar product. It is so sweet as to suggest the possibility at an early date of the displacing of the product of the cane by some rival from the laboratory of the chemist.—*Phil. Med. Times*, January 27.

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MEDICAL MATTERS IN PARLIAMENT.

HOUSE OF COMMONS.—THURSDAY, MARCH 1.

Bow Cemetery.—In reply to Mr. Bryce, the Secretary of State for the Home Department stated that a report had been received from the inspector appointed to inquire into the alleged overfilling of the cemetery at Bow, and into other matters connected therewith; and that the orders usual in such cases would be issued forthwith.

Army Medical Department.—The Secretary of State for War, replying to a question put by Sir H. Fletcher, stated that the Army Medical Department and Transport Department Committee had not yet reported, but that he understood from Lord Morley, the Chairman of the Committee, that the report would probably be made within a week or two. He did not apprehend it would contain anything that would prevent its being laid on the table of the House; but he would consider that point when he had received the report.

MONDAY, MARCH 5.

Glanders in a Bengal Cavalry Regiment.—Dr. Cameron asked the Under-Secretary of State for India whether a regiment infected with glanders, and without a veterinary surgeon, was sent to Egypt; whether many of the horses were destroyed while in Egypt, and a troop had to be placed *hors de combat* at Suez, the horses of some other regiments and corps being placed in great peril of infection; if, on the return to India and subsequently, many more of the Bengal Cavalry horses had been destroyed on account of glanders; and if an officer of an infantry regiment died at Lucknow of glanders, as well as two natives—these persons having been on board ship with their horses, and thus becoming infected; and whether it was true that with more than 7000 animals accompanying the forces sent from India to Egypt there were only two veterinary officers, while in the Imperial Army the proportion was one veterinary surgeon to 250 or 300 animals.—Mr. J. K. Cross replied that two months ago an inquiry was made of the Government of India as to the precise extent to which glanders prevailed among the Bengal Cavalry during the campaign in Egypt and since, and their detailed report might be expected soon. The India Office had had no information of any officer or other person having died of glanders after returning to India, but inquiry would be made at once on that point. British veterinary surgeons are never employed on the establishment of the Bengal Native Cavalry, but each regiment has two "Salootrees" (a very competent body of men), and these went with the corps to Egypt. The recently organised Transport Service is also supplied with "Salootrees," and the full war establishment was attached to the transport in Egypt. Each battery of artillery had its British veterinary surgeon, and a veterinary surgeon on the staff accompanied Sir Hugh Macpherson as superintendent.

River Pollution.—Mr. Sullivan gave notice that on the 8th inst. he should ask the Chief Secretary for Ireland whether arrangements could be made by the proper authorities in Ireland to prevent the continued pollution of a river near Mullingar Gaol, by the discharge into it of sewage from the prison.

TUESDAY, MARCH 6.

Vaccination in the Army.—Mr. P. A. Taylor asked the Secretary of State for War whether every recruit on entering the Army was compelled to be vaccinated, without reference to any objection he might entertain, to his having been previously vaccinated, or to his having had small-pox; and whether recruiting officers had orders to explain all this to would-be recruits. The Marquis of Hartington replied: Every recruit, without exception, is vaccinated on entering the Army. No orders are given to recruiting officers to explain the regulation on this subject before enlistment, and no case of objection has ever been brought to notice.

Vaccination of Pauper Children.—Mr. Hopwood asked the President of the Local Government Board whether the Order of that Board of January 27 (1882), addressed to boards of guardians, did not recite with approval that "some boards of guardians have passed a resolution requiring the medical officer, subject to the exercise of his judgment as to making exception in particular cases, to secure the vaccination of all children born in the workhouse as soon as possible after birth," and added some other questions excited by the recent case in St. Pancras parish.—Sir Charles Dilke in reply said: The practice is as stated by the hon. member in the first paragraph of his question. The Local Government Board have never fixed any age before which a newly-born child should not be vaccinated; and the Department is aware that its orders form no defence in point of law to the vaccinating officer on a charge of manslaughter. There has never been any charge except the one which recently occurred.

FROM ABROAD.

BLEEDING COUP-SUR-COUP IN PNEUMONIA.

IN an article in the number for January 20, the *Gazette des Hop.* calls to mind a lecture delivered about ten years since by Prof. Peter, who brought before his class a case that some would almost regard as "monstrous," in which pneumonia was cured by venesection; and Prof. Hardy, in his clinic at La Charité, protested in a similar manner against the unreasonable prejudice against all venesection which has taken the place of its former extravagant adoption. His audience seemed almost astonished at his presenting to them a case in which he had performed bleeding for pneumonia three times in the twenty-four hours, and that in the very theatre in which Bouillaud formerly so warmly advocated the *coup-sur-coup* practice, since almost forgotten. The subject of the case was a man of thirty-seven years of age, of good constitution, and in the enjoyment of good health until four days prior to admission with well-marked signs of acute, fibrinous, lobar pneumonia of the left side. In presence of this case of uncomplicated pneumonia occurring in a man in the prime of age and of good health, and who had no morbid antecedents except two similar attacks some years before, Prof. Hardy ordered 400 grammes of blood to be drawn at once, 400 in the evening, and 300 next morning, so that 1100 grammes were taken in the twenty-four hours, and a somewhat abundant epistaxis followed some time after the last venesection. After the third bleeding the condition of the patient was greatly improved. The oppression of the breathing was relieved, and the cough and expectoration were sensibly modified, the temperature descending first to 39° and then to 38° Cent. Next day all fever had entirely ceased, the temperature being 36·8°, the pulse 80, and the respirations 18; the cough had disappeared, and the expectoration, which persisted awhile, was white and fluid. The local signs decreased in like manner, so that on the second day there scarcely remained a slight dulness and obscurity of respiratory sound at the base, respiration being quite normal throughout the rest of the lung. This rapid disappearance of the local signs was, in fact, one of the most special and remarkable facts of the case, when we remember how frequently such signs are found to persist for several days after the complete disappearance of fever and the general symptoms. In this case the disappearance was almost simultaneous; and Prof. Hardy attributes this favourable result to the bleedings practised after the method of his great predecessor. But while treating this case in this manner, Prof. Hardy had the case of a colleague under treatment, in which the conditions of the patient's general state and local lesion were quite different, and in which blistering, Todd's alcoholic mixture, tonics and reconstituents were the means required, and were followed by complete success. It is by comparing these two extremes in the therapeutics of an affection which, if not identical in its nature, is at least so in its seat and its name, that we gain some idea of the differences and of the infinite variety of indications that may be furnished by the same disease.

SPIDERS AND THE ELECTRIC TELEGRAPH IN JAPAN.—According to *Électricité*, spiders, which are very numerous in Japan, spin their webs during the night between the telegraph wires and the supports of the telegraphs. As the dews are very abundant in that country, the spiders' webs become conductors of electricity, and give rise to great disturbance in the transmission of despatches.—*Revue Scientifique*, February 17.

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GENERAL CORRESPONDENCE.

SPECIAL CERTIFICATES IN PSYCHOLOGICAL MEDICINE.

LETTER FROM DR. G. H. SAVAGE.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is not often wise to reply to a leading article, but as I think there are some errors in your very sensible article of March 3, "On Special Certificates in State Medicine and in Psychological Medicine," I shall run the risk of doing a foolish thing, and so I write.

You say there is no public service of psychological medicine, and you are correct; but surely there are a very large and important number of men connected with hospitals for the insane and with asylums, and these represent only a small part of those who are interested deeply in insanity. There are literally hundreds of medical men who have insane patients under their care, or are anxious to have "single cases."

The subject is said by you to require no special technical knowledge. I can only say this is not my experience. As to the statement that there is no right to submit patients to an examination which would not in any way be to their benefit,—I wonder how much benefit is derived by the patients in general hospitals by their repeated examination? After years of experience of almost daily teaching, I can say that insane patients do not object to being examined, nor does examination do them harm. They get to look upon themselves as patients, not as prisoners. Pardon my defence of psychological medicine. I am, &c.,

GEO. H. SAVAGE, M.D.

Bethlem Royal Hospital, March 5.

REVIEWS AND NOTICES OF BOOKS.

Transactions of the Sanitary Institute of Great Britain. Volume III., 1881-82. Editors, H. C. BURDETT, F.L.S., F.S.S., and F. S. B. F. DE CHAUMONT, M.D., F.R.S. London: Edward Stanford, 55, Charing-cross, S.W. 1882.

IN presenting this third volume of the *Transactions of the Sanitary Institute*, the editors point out that as no congress was held in 1881, there was an absence of the usual matter for a volume; the principal reason given why no congress was held, being that the International Medical Congress, and the Medical and Sanitary Exhibition established in connexion with it at South Kensington, rendered a congress and exhibition both less necessary and less easy to carry out at the time of year which is generally most convenient for the members of the Institute. The present *Transactions*, however, contain a very full report on the sanitary portion of the exhibits at South Kensington, and, as usual, copies of all papers read before the Institute during the year, and reports of the discussions which followed the different readings.

History of Rome and of the Roman People, from its Origin to the Establishment of the Christian Empire. By VICTOR DURUY, Member of the Institute, ex-Minister of Public Instruction, etc. Translated by W. J. CLARKE, M.A. Edited by the Rev. J. R. MAHAFFY, Professor of Ancient History, Trinity College, Dublin. London: Kelly and Co., 51, Great Queen-street, W.C.

M. DURUY'S History of Rome has won a very high reputation on account of the author's power of exposition and illustration, and his remarkable and exhaustive range of historical learning and research; and Messrs. Kelly and Co. will render a great service by placing a translation of the work at the command of English scholars and readers. The only fault to be found with their edition is that it will be expensive, as it is to be published in seventy-two parts, each costing 4s. But, on the other hand, the parts are to be issued only monthly, so that the cost will be spread over a long period. The work, of which we have received Part I., is superbly got up. The whole will contain about 3000 engravings, 100 maps and plans, and numerous chromo-lithographs; and in every point—paper, typography, execution of the illustrations, etc.—the publication leaves nothing to be desired. Judging from the part before us, the book will be a veritable *édition de luxe*, and ought to command a large sale.

Street's Indian and Colonial Mercantile Directory for 1882-83. London: G. Street and Co., 30, Cornhill, E.C.; and Street Brothers, Serle-street, Lincoln's-inn, W.C. 1882.

THIS Directory contains an immense amount of information indispensable to the mercantile classes, and much of which will be of great interest and service to large numbers of people not engaged in commerce or trade. Besides giving the trade returns, tariffs, population, etc., of foreign and colonial countries and towns, it now contains full particulars of the steam and other communications with the various places treated of. Concise descriptions of country and town are furnished. The principal products are spoken of; tables of local weights and measures are given, and the value, in English money, of foreign coins. Lists of the leading professional men (physicians, surgeons, barristers, etc.) in each city or town will be found, and of course lists of bankers, traders, etc., of every class. We find also lists of books of reference are given in the notices of the several countries; and we would suggest that the value of these lists of books would be much increased by the addition of the several publishers' names, and of the dates of publication. The work contains eighteen very clearly executed maps, and in every way does great credit to the industry and carefulness of the compilers.

ACUTE TONSILLITIS.—Dr. Skinner, writing in the *Phil. Med. News*, February 10, corroborates the statement made by a previous correspondent as to the great utility of the bicarbonate of soda in the local treatment of this disease. He combines it with tincture of myrrh, camphorated opium tincture, and water, as a gargle. It will be found very serviceable in many cases of the acute tonsillitis of scarlatina. If the case is seen within a few hours after the local inconveniences have been experienced, and before any marked congestment and enlargement of the tonsils with febrile action are set up, abortion of the disease may be frequently effected by once or twice cauterising thoroughly the tonsils and pharynx with a nitrate of silver solution, varying in strength from ten to twenty grains to the ounce. Usually, however, the case is not seen so soon, and then the nitrate always increases the local distress. The treatment by chlorate of potash and tincture of iron Dr. Skinner has not found satisfactory, except in subacute and chronic tonsillitis, when these remedies are often beneficial.

APPLICATIONS TO THE EYE.—At a meeting of the Medical Society of the State of New York, Dr. Mittendorf read a paper on the above subject. He said that solutions of the alkaloids in water were hard to keep, being liable to developments of fungous growths. The use of granules might irritate the cornea, and their solution took time. Vaseline was bland, but difficult of application; and powders mixed with it might settle, and eserine especially was difficult to mix with it. He preferred impalpable powders, but it is difficult to find a vehicle that will readily dissolve in the eye. He had found powdered gum-arabic with sugar of milk satisfactory. Eserine, which is deliquescent and gelatinous, was first dissolved in water, then mixed with sugar of milk and reduced to a powder, and then rubbed up with gum-arabic. The various alkaloids thus prepared were, as a rule, to be applied by the physician only: they could be dissolved in water in a watch-glass, or used dry; and when left for the patient to use they might be dispensed in water.—Dr. St. John Roosa had never regarded fungi in collyria as in any respect hurtful.—Dr. Squibb said that salicylic acid, which was soluble in 300 parts of water, prevented the growth of fungi, which, subsisting at the expense of the alkaloid, weakened the solutions. The difficulty with eserine could be overcome by using the salicylate of eserine, which did not deliquesce and was not subject to attacks of fungi. Vaseline was not a good excipient, as it would dissolve nothing. Oleic acid is preferable, and the oleates of the alkaloids are soluble.—Dr. Mittendorf observed that the advantage of mixture with gum-arabic was that minute doses could be regulated accurately.—*New York Medical Journal*, February 10.

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PROVINCIAL CORRESPONDENCE.

MANCHESTER.

March 5.

RESIGNATION OF DR. WILLIAM ROBERTS AT THE ROYAL INFIRMARY — TESTIMONIAL TO MR. LUND — MEDICAL CHARTER FOR THE VICTORIA UNIVERSITY—NEW MEDICAL SCHOOL BUILDINGS AT THE OWENS COLLEGE—PROPOSED REMOVAL OF THE ROYAL EYE HOSPITAL—REPORTS OF THE CLINICAL AND ST. MARY'S HOSPITALS.

THE resignation by Dr. William Roberts of the appointment, which he has so long and honourably held, of Physician to the Royal Infirmary, has followed quickly on that of the best known of his surgical colleagues, Mr. Lund. It had been for some time an open secret that Dr. Roberts had in contemplation the step he has now definitely taken. His large consulting practice has lately made such great demands upon his time and energy, that he found it impossible, so long as he remained an active member of the hospital staff, to obtain leisure for those scientific studies and researches in which he delights. No Manchester physician of recent years has made for himself a professional reputation at once so wide-spread and so solid as Dr. Roberts; and certainly none, on his retirement from active service at the hospital, has been in a position to render a more satisfactory account of his stewardship. During the earlier part of his connexion with the charity, when it was comparatively rare for an infirmary physician to recognise, in any other way than by appropriating his share of the students' fees, his responsibility as a teacher of clinical medicine, Dr. Roberts threw himself with energy into the work of clinical instruction, and successive generations of Manchester students are ready to bear witness to the excellent quality of his teaching. Besides doing good work as a teacher, he has in another way utilised his opportunities for the benefit of the profession and the public by making many important contributions to the stock of medical knowledge. Gifted with the faculty, much less common than is usually supposed, of accurate observation, and possessed of the art of clear and concise statement, his published writings have always merited and secured the attention of the profession.

For the present he will retain his professorship at the Owens College, which gives ground for hoping that it is not his intention entirely to relinquish his teaching duties. The vacancy caused by Dr. Roberts's retirement from the Infirmary has been filled up by the appointment of Dr. Dreschfeld, the Senior Assistant-Physician and Professor of Pathology at the Owens College.

It is gratifying to be able to state that Mr. Lund, whose retirement from the office of Surgeon several months before his term expired was occasioned by a threatened break-down in his health, has now entirely recovered and is in full work again. His long connexion with the Manchester School as a lecturer—first of all, for many years, on anatomy, and subsequently on surgery—and as a clinical teacher, and his painstaking devotion to the interests of the students, have been affectionately recognised. A fund has been raised by his former pupils and a few other professional friends for the presentation to him of a suitable testimonial. Mr. Lund's own wishes have very properly been consulted as to the form which this should take, and it is now understood that the principal part of the amount subscribed (nearly £250) will be expended in a bust.

There is a well-authenticated rumour afloat, though it has not yet been publicly announced, that the power of granting medical degrees has virtually been conceded to the Victoria University, and that the charter now only awaits the signature of the Queen in Council, and is expected to reach Manchester within the next few days.

The new buildings in connexion with the Medical Department of Owens College are rapidly approaching completion. They comprise improved physiological and pathological laboratories, a museum of sanitary appliances, an enlarged museum of materia medica with extensive pharmaceutical laboratory, together with two large reading-rooms—one for students and the other for members of the Manchester Medical Society, with the library of which both rooms will be in communication. The pharmaceutical laboratory has been planned by the Professor of Materia Medica, Dr. Leech, on a scale which will not only meet the requirements of medical students engaged in the study of practical pharmacy (hitherto conducted under great disadvantages, either in the dispensing-room of a hospital or in the surgery of a general practitioner dispensing his own medicines), but also those of students preparing for the examinations of the Pharmaceutical Society, in the event of the Owens College authorities undertaking, as they surely will do, the education of pharmacists.

Many of the hospitals have recently been holding their annual meetings. The Board of the Royal Eye Hospital presents a satisfactory balance-sheet, but cries out for a new or enlarged hospital, and more beds. The idea has been entertained of securing a site for a new hospital about a mile and a quarter from the centre of the city, on its southern side. All well-wishers of the poor must, however, desire to keep this institution—to which so many hundreds throng week by week from the surrounding towns—nearer to the railway stations and to the centre of the city; and it is to be hoped that if the present building is really becoming too small, the Board will see its way to the purchase of the property adjoining, and enlarge the existing hospital rather than rebuild it elsewhere.

The managers of the Clinical Hospital and Dispensary for Children report a large increase of patients, both women and children, and, in view of the increasing importance of the women's department, proposed and carried, at the annual meeting, a resolution to alter the name. Henceforth, therefore, it will be known as the Clinical Hospital for Women and Children. At the same time they appeal earnestly for funds, and announce that unless this appeal is promptly responded to they will have to close their wards. The deficiency in 1880 was £646, in 1881 it had increased to £676, whilst at the end of 1882 it had reached no less a sum than £1114.

It is refreshing to turn from this depressing picture to the jubilant report of the Board of a much older hospital for women and children—St. Mary's. For several successive years the finances here, too, have been in a most unsatisfactory condition, and the admission of in-patients has been seriously restricted. But this year strenuous efforts have been put forth, especially by the Vice-Chairman of the Board, Mr. Duncan Matheson, and contributions, amounting in the aggregate to £2000, have been received towards the extinction of the debt; so that, instead of an adverse balance of £1262 5s. 3d., which appeared in the financial statement for 1881, there was, at the end of 1882, a balance to the credit of the Hospital of £195 8s. 8d. The great need now, of course, is for increased annual subscriptions, so that the present satisfactory condition of the balance-sheet may be maintained. It is worth noting that no fewer than thirty-one ovariotomies were performed at this Hospital during the year 1882.

HISTOGENESIS OF CANCER.—Dr. Reed, in No. XII. of his "Studies from the Pathological Laboratory of the University of Philadelphia" (*Phil. Med. Times*, January 13), sums up an elaborate paper on the Histogenesis of Cancer in the following terms:—"In conclusion I will summarise the essential points in favour of the exclusive epithelial origin of cancer. 1. Primary true cancers are found only in locations where there is pre-existing epithelium. 2. No cancer has been proved beyond doubt to have originated heterotopically. 3. The cicatrisation of cancer explains the young connective-tissue infiltration. 4. Young connective-tissue cells or white blood-corpuscles have never been seen inside the alveoli. 5. The independence of the epithelial cancer-cylinders from the connective tissue. 6. The intactness of endothelial ensheathments of connective-tissue trabeculæ forming the alveoli. 7. The mode of development and concentric growth of *secondary* cancer. 8. The proliferating power of epithelium *normally* is greater than that of any other tissue. 9. The results of my experiment showing that the epithelial covering in the healing of ulcers is exclusively derived from the epithelium of the border, a most conclusive proof of this being *the gradual advancement of the pigment from the borders of the healing ulcer*—this fact, by analogy, forming a strong testimony in favour of the epithelial origin of cancer. 10. The transformation of connective-tissue cells into epithelial cells, in extra-uterine life, does not occur, physiologically or pathologically."

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 27.

JOHN MARSHALL, F.R.S., President, in the Chair.

Two papers on Scurvy were read: one (communicated by the President) by Dr. Neale, surgeon to the late *Eira* expedition, the other by Dr. Hale White. A number of gentlemen, well known to take an interest in the subject, were present on this occasion, including Dr. Rae, Sir William Smart, Inspector-General Donnett, Inspector-General Colan, Professor de Chaumont, and many others.

NOTES ON SOME POINTS IN THE ETIOLOGY OF SCURVY.

Mr. W. H. NEALE contributed this paper, the object of which was to discuss briefly the etiology of scurvy, and to consider whether the experience of the late *Eira* expedition could throw any light on the question as to how scurvy can best be prevented during an arctic winter. After the enumeration and consideration of the chief predisposing and existing causes of scurvy, special attention was drawn to those present in the case of the *Eira* expedition, and a comparison made of the weekly dietary in the *Eira* expedition with that of the crews of the *Alert* and *Discovery*. The author spoke also of the value of fresh meat instead of preserved meats as an antiscorbutic, and of the antiscorbutic properties of blood; and concluded with a few suggestions for future arctic expeditions.

A CASE OF SCURVY WITH DILATATION OF THE HEART AND RETINAL HÆMORRHAGES.

Dr. W. HALE WHITE read this paper. He said that out of about twenty cases which were examined at the *Dreadnought* Hospital, only one presented retinal hæmorrhages, and that fell under the author's care. The patient was admitted on November 13, 1882. He had left Calcutta four months and a half ago, and whilst there had had dysentery. On admission he was very sallow and evidently very ill; there was swelling of the gums and the usual bruise-like swellings about the body. The apex beat was in the fifth space one inch outside the nipple line; the area of cardiac dulness was increased; there was in the third left intercostal space a loud systolic murmur; the first sound at the apex was muffled, and arterial murmurs were present in the neck. Pulse was weak and almost thready. In the right eye were two large hæmorrhages, one above and one below the disc; they were striated at the margin, white in the centre. The blood showed only 40·5 per cent. of the normal number of white corpuscles, and only 20 per cent. of the normal quantity of hæmoglobin. The patient remained in the hospital a fortnight, and was treated with lime-juice and put on full diet. He steadily improved, and the retinal hæmorrhages became less distinct. The red corpuscles increased to 63 per cent. of normal, and the hæmoglobin to 35 per cent. The basic systolic murmur disappeared, but the apex beat remained in the same position. It was stated that this case presented the following points of interest:—First, the influence of the previous dysentery in making the attack of scurvy severe, which severity was evidenced by the marked blood-changes; secondly, the presence of retinal hæmorrhages, a very unusual occurrence as compared with other anæmic diseases, and which was to be explained by the fact that scurvy as seen nowadays was not severe enough to produce retinal hæmorrhages; and thirdly, the dilatation of the heart. It was shown that this is the only recorded example of cardiac dilatation in scurvy, and that, considering the close alliance of this disease to other anæmic diseases in which it was known that the heart was fatty, it was presumed that here also this was the cause of the dilatation.

The PRESIDENT said that the discussion would doubtless hinge chiefly on Dr. Neale's paper, in which a challenge to the old idea that lime-juice is the only remedy for scurvy, was thrown down. He would like the opinion of physiological chemists as to the exact composition of scorbutic blood and tissues, with a view to determine the presence or absence of those salts which led to scurvy. He wished to know what amount of albuminoid diet was necessary to sustain health, and the *rôle* which hydrocarbons played. Dr. Neale's suggestion that blood itself should be used as a diet appeared both wise and rational. Being honoured by the presence of many naval and military men, he, in accordance with the usage of the Services, would ask the juniors to speak first. He then called on Inspector-General Colan.

Dr. COLAN, from his own experience, was of opinion that the actual essential and proximate cause of scurvy is a deprivation of something that is contained more or less abundantly in certain fresh succulent vegetables, including fruits, which is probably an organic vegetable acid, free or combined with a base forming a salt. This deprivation leads to a state of malnutrition, or depraved condition of the blood, which suffers defect in quality or quantity, or both, constituting the disease called scurvy, in which complaint an immense quantity of serous fluid is thrown out into the pleural cavities and the pericardium; and a sanguineous fluid into the intestine, the subcutaneous areolar tissue, the aponeurotic sheaths of tendons, and under the skin, probably by an increased tendency to exosmosis. The lungs themselves may become dotted with blood, or filled with thinner fluid. Dr. Colan's heaviest cases in the arctic expedition were those of hydrothorax and hydropericardium, accompanied by effusion into the gums and about the hamstring muscles; the pressure of fluid on the heart causing the alarming tendency to syncope that was so prevalent. It may be that, as Dr. Aitken states, the blood is altered by the addition to it of some ingredient or ingredients, or by the absence of such that ought to exist in it. The deficient ingredient may be one of the ordinary constituents of the blood, or of some principle or element entering into their composition; it is clear that, when certain articles of food are given, the blood in scurvy rapidly regains its healthy state, and the disease disappears, though it takes a long time, in bad cases. for the effused fluid to be absorbed, and the broken strength regained. The severity of scurvy may be increased, its duration prolonged, the recovery from it rendered more tedious, and its accession hastened, by great cold (running down as low as 105° below freezing), great and prolonged darkness (during 142 days the sun never appeared over the horizon), moisture, foul air, and monotony of diet and routine, as well as by depression of spirits, and a salt diet, and last, but not least, great physical exertion, such as the sledging parties underwent in the Polar Sea. The great prophylactic as well as the great cure for scurvy is, Dr. Colan believed, a sufficient supply of fresh vegetables, as recently gathered as possible, and which contain citric, malic, and tartaric acids, either free or in a salt. Such vegetables are the potato (a first-rate anti-scorbutic), onion, cabbages, cauliflower, broccoli, agave Americana (cactus), wild artichokes, parsnips, carrots, turnips, lettuce, kale, dandelion, scurvy-grass, sorrel, and sauerkraut. Any of the cruciferæ are good. Amongst fruits, many of the genus citrus are good; as also are grapes. It is probable that the organic vegetable acids in these are decomposed easily, and form carbonates in the system. It may be that the salts of vegetables supply some constituent materials to the fibrine, red particles, or albumen. In the absence of fresh vegetables, the expressed juice of the lime—citrus limetta or acida—is the best substitute; Dr. Colan found it of the greatest possible use in the arctic regions. That used in the North was made at Montserrat in the West Indies, and was fortified, to prevent fermentation, with 10 per cent. of spirit; and gave, when analysed, twenty-seven grains of citric acid to the ounce in the fortified, and thirty-two grains before fortifying; specific gravity 1053, fortified. Professor De Chaumont found an average of 392 grains in the fortified juice. Dr. Colan ventured to say that, on sledging expeditions, the lime-juice might be carried in some skin or capsule, each capsule containing about eight ounces for eight men daily; and this, whether it were frozen or fluid, might be mixed with the warm pemmican at dinner. Dr. Colan did not recommend that concentrated lime-juice in lozenges should be taken to the arctic regions till a trial of them has been made at home. Sledging in the extreme North is too much a matter of life and death to begin experiment in. As succus taraxaci, succus scoparii, and succus conii, and all the salts of mineral springs on the Continent and elsewhere are best with their natural water of combination, so it may be with lime-juice. Dr. Colan found the citrate of iron and

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quinine useful in convalescent scurvy patients, owing, perhaps, to some catalytic power in promoting the assimilation of the nutritive part of the food. In case of there being no lime-juice at hand, vinegar and the citrates, tartrates, and acetates of the alkalies might be given. Preserved vegetables and fruits are, though very inferior, substituted for fresh vegetable food. Still they are very useful. Dr. Colan had a good allowance of them on board ship, and no doubt they did good. Still, there is something lost in the art of preserving (boiling, or pickling, or drying), which we want in scurvy, and after a long time it is doubtful if they would keep off the appearance of the complaint. Their organic principles are not as readily assimilable after they are dried and kept for some time. Dr. A. Marroin, in his "Medical History of the French Fleet," for 1861, says, "Preserved vegetables retard the outbreak of scurvy, they slacken its course without stopping it altogether, when it has thrown its roots too deeply into the economy." Although well supplied with preserved vegetables, there were at one time 1000 cases of scurvy in six ships in Katcha Roads. Some of these ships were sent down the Bosphorus, and were supplied with salads and fruits, and the change effected was almost instantaneous. Beer and wine possess antiscorbutic qualities. Dr. Colan found them useful with sick men. Ardent spirits are more hurtful than good in scurvy. Dr. Colan though that fresh meat (raw meat in particular) has some power as an antiscorbutic. The skin of the narwhal and the flesh of the walrus are believed to have this property. Dr. Kane found the latter useful. When Dr. Colan was able to give his scurvy cases in the summer some musk ox, geese, ptarmigan, and duck, it appeared to do them good, though they may have acted by simply strengthening the system. There may be something in meat recently killed which is antiscorbutic, but which it loses in a short time if kept. Perhaps the lactic acid undergoes fermentation. The Esquimaux eat a deal of blubber, which is said to be antiscorbutic, but they suffer from scurvy, and we gave them a quantity of lime-juice at Egedesminde. The American Indians protect themselves against scurvy by putting up for the winter dried plums, buffalo-berries, and chokeberries. Meat ought to be given in large quantity. The American pemmican contains raisins and currants; and one sweet pemmican had currants in it. Milk is supposed to have antiscorbutic properties. It will be found useful when preserved. Instances have been given of men getting scurvy while subsisting on vegetables; but it may be that those vegetables had not the antiscorbutic acids or salts, or had not enough of them; and we must know whether the vegetables were eaten fresh or not. It is to be hoped the time is not far off when men will cease to talk of the treatment of scurvy, as well as of typhus and typhoid fevers, finding that preventive measures will be sufficient to ward off their appearance. In these days of quick passages, all steamers ought to carry enough fresh vegetables for all on board, and it would be well to cause all sailing-vessels or steamers making long voyages to call in at all available ports for a supply of the same. After the last day's issue of fresh vegetables, lime-juice of the best quality should be issued to all on board at the rate of an ounce a day, in sweetened water; and, if the voyage were very prolonged, this ought to be increased. If scurvy appeared, as much as six ounces of the juice a day should be given. Persons have got scurvy while taking lime-juice; but many cases are complicated with low inflammations of the lungs, liver, spleen, and muscles, which lime-juice does not benefit. In the far-off arctic regions, where men, and those the strongest, are exposed to great hardships while living under the most exceptional circumstances possible to meet with, scurvy will always be likely to occur. It would be well if, in addition to lime-juice, vegetables, as nearly as possible preserved in the state they were gathered, could be sent, such as raw potatoes preserved in molasses, or pitted in earth, as in Ireland, the earth being made use of in the valleys in the summer under glass to grow mustard and cress, and perhaps turnips (or their tops). Sheep might in a large number be taken to the edge of the ice, and there slaughtered and preserved in ice for future use.

Inspector-General Donnett had never seen a case of scurvy on board any ship in which he had served; his experience had been gained solely amongst seamen landed from merchant ships. Scurvy is a disease resulting from the absence in prepared food of some protective elements which are found in fresh vegetables, fresh flesh, and fish. Neither cold, nor fatigue, nor monotony, nor depression of spirits would alone lead to scurvy. There was none of it in the retreat from Moscow in 1812, though every sort of hardship had to be encountered. It was not confined to any one nation or people: he had seen it in Lascars, Chinese, and Esquimaux. He considered the introduction of lime-juice as comparable only to the introduction of vaccination in the advantages it had wrought. Fresh meat was even better than lime-juice when it could be obtained, but it was well to associate lime-juice with any diet. Kane, who had suffered extensively from scurvy, stated that he would have laughed at it if he could only have obtained frozen walrus as food. The men in the *Eira* expedition had been able to do as they pleased, and had not nearly so much fatigue to undergo as the men in the late Government expedition. The subject was one to which greater attention ought to be paid in the merchant service. Men signed articles with no knowledge of their contents, while their health and interest were hardly considered by those who were responsible. The Board of Trade should institute a systematic inspection of the food brought home, as the best means of knowing how the sailors have been fed.

Dr. Rae gave an interesting account of his four expeditions to the arctic regions. He had not been so far north as Dr. Colan, but he had seen much stormy weather, and said that under these circumstances a cold of 30° to 40° below zero was equal to 100° almost in still weather. His experience extended over nearly fifty years, and he was sure that neither cold, nor fatigue, nor want of lime-juice need cause scurvy. In his first expedition they had all had to work very hard indeed, and to carry fifty pounds on their backs, besides making some twenty miles a day over exceedingly rough ice roads. They had lived chiefly on reindeer and ptarmigan, and, being very hungry, had eaten all the bones of the birds except their beaks and claws. They were fortunate in this respect; the men had been trained from childhood to kill wild game, and they had thus had plenty to eat. They had no spirits, but tea made from the extract, which he had taken out on the recommendation of Dr. Bence Jones. The cold was so great that the spirit-lamps did not suffice to boil the water, though it warmed it. He had suggested this to Captain Nares, but he had not acted on the suggestion. On killing their animals the blood was collected in the stomach of the animal previously turned inside out; it at once became frozen; the meat was chopped small and mixed with the blood. In his expeditions the men were whalers; there were no officers. He had no trouble of any kind with them; they were well disciplined and obeyed him in everything. He had a school and taught them. The cold at one time was so great that his books, which had become wet and damp from the condensed moisture of the inside of their hut, could only be thawed by taking them to bed. Yet there was no scurvy. It was important not to try and keep too warm, but rather to accustom oneself to the place and the weather. He related how, some forty-nine years ago, when sore pressed by scurvy, the captain, one officer, and several of the crew having died, they found some cranberries, and what a marvellous restorative effect they had on the diseased men. Cranberries should always be taken on arctic expeditions.

Sir Wm. Smart said, for his own part, he had not seen scurvy, though he was well acquainted with the literature of the subject. He thought a diet of fresh animal food of the highest importance, as being both preventive and curative. There were instances of winters passed in an arctic region without vegetables and without scurvy. In the case of the *Investigator*, after two winters and one summer without scurvy, the disease broke out on the approach of the second summer; this suggested that a diet which was protective for a while, failed in time under the further depressing influences perhaps of despondency. He thought it was better to live in huts than in hot, close, ill-ventilated cabins, amidst dampness and foul air—causes which, he thought, had tended to produce scurvy in the *Alert* expedition.

Dr. De Chaumont spoke from an experience gained chiefly in the Crimea, and from a few cases he had met with since in the army. He thought the present discussion had certainly shown the value of fresh meat; and he illustrated it by his experience in the Crimea, where, in 1856, after the fighting was over, and his regiment were left for fourteen days very unnecessarily on salt meat only, in order to finish

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up certain stores which were in hand, symptoms of scurvy began to show themselves very quickly, for the soldiers were reduced to a state in which the balance of health was very delicately poised. In the case of the Government expedition, he pointed out that the scurvy broke out in the sledging parties, and that the victualling of these was arranged by Sir George Nares, with the insufficient allowance of only two ounces of dried potatoes per man daily, and without any other antiscorbutic whatever. Their work was extremely heavy, and equal to 500 foot-tons per diem, 300 foot-tons being a full allowance. Of the pemmican they had with them, they could not eat their full allowance for nausea; and it was not to be wondered at that they broke down. He did not consider that fresh meat by itself was a sufficient prophylactic. Its value was derived probably from the lactic acid it contained; but that was a very small percentage of the meat, and large quantities had to be eaten to get sufficient lactic acid, as was evidenced by the enormous meals of the meat-eating natives. He placed his chief reliance on vegetables, and remarked how often it might be seen in ordinary conditions of life that persistent refusal of vegetables brought on scorbutic symptoms; though, of course, it would be going much too far to say that scorbutic conditions always brought on scurvy.

Sir Joseph Fayrer related his experience in the siege of Lucknow, where, after they had been five months shut up under all sorts of unhygienic conditions, vegetables were so eagerly sought after, that a small cruciferous plant which grew on the walls sold for its weight in silver, and many men lost their lives in attempting to get it. The disease from which they were suffering most was scurvy, and that was an instance of the natural craving for a vegetable diet in the disease. At the same time, vegetables were not sufficient prophylactics, for the natives of India, though subsisting largely on vegetables, still got scurvy.

Dr. Barnes, having been physician to the *Dreadnought*, and also having spent a year on a merchant ship, had had some experience in the matter. He thought that, if fresh meat were cooked, it would not keep away scurvy. When it was raw it had almost the same powers as milk; but it needed to be supplemented with vegetables. No government which sent out an expedition without lime-juice could escape a criminal responsibility. In the merchant service, scurvy was a disease of the forecastle, and not of the cabin; and he spoke very strongly of the necessity of making the owners and captains of ships liable to heavy fines or imprisonment if they neglected their duty to the crew.

Dr. Rae pointed out that in the last records obtained of Franklin's expedition eight officers had died to fifteen men, so that the officers seemed to have borne their full share of danger and hardship.

Dr. Barnes explained that any remarks he had made applied only to the merchant service.

Dr. Reginald Thompson gave it as the result of his experience of three months on the prairies, that when meat only was available a great deal must be eaten, and much exercise taken. He was in the habit, during those months, of eating eight pounds of meat a day, with hard exercise, and felt in excellent health.

Dr. Neale replied very briefly. He had understood Dr. Colan to say that citric, tartaric, and other vegetable acids were efficient preventives; but he thought that was hardly compatible with the cases that had occurred among the crews of the *Alert* and *Discovery* before they started on their sledging and very soon afterwards. As to the value of fresh meat, he imagined it probable that it was greater in the arctic regions than elsewhere, because it was possible to eat it before it had undergone changes which occurred very quickly in warmer climates. The crew that served on the *Eira*, he reminded the meeting, was got together too late in the season to be in any sense a picked crew, as it had been sometimes assumed; they were rather less capable, in fact, than the average whalers.

Pathological specimens were exhibited from the Guy's Museum, of the subperiosteal hæmorrhages found in scurvy, and of the subcutaneous hæmorrhages; and tables were hung on the walls, showing the diminution of scurvy since the Merchant Shipping Act had come into force, and the amount of scurvy in the British as compared with the foreign merchant services.

Annual Meeting—Thursday, March 1.

John Marshall, F.R.S., President, took the chair at 8 p.m., and declared the ballot open for one hour, nominating Dr. C. H. Carter and Mr. George Eastes as scrutineers.

The report of the President and Council, which was read by the Secretary (Mr. Berkeley Hill), announced to the meeting the continued prosperity of the Society, and the progressive increase in number of its Fellows. The number of deaths among them had been nineteen, which was about the average of the last twelve years, and of these two were Honorary Fellows, Mr. Charles Darwin and Dr. John W. Draper. The new elections had been twenty-six (twenty-one resident and five non-resident). A few minor changes among the Fellows as to non-residency, etc., were enumerated, and the number of subscriptions was stated to be 301, against 292 in the last report, and the total number of the Society—resident, non-resident, and honorary—was 704. The items of receipts and expenditure were in most cases much the same as in recent years, a slight increase in the latter being observable in the library, stationery, and repairs accounts. There had been also a large extraordinary expenditure on repairs of the exterior of the house, which the ground-landlord had required to be done, and which, with an expenditure on the seats in the meeting-room, and other decorative improvements, amounting in all to about £250, had been paid with the exception of a small balance of £27 out of the current receipts of the last two years. It was stated that these arrangements had, much to the Society's benefit, been carried out with economy under the careful supervision of the retiring Secretary, Dr. Reginald Thompson. The payment of the sum of fifty guineas to the Harvey Tercentenary Memorial, voted at previous anniversary meetings, having been shown to be illegal, the amount had (owing specially to the exertions of the Treasurer, Mr. Cooper Forster) been made up by a subscription among forty of the Fellows. The report also stated that the time had arrived for a second award of the Marshall Hall Memorial Prize, and that the Council recommended its presentation to Dr. David Ferrier for his investigations into the physiology and pathology of the nervous system. A change in the character of the printed *Proceedings* had been made by the introduction of reports of the discussions at the meetings, and, to encourage these discussions, abstracts of the papers had been printed for distribution before each meeting. The report of the Librarian gave the number of additions to the library (467 works), and, after referring to the triennial inspection of the library by the Committee as having taken place, the library being found in excellent condition and perfect working order, gave full details as to the number of volumes in the library (33,500), the number of books taken out, and the daily number of Fellows using it, etc.

The adoption of the report was moved by Dr. Julius Althaus in a congratulatory speech on the condition of the Society, in which he particularly referred to the judicious award of the Marshall Hall Prize to Dr. Ferrier, whose laborious researches rendered him so worthy a recipient of it.

The motion was seconded by Mr. Pickering Pick, and carried unanimously.

The President then called upon Dr. David Ferrier to come forward, and addressing to him a few complimentary words upon the grounds on which the award had been made to him, presented him with the diploma recording his selection as the second Marshall Hall prizeman, and with it a cheque for the amount of the prize (some £285).

Dr. Ferrier, on receiving the diploma, made a reply, thanking the President and Society for the high honour they had conferred upon him in their selection of him as a recipient of the prize.

The President, in addressing the meeting, introduced at once the subject of the losses the Society had sustained among its Fellows during the past year, which he said were so numerous and important that he must defer the task of considering more general questions relating to the Society, and to the progress of medicine and surgery, to a future opportunity. The President gave a short classified enumeration of the deceased Fellows, of whom the non-residents were nine, including three (Drs. F. E. C. Hood, F. R. Hogg, and Charles Morehead) who had served with the Army in India, three others (Drs. Richard Elliot of Carlisle, Richard Cross of Scarborough, and William M'Ewen of Chester) who

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had been engaged in practice in large provincial towns, and three (Dr. W. W. Johnston, Joseph Williams, and George Budd) who had retired from metropolitan practice to reside in the country. One deceased physician, Sir James Alderson, though he had ceased to belong to the Society, was connected with it for many years, partly as a non-resident, but chiefly as a resident Fellow, and had in 1865-66 been a President of the Society. There were eight deceased resident Fellows—Dr. Robert W. Lyell, Dr. Alexander Silver, Mr. G. T. Clover, Dr. Robert Taylor, Mr. George Critchett, Dr. Peacock, and Sir Thomas Watson; and there were two honorary Fellows—Dr. John William Draper of New York, and Mr. Charles Darwin. The President went into full details of the lives of the deceased, taking the individuals in each class in the order of the duration of their fellowship, beginning with the youngest, which he said be found to correspond with their ages, influence, and position in the profession. For such statements, he said, as were not based on his acquaintance with the deceased, or on circumstances regarding them which had come within his own cognisance, he was much indebted to obituaries which had already appeared in the public journals. In his notice of Dr. George Budd, the President referred to the interesting fact of so many of his brothers (seven out of nine) having been members of the medical profession, his being third wrangler at Cambridge, and his successive connexion with the Middlesex Hospital, the *Dreadnought* Hospital Ship, and King's College, the offices he held at the College of Physicians, and the production of his standard works on Diseases of the Liver and Stomach. In the notice of Mr. Clover, he went very fully into the points of the amiability and unselfishness of his character, his patience and cheerful resignation under the wearing effects of chronic pulmonary disease; and his large experience and wonderful ability in the administration of anæsthetics, so well illustrated in his valuable article on the subject in Maine's "Dictionary of Medicine." Full notice of the life-incidents, character, and works of Mr. George Critchett, Dr. T. B. Peacock, and Sir Thomas Watson concluded the obituary portion of the address, in which the speaker largely dwelt upon Mr. Critchett's excellence as a teacher, and his acknowledged dexterity as an operator, his promptness in consultation and considerate kindness to his patients. Dr. Peacock's predilection for pathological investigations and his gradual concentration of them on the malformations and diseases of the heart, the presentation of his unrivalled collection of examples of these diseases to the Hunterian Museum; his strongly marked individuality, precision, conscientiousness, and simplicity of character, and his fondness for foreign travel and frequent journeys abroad for recuperation of his energy. The origin and collegiate and early life of Sir Thomas Watson, the "Nestor of English Medicine," who had died at the patriarchal age of ninety years and nine months; his connexion as Physician and Lecturer with the Middlesex and King's College Hospitals, and their outcome in the publication of his celebrated Lectures, the estimation of which has been in our time almost unique, the description of disease in them being so full and clear as to cause him to be compared with Sydenham, and their scholarly style having gained him the appellation of the Cicero of English medical literature; his professional eminence, moral worth, sagacity, integrity, and steady adhesion to those high principles of duty which made him so fit to advise on all ethical questions relating to our profession, entitling him justly to the name of the "greatest English physician of the present century." The President then gave biographies of the two honorary Fellows—Dr. James William Draper, the physicist, chemist, and physiologist, and Charles Darwin, the great naturalist—with notices of their works and a discussion of the question of the important influence they had had, especially those of the latter, on the science of the day; and then summed up his address with reflections on the lessons we might derive from these histories of the careers of the deceased members, from which peroration the following words are extracted:—

The thought has often occurred to me, and no doubt to many besides, what an amount of accumulated experience and wisdom is blotted out at the death of each master of the craft of medicine and surgery; and if we reflect on the number of gifted, learned, and industrious men who have passed from our ranks during the last twelve months, we may well feel dismay that so much slowly acquired individual knowledge has been here extinguished, and so much personal power has thus died out. But fortunately, owing to the liberal intercommunication of ideas which distinguishes the leal from the false disciples of Æsculapius, amongst the instruments of which are societies and brotherhoods like ours, such knowledge and power are handed on from period to period, and the examples of one generation are emulated by its successors. If we study the record of the lives of our deceased Fellows which I have put before you, we find that they possess one common characteristic, viz., devotion of work. Whether they were born to affluence, or entered upon life supported by moderate or scanty resources; whether their education was of the highest order or of humbler pretensions, provided for them or secured with difficulty; at whatever medical school they were trained; whatever professional titles they acquired; whatever the branch of practice to which they had recourse, whether in London, the provinces, or abroad; whether they had the early support of powerful friends, or struggled upwards by themselves; whether they were shaped by circumstances, or compelled circumstances to bend to them; whether they aimed solely at professional eminence, or sought relief to their redundant energy in the duties of citizens besides; whether they were rewarded by the rich or the poor, by the public, the profession, the Government, or the Crown; and lastly, whether their lives were so prolonged as to secure the full fruition of their aims, or were cut so short that they saw but visions of future success,—it is apparent, I say, that all were devoted to their work." After a few words relative to the special interests of the Society in relation to the deceased Fellows, the President concluded with these words:—"It has frequently been remarked, both in prose and verse, that the occasional contemplation of the lives and works of great and good men may help to encourage us to corresponding efforts, and perhaps I may venture to hope that the picture which I have endeavoured to present to you in, this passing hour, of the deeds of our recently deceased associates may serve to deepen our convictions of the value and needs of our noble profession, may nerve such of us as are able to fresh exertion, and concurrently aid in advancing the interests and increasing the prosperity of this Society."

A vote of thanks to the President for his address was moved by Mr. Spencer Wells, seconded by Mr. H. W. Page, and the motion having been put to the meeting by the Treasurer, Mr. Cooper Forster, was carried with acclamation.

Thanks were also voted, on the motion of Mr. Thomas Smith, seconded by Dr. Macfarlane (of Kilmarnock), and carried unanimously, to the retiring Vice-Presidents and other members of Council; and also moved by Mr. Christopher Heath, seconded by Mr. R. W. Parker, and carried with applause, to the retiring Secretary, Dr. Reginald Thompson, and the retiring Librarian, Dr. Edward H. Sieveking, for their zealous and valuable services; the mover especially referring to the rather severe additions to the usual secretarial duties which had fallen to the lot of the retiring Secretary, who, during the whole three years' period of his holding office, had had to superintend repairs, alterations, and improvements, external and internal, of the Society's premises, in which his valuable knowledge and judgment in these matters had been of the utmost service to the Society.

MEDICAL NEWS.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

Hewkley, Frank, M.R.C.S. Eng., L.S.A. Lond.—Assistant Medical Superintendent to the Royal India Asylum, Ealing, W.

BIRTHS.

Applebe.—On March 4, at Hay, Breconshire, the wife of E. A. Applebe, L.R.C.P., of a daughter.

Berry.—On March 3, at Bracondale House, Wimbledon, the wife of O. W. Berry, M.R.C.S., of a daughter.

Cotton.—On February 27, at 47, Abingdon-street, Northampton, the wife of George Cotton, M.R.C.S., of a son.

George.—On February 27, at Malvern Link, Worcestershire, the wife of J. W. George, M.R.C.S., of a daughter.

Hall.—On March 2, at 46, Queen Anne-street, Cavendish-square, the wife of F. De Havilland Hall, M.D., F.R.C.P., of a daughter

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JACKSON.—On March 3, at Barnstaple, Devon, the wife of Henry Jackson, M.R.C.S., of a son.

LAMMIMAN.—On March 1, at 8, Mount Ephraim, Tunbridge Wells, the wife of Cleland Lammiman, F.R.C.S., of a daughter.

NOLAN.—On February 28, at Brighton, the wife of William Nolan, M.A., M.D., Surgeon-Major H.M. Bombay Army, of a daughter.

WILSON.—On February 28, at Leytonstone, Essex, the wife of Albert Wilson, M.D., of a daughter.

MARRIAGES.

HARDING—GRAYLING.—On February 28, at Sittingbourne, Frank Davis Harding, of High Wycombe, Bucks, to Margaret, younger daughter of John Grayling, M.D., of Sittingbourne, Kent.

OWEN—SMITHERS.—On March 3, at West Derby, near Liverpool, Walter Henry Owen, youngest son of Harold Owen, L.R.C.P., of Tue Brook Villa, near Liverpool, to Florence Mary, eldest daughter of the late Charles Smithers.

SHELDRICK—KRETZSCHMAR.—On December 26, 1882, at Verulam, Natal, the Rev. Henry J. Sheldrick, incumbent of Verulam, to Georgina Carolina, youngest daughter of D. E. Kretzschmar, M.D.

TAYLOR—BRAUND.—On February 28, at Stratton, James Robert, second son of George A. Taylor, of 27, Change-alley, London, and Peckham, to Florence Annie Mather, eldest daughter of M. Braund, M.R.C.S., of Stratton, Cornwall.

TURNER—TAYLOR.—On January 25, at the Cape, William John St. John, elder son of Surgeon-General Turner, F.R.C.S., H.M.I.A., Bombay Presidency (retired), to Charlotte Anne, eldest daughter of the late James Taylor, Esq., of Graham's Town.

DEATHS.

ARNOTTE, JAMES, M.D., formerly of St. Helena, at 8, St. Stephen's-crescent, Westbourne-park, W., on March 4, in his 87th year.

CHRISTOPHERS, JOHN CROWCH, F.R.C.S., at 22, Westgate-terrace, South Kensington, on February 26, aged 70.

EWART, MARGARET JANE, eldest daughter of W. M. Dalgliesh, M.D., Masham, Yorkshire, and widow of Robert Ewart, of Allershaw, Dumfriesshire, at Dollar, N.B., on February 23.

GARDNER, SEBASTIAN CLAUDE THOMAS, M.R.C.S., at Shelly Lodge, Worthing, on February 28, aged 43.

GOODCHILD, FRANCIS, M.B. Lond., at Heathfield House, Ealing, on February 25, aged 28.

HAVILAND, ANNE WALL, wife of H. J. Haviland, M.D., at 6, Bayshill-villas, Cheltenham, on March 1, aged 48.

PONDER, WILLIAM, M.R.C.S., at Hayes Cottage, Dulwich-road, Brixton, on February 28, in his 75th year.

WYER, JOHN, M.R.C.S., late 19th Regiment Foot, at Whitechurch, Canonicorum, Dorset, on February 23, in his 94th year.

VACANCIES.

CAMBRIDGE FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Principal Medical Officer. Salary £175, with house free of rent, rates, and taxes. Candidates must not be more than forty-five years of age. Applications, stating age, qualifications, whether married or single, and with testimonials, to be sent to Mr. W. P. Littlechild, 5, Queen's-lane, Cambridge, of whom further information may be obtained, not later than March 23.

CHICHESTER INFIRMARY.—House-Surgeon and Secretary. Salary £100 per annum, with board, washing, and lodging. Candidates must possess both a medical and a surgical qualification, obtained in the United Kingdom, and be duly registered. Applications, with testimonials, to be sent to the Secretary on or before April 7. The election will take place on April 19.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, N.—Junior Resident Medical Officer. (*For particulars see Advertisement.*)

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, N.—House-Surgeon. (*For particulars see Advertisement.*)

HEREFORD GENERAL INFIRMARY.—House-Surgeon and Secretary. (*For particulars see Advertisement.*)

MANCHESTER ROYAL INFIRMARY, DISPENSARY, AND LUNATIC ASYLUM.—Honorary Assistant-Physician. (*For particulars see Advertisement.*)

STAMFORD HILL, STOKE NEWINGTON, ETC., DISPENSARY.—Honorary Surgeon. Candidates must be fully qualified, and must be Fellows or Members of the respective Royal Colleges of London. Applications to be sent to the Honorary Secretary, Dispensary, Stoke Newington, on or before March 13.

TOWN AND DISTRICT HOSPITAL, NEWARK-UPON-TRENT.—House-Surgeon and Secretary. Salary £100 per annum, with board, lodging, etc. Testimonials to be forwarded not later than March 12.

YORK LUNATIC ASYLUM. Resident Medical Superintendent. (*For particulars see Advertisement.*)

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Berwick-upon-Tweed Union.—Mr. John Paxton has resigned the East Norhamshire District: area 14,880; population 2895; salary £35 per annum.

Henley Union.—Mr. Thomas Ward Jeston has resigned the Henley District and the Workhouse: area 6404; population 4895; salary £60 per annum. Salary for Workhouse £60 per annum.

Oundle Union. The office of Medical Officer for the Weldon District is vacant: area 8950; population 1639; salary £50 per annum.

Pembroke Union.—The Third District is vacant by the death of Mr. George Chater: area 6665; population 4688; salary £30 per annum.

Spalding Union.—Dr. J. K. Brigham has resigned the Pinchbeck District: area 15,463; population 3846; salary £51 per annum.

APPOINTMENTS.

Anglesey Union.—Richard Prothero, M.R.C.S. Eng., L.S.A., to the Amlwch District.

Bloxn Union.—John Greasley, M.R.C.S. Eng., L.S.A., to the Third District.

Bromyard Union.—John W. Hinings, M.R.C.S. Eng., L.R.C.P. Edin., L.R.C.S. Edin., to the Second District.

Dore Union.—Alexander Lane, M.R.C.S. Eng., L.S.A., to the Madley District.

Foleshill Union.—A. E. Bower, M.R.C.S. Eng., L.S.A., to the Shilton District.

Forshoe Incorporation.—Wm. B. Spowart, L.K.& Q.C.P. Ire., L.R.C.S. Ire., to the First District.

Grantham Union.—Henry B. Bailey, M.R.C.S. Eng., L.S.A., to the Workhouse, and the Spittlegate District.

Royston Union.—Leslie M. Earle, M.D., C.M. Edin., to the Fourth and Fifth Districts.

St. Alban's Union.—Mortimer Balding, M.D., M.R.C.S., to the Second District.

St. George-in-the-East Parish.—John J. G. Murray, L.R.C.P. Edin., L.R.C.S. Edin., as Assistant Medical Officer at the Infirmary.

Wakefield Union.—Wm. Stanger, F.R.C.S. Eng., L.S.A., to the Sandal Magna District.

Watford Union.—Jacob H. Bartlett, L.F.P.& S. Glasg., L.R.C.P. Edin., to the Sarratt District.

APPOINTMENTS FOR THE WEEK.

March 10. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Mr. H. H. Statham, "Music as a Form of Artistic Expression."

12. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies." (Lecture VII.)

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Routh, "On a Case of Poisoning by Citrate of Caffein." Dr. Robert Lee, "On the Diffusion of Medicinal Agents in the Atmosphere." Dr. Symes Thompson, "On Alpine Health-Resorts."

13. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. R. S. Ball, "The Supreme Discoveries in Astronomy: The Astronomical Significance of Heat."

ANTHROPOLOGICAL INSTITUTE (4, St. Martin's-place, W.C.), 8 p.m. Mr. H. O. Forbes, "Report on the Ethnology of Timor-laut" (communicated by the Committee of the British Association through Mr. John Evans). Dr. Gustav Oppert, "On the Classification of Languages."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. A. Willett and Mr. W. J. Walsham, "Second Case of Malformation of the Left Shoulder Girdle, with Remarks on the Nature of the Deformity." Dr. Percy Kidd, "On Two Cases of Congenital Syphilis of the Larynx."

14. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies." (Lecture VIII.)

ROYAL COLLEGE OF PHYSICIANS, 5 p.m. Dr. A. B. Garrod, "On Uric Acid in its Relation to Renal Calculi and Gravel." (Lumleian Lect.—II.)

HUNTERIAN SOCIETY (Royal Institution) (Council Meeting, 7½ p.m.), 8 p.m. Mr. Tatham, "On Malformed Heart." Dr. Warner, "On the Advantages of Antiseptic Precautions in Draining Dropsical Legs."

ROYAL MICROSCOPICAL SOCIETY, 8 p.m. Dr. C. T. Hudson, "On a Batch of New Floscules."

15. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Dewar, "On the Spectroscope and its Applications."

16. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. W. H. Flower, "On the Anatomy of the Horse and its Allies." (Lecture IX.)

ROYAL COLLEGE OF PHYSICIANS, 5 p.m. Dr. A. B. Garrod, "On Uric Acid in its Relation to Renal Calculi and Gravel." (Lumleian Lect.—III.)

ROYAL INSTITUTION (Council Meeting, 8 p.m.), 9 p.m. Prof. Tyndall, "Thoughts on Radiation, Theoretical and Practical."

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VITAL STATISTICS OF LONDON.

Week ending Saturday, March 3, 1883.

BIRTHS.

Births of Boys, 1386; Girls, 1387; Total, 2773.
Corrected weekly average in the 10 years 1873-82, 2778·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	795	795	1590
Weekly average of the ten years 1873-82, corrected to increased population ...	926·1	901·9	1828·0
Deaths of people aged 80 and upwards ...	...	...	71

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	689633	...	...	4	3	6	...	4	...	3
North ...	905947	2	2	5	5	11	2	3	...	1
Central ...	262288	...	1	2	1	4	...	3	...	1
East	697739	1	12	10	1	5	...	1	...	3
South	1265927	4	4	6	3	16	1	4	...	4
Total	3816483	7	19	27	13	42	3	15	...	12

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·398 in.
Mean temperature	43·0°
Highest point of thermometer	55·2°
Lowest point of thermometer	30·6°
Mean dew-point temperature	26·6°
General direction of wind	... W.S.W. & E.N.E.
Whole amount of rain in the week	0·14 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 3, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Mar. 3.	Deaths Registered during the week ending Mar. 3.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2773	1590	21·0	55·2	30·8	43·0	6·11	0·14	0·36
Brighton	111262	65	44	20·6	54·0	33·0	42·2	5·67	0·10	0·25
Portsmouth	131478	88	48	19·0	...	...	...	...	...	...
Norwich	89612	65	35	20·4	...	...	...	...	...	...
Plymouth	74977	44	42	29·2	56·1	37·6	44·6	7·01	0·04	0·10
Bristol	212779	123	88	21·6	54·1	30·2	43·8	6·56	0·03	0·08
Wolverhampton ...	77557	61	43	28·9	...	...	...	...	...	...
Birmingham ...	414946	333	185	23·3	...	...	...	...	...	...
Leicester	129483	99	48	19·3	53·5	34·8	44·3	6·84	0·17	0·43
Nottingham ...	199349	154	90	23·6	58 0	35·0	44·0	6·67	0·08	0·20
Derby	85574	70	31	18·9	...	...	...	...	...	...
Birkenhead ...	88700	65	30	17·6	...	...	...	...	...	...
Liverpool	566753	435	327	30·1	49·8	35·0	42·8	6·00	0·04	0·10
Bolton	107882	80	46	22·3	52·5	33·8	42·6	5·90	0·41	1·04
Manchester ...	339252	252	172	26·5	...	...	...	...	...	...
Salford	190465	146	77	21·1	...	...	...	...	...	...
Oldham	119071	76	51	22·3	...	...	...	...	...	...
Blackburn	108460	88	66	31·7	...	...	...	...	...	...
Preston	98564	80	51	27·0	...	...	...	...	...	...
Huddersfield ...	84701	55	31	19·1	...	...	...	...	...	...
Halifax	75591	51	33	22·8	...	...	...	...	...	...
Bradford	204807	115	95	24·2	54·0	32·4	43·7	6·50	0·05	0·13
Leeds	321611	227	139	22·6	55·0	34·0	44·3	6·84	0·10	0·25
Sheffield	295497	236	156	27·5	54·0	32·5	43·6	6·45	0·16	0·41
Hull	176296	137	84	24·9	55·0	34·0	42·4	5·78	0·14	0·36
Sunderland ...	121117	92	58	25·0	...	...	...	...	...	...
Newcastle	149464	112	84	29·3	...	...	...	...	...	...
Cardiff	90033	67	57	33·0	...	...	...	...	...	...
For 28 towns ...	5620975	6189	3801	23·0	58·0	30·2	43·4	6·33	0·12	0·30
Edinburgh	235946	133	90	19·9	53·0	34·7	45·1	7·28	0·04	0·10
Glasgow	515589	396	287	29·0	54·0	35·0	44·7	7·06	0·00	0·00
Dublin	349?85	248	233	34·8	52·8	31·3	45·0	7·22	0·05	0·13

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·40 in. The lowest reading was 30·24 in. on Thursday morning, and the highest 30·53 in. by the end of the week.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Student.—Professor Flower will conclude his lectures on Friday, the 16th inst.; the course was commenced on the 26th ult.

The Anthropological Society, Paris.—This Society has received from one of its members, Dr. Bonsengre, a report of the autopsy of General Skobeleff, from which it would appear that the weight of the brain, according to Broca's system, was 1457, which is considerably above the mean for ordinary adult Europeans of his height (1·73 m.), and even slightly above that hitherto given for exceptionally great men.

Left-handedness.—Dr. Goëtan Delaunay has just communicated an interesting paper to the French Anthropological Society, in which he seeks to establish that right-handedness is not an acquired habit, but is a natural attribute characteristic of the superior races. Savage tribes, he states, and communities in an inferior state of civilisation, show a much larger proportion of left-handedness than highly civilised peoples do. Idiots and epileptics offer a very large percentage of left-handed individuals, and there are more left-handed women than men. His general conclusion is that in the evolution of the species there has been a steady tendency to the development of the right side of the body at the expense of the other, and that the examples of left-handedness still to be met with in the superior races are mere "survivals."

The Proposed Museum at Owens College, Manchester.—The movement for erecting additional buildings for the purpose of natural history, etc., is making rapid progress. Towards the sum required (£50,000) £25,650 has been raised.

A Former Lecturer.—The motion submitted to the Council, July 28, 1858, by the late Mr. J. F. South, twice President of the College, was the following:—"That Mr. Edward Arris and Mr. Gale having severally given the sum of £250 and a house on Snow-hill for the endowment of lectures on anatomy, and such moneys having been improperly merged into the general property of the College, it is due to the memories of the said founders, and as an encouragement for similar endowments, that such appointments be revived." It was Mr. Charles Hawkins who successfully carried a similar motion with regard to the "Jacksonian Prize."

Compulsory Notification of Infectious Diseases, West Derby.—Dr. W. Carter, the Medical Officer of Health for West Derby, in his last report, after giving details regarding the infectious diseases which occurred in the district, adds—"I have to again express my belief that the medical men practising in the district are in all cases eager to avail themselves of the facilities for disinfection offered to them by the Local Board through its officers and stoves. They—that is, the medical men—are ever ready to send intimation so soon as, in their judgment, an inspector's services can be of advantage to them in limiting the spread of disease. And I again desire to express my deliberate conviction that any change in the law, in the direction of making early notification compulsory on medical men, would, by disturbing the harmonious relations at present existing between them and the medical officers of health, and by causing the poorer classes of people to delay applying for medical aid, tend to promote the spread of disease."

Dr. Turner.—Ask Mr. Chatto, Librarian of the College of Surgeons. There is a painting of Dr. Arbuthnot in the College of Physicians. Dr. Munk states that the engraving is now exceedingly scarce.

The Solacing "Whiff."—With respect to the consumption of tobacco in the Chester Workhouse—noticed in these columns last week—the Guardians have resolved that the medical officer be authorised to give orders in cases under his treatment only; that tobacco to the value of £30 annually be supplied for the use of the workhouse, to be distributed at the master's discretion; and that smoking in the hospitals by attendants be prohibited. It appears there had been a constant increase in the expenditure for tobacco since 1877, when the amount was only £6 4s. 6d., till 1882, when £70 was so spent.

New Baths, Birmingham.—The baths erected by the Corporation in Monument-road have just been opened by the Mayor. They cost £20,000, and the town has now four sets of public baths.

A Football Fatality.—At an inquest, held at Runcorn, touching the death of a youth fifteen years of age, it appeared the deceased played in a football match at Runcorn, and at the end of the game it was discovered that he had a black eye; but how he got it he could not say. Three days afterwards he suffered acutely from headache. Dr. Carruthers was called in, and found the youth suffering from inflammation of the brain, from which he died. A post-mortem examination led Dr. Carruthers to conclude the deceased had received a blow which had caused concussion of the brain. Verdict in accordance with the medical evidence.

Prince Bismarck on Vivisection.—In a letter to Herr von Weber, of Dresden, the President of the International Society for the Suppression of Scientific Cruelty to Animals, Prince Bismarck has expressed his abhorrence for uncontrolled vivisection, and his hope that the law will be changed to limit the wanton exercise of the practice.

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The Plague.—It is stated by a correspondent in the *Times* that a painful malady, supposed to be the plague, has broken out in Persian Kurdistan.

Diseased Meat: An Official Convicted.—The Assistant Collector of Market Tolls of Bridgwater has been fined £5 and costs for having upon his premises in a slaughter-house the carcase of a heifer in a diseased state prepared for sale, and unfit for human food. The defence was that the meat was only intended for the food of pigs; but the medical officer remarked that the pigs must have very sensitive stomachs to require t heir food to be so carefully prepared. Evidence was adduced that the meat was dressed in the ordinary way for sale.

Open Spaces.—An association has lately been formed for the preservation of Dartmoor. A committee has also been appointed to prevent Mitcham Common being destroyed and rendered valueless to the public by wholesale gravel-digging.

A Proposed Amalgamation of Waterworks opposed.—At a public meeting of the residents of Eton College and the town, under the presidency of the Chairman of the Eton Local Board of Health, it was resolved to oppose the Bill for the incorporation of the Windsor and Eton Waterworks Company, and the vesting in them of the Windsor and Eton wate rworks, and that the Eton Local Board should be authorised to incur the expenses of the opposition, and charge them upon the rates.

Te mperance Appellations.—Teetotalers having objected to be styled "hydropots," the latest suggestion is "aquabiba."

Local Self-government.—The Wrexham Rural Sanitary Authority has held a special meeting for the purpose of considering the present working arrangements and business of that Authority, with a view to reorganise the same. A report was read, detailing the work which the Authority had performed, since its formation in 1872, which had cost £39,487. It was proposed that the Union should be divided for sanitary purposes i nto two districts of about equal extent and population, and that one inspector of nuisances at a salary of £150 a year, and one medical officer at a s alary of £60 a year, should be appointed for each district. This proposal, after considerable discussion, was adopted, and the matter referred to a committee to carry out the necessary details.

A Visitor.—The bust of Mr. William Clift, F.R.S., the first Conservator of the Hunterian Museum, which is now placed in the Museum, was originally, and unknown to any member of the Council, quietly placed one morning on one of the vacant pedestals in the College, by Dr. Diamond, who also presented a spirited medallion of Dr. Friend, carved in boxwood, to the Royal College of Physicians.

C ottage Hospital for Harwich.—The Duke of Buccleuch has offered a free site on the Jedburgh-road for the erection of a cottage hospital for Harwich, and promised a yearly subscription of £10 towards the funds of the institution.

L udlow Workhouse.—According to returns recently published, there are at the present time in the union workhouse a number of paupers who have attained a very advanced age. There are seven above 80—one of these is 86, two are 84, one is 84, and three are 81. There are twenty-eight between 70 and 80, three aged 70, five 71, four 72, two 73, five 75, three 76, one 77, two 78, and one 79.

Ad ulterated Teas: America.—A Bill prohibiting the importation of adulterated teas has passed through the American Congress.

A Nuisance.—The case of the Bedminster Rural Sanitary Authority *v.* Lawson, heard in the Chancery Division lately, was an action brought to restrain an alleged nuisance caused by the deposit, by the defendants, who were soap manufacturers, of refuse on St. Philip's Marsh, adjoining the river Avon, near Bristol. In June, 1882, Vice-Chancellor Hall, on the defendants' application, made an order directing the issues in the action to be tried at the Assizes at Bristol. In August, 1882, four issues were tried accordingly before a special jury. The jury found two of the issues in favour of the plaintiffs, and two in favour of the defendants. The result of the finding was that the refuse was a nuisance, but not injurious to health. Judgment in accordance with the finding of the jury was now moved for. It was stated that the defendants now used a deodorising process, which obviated all nuisance. An injunction was granted to restrain the defendants from depositing the refuse so as to be a nuisance, or allowing the same to continue on any part of the marsh under their control.

Swansea and South Wales Nursing Institute.—The first general meeting of this institution has been held at the hospital in that town, and a code of rules adopted. Those trained will attend the upper and middle class sick for regulated payments, and the poor gratuitously.

H. N. P.—The Manchester Hospital Sunday Fund collection on the 11th ult. amounted to £4685 5s. 8d. The Saturday Hospital collection has not been fully handed in, but £1589 10s. 6d. has been forwarded to the Secretary.

Beer-drinking in the South of France and in Italy.—Mr. Ferdinand Reiber, a native of Strasb urg, has published a book upon beer, under the title of "Études Gambrinales." He proves by abundant statistics that beer has already invaded the South of France, and that it is rapidly making its way in Italy. For this general success he assigns a reason somewhat singular. Beer is the only liquor which one can drink and enjoy while smoking.

Query. Offering too much Security?—"A medical student, whose means are exhausted, would like to meet with some one who would advance him the necessary sum to complete his studies, at a moderate rate of interest. If necessary, he would, as a guarantee, at once marry his creditor's daughter, or, if he prefers it, would give an undertaking to do so on passing his final examination."

Deliberate Propagation of Disease.—In a discussion at a meeting of the Bolton Rural Sanitary Authority on an outbreak of measles at Lostock, it was stated that parents deliberately placed their healthy children among those affected, in order that they might take the disease, believing it was impossible to prevent their being affected. Handbills were ordered to be circulated, explaining the dangers of such a practice.

Curious, if True.—A sporting contemporary of Saturday last states that M. Selous, the African traveller, and author of "Wanderings in South Africa," was in the office of Mr. Ward, the well-known taxidermist, discussing the mounting of some of his trophies, when he was seized with a severe sneezing. Using his handkerchief, he felt something prick his hand, and on examination the cause turned out to be a thorn, which nine years before, when pursuing a wounded elephant, had entered his nose and buried itself there.

The Use of the Cane in Schools.—The question of the use of the cane for the purpose of chastisement in schools was before the Second Division of the Court of Session, in an appeal from the Edinburgh Sheriff Court, a few days ago. In the circumstances of this case their lordships did not hold the teacher—a female—liable in damages, but they joined in strongly reprobating the use of the cane. Lord Young said he had seriously considered the question whether the use of the cane to a young girl was not in itself an assault.

Consumption of Tobacco in France in 1882.—The official returns give the value of the tobacco consumed in France as 363,500,000 fr., or about £14,540,000 sterling. The great bulk of this sum was represented by ordinary smoking-tobacco. Cigars show a total of 60,500,000 fr., while 16,000,000 fr. was expended in cigarettes, and 9,000,000 fr. in tobacco for chewing.

COMMUNICATIONS have been received from—

Messrs. Kelly and Co., London; Mr. Lawson Tait, Birmingham; Miss Emma Cons, London; The Secretary of the Local Government Board, London; Lord Walsingham, London; The Secretary of the West London Medical Society, London; Mr. Henry E. Armstrong, Newcastle-upon-Tyne; Dr. W. Wilson, Florence; Surgeon-General C. R. Francis, M.B., London: The Director-General of the Naval Medical Department, London; The Director-General of the Army Medical Department, London; Dr. Clifford Beale, London; Dr. Willoughby, London; Dr. C. A. Mercier, Dartford; Mr. J. Chatto, London; The Honorary Secretary of the Medical Society of London; Mr. W. W. Reeves, London; Dr. Savage, London; Mr. T. M. Stone, Wimbledon; Dr. Eberle, Thirsk; Mr. Alfred Reid, London; Dr. Norman Kerr, London; Mr. Rudler, London: Dr. W. Alexander, Liverpool; Dr. A. T. Thompson, Glasgow; The Registrar-General for Scotland, Edinburgh; The Military Secretary of the India Office, London; Mr. J. E. Wakefield, London; Dr. J. W. Moore, Dublin; The Sanitary Commissioner for the Punjaub, Lahore; The Secretary of the Poor-Law Medical Officers' Association, London; Mr. T. Jones, Manchester.

BOOKS, ETC., RECEIVED—

Compulsory Notification of Infectious Diseases considered, by Robert Hamilton, F.R.C.S.—Reports upon Broadmoor Criminal Lunatic Asylum for 1881—Elementary Meteorology, by Robert H. Scott, M.A., F.R.S.—How to Help Cases of Distress, by C. S. Loch—St. Bartholomew's Hospital Reports, vol. xviii., by W. S. Church, M.D., and John Langton, F.R.C.S.—Sanitary Report of the Port of London, etc.—Report on the Health, Sanitary Condition, etc., of Kensington, January 28 to February 24—On Ligature of the Arteria Innominata for Subclavian Aneurism, by William Thomson, M.A., F.R.C.S.—Report of the Health Committee on the Borough of Nottingham—A Defence of the Contagious Diseases Acts, etc., by Frederick W. Lowndes, M.R.C.S. Deux Conférences sur l'Hygiène Scolaire, par le Dr. A. J. Duval—Diphteritis des Rachens, von Dr. G. Mayer—Annual Report of the Sussex County Lunatic Asylum, Hayward's Heath—Transactions of the Medical Society of the State of Pennsylvania, vol. xiv.—The Micrographic Dictionary, parts xviii. to xxi.—Vaccination, by Thomas M. Dolan, L.R.C.P., etc.—Transactions of the American Ophthalmological Society—Dental Vade-Mecum, by James Hardie—On a Form of Loss of Memory occasionally following Cranial Injuries, by Joseph Bell Poverty, Taxation, and the Remedy, by Thomas Briggs—Des Erworbenen Plattfusses, von Dr. G. Hermann von Meyer—Meade's Manual for Students, by James Cantlie, M.A., etc., and D. Colquhoun, M.D., M.R.C.P.—The Life and Work of St. Paul, by F. W. Farrar, D.D.—Annual Report of the Royal National Hospital for Consumption, etc.—Messrs. Longmans and Co.'s Notes on Books—Report of the Stroud Union Sanitary District—Annual Report on the Civil Hospitals and Dispensaries in the Madras Presidency for the year 1881.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—L'Impartialité Médicale—Archives Générales de Médecine—Revue Mensuelle de Laryngologie, etc.—Cape Argus, February 12—Ophthalmic Review—Veterinarian—Philanthropist—Glasgow Medical Journal—Centralblatt für Klinische Medicin—Birmingham Medical Review—Italian Times, March 3—Therapeutic Gazette—Practitioner—Annali di Oftalmologia—New York Medical Journal.

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ORIGINAL LECTURES.

THE LUMLEIAN LECTURES ON URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

By ALFRED B. GARROD, M.D., F.R.C.P., F.R.S., ETC.

LECTURE I., PART I.

On being requested to deliver the Lumleian Lectures for the present year at your College, I naturally felt much gratified by the honour; but, none the less, I should have hesitated to accept the responsibility of addressing you in my present capacity, had it not so happened that I was at the time engaged in completing some investigations which I had begun many years before. As these had relation to the production of uric acid in the animal economy, and to its morbid manifestations—subjects of deep interest to the physician,—I thought that the results of these researches might not be altogether without attractiveness to my professional brethren, if they were made the subject-matter of the present course of lectures.

Having, therefore, a subject to bring before you which contains some little novelty, and, as it were, breaks new ground, I put this fact forward as my excuse for appearing to-day in the capacity of your Lumleian Lecturer.

I shall not hesitate to dwell somewhat on the physiology of uric acid in my lectures, as I feel sure that any advance in its pathology which the future may show must largely depend on our having the firm foundation of a correct physiology to build upon—a thing much needed at the present time, if we may draw such a conclusion from the diversity of opinions as to the production of uric acid which are in vogue, while we have many holding that the spleen, others that the liver or the lymphatic glands, are the organs devoted to its elaboration. Nor shall I hesitate to dwell upon the condition and composition of the urinary excretion in different classes of animals, for I have long felt that, if in the study of the physiology of uric acid we confine our attention to the human subject, we place ourselves in a position of great disadvantage towards the inquiry, seeing that uric acid and its derivatives pervade the whole animal kingdom. Furthermore, when I considered that, in some animals, the nitrogenised excretion consists almost entirely of uric acid, while in others its amount is extremely small, it occurred to me that, in the study of this principle in various classes of animals, we should be most likely to discover the true solution of its formation and the *rôle* which it plays in the animal economy. For these reasons, I have laid great stress on the comparative physiology of uric acid in my lectures.

Let us imagine a partition separating the blood from the urinary excretion, such as, in nature, is found in the walls of the renal vessels; then uric acid, free or in combination, may exist either on the one or on the other side of this membranous partition: if on the one side—that is, in the blood—it originates symptoms which are referable to various organs; it may be deposited in the articular tissues, and produce the typical form of joint-gout, with chalk-stones; or it may affect the skin in the shape of eczema, or cause cramps, neuralgic pains, dyspepsia, etc., according to the part particularly selected. On these I shall not touch in this course of lectures, having had full opportunities of setting out my views and researches elsewhere. But uric acid is also to be found on the other side of our imaginary partition, that is, in the urinary excretion, and, under certain circumstances, it forms morbid deposits, such as go by the names of gravel and calculi; and it is to these that I shall confine my attention, with special reference to their pathology and treatment.

The metabolism of the various tissues of which the animal body is composed, which occurs during life, is accompanied by the formation of certain products which require to be eliminated. Leaving out of consideration the inorganic salts, such as the phosphates and chlorides, we have certain elements, chiefly among which are carbon, hydrogen, oxygen, and nitrogen (some of which four elements enter into all organic compounds), to be got rid of. Of these, a large portion of the carbon, united with oxygen, escapes by the lungs as carbonic anhydride (carbonic acid), while the hydrogen, united with oxygen in the form of water, is thrown out by the skin, lungs, and kidneys. There remains the nitrogen—the element, *par excellence*, characteristic of life—which is eliminated almost exclusively by the kidneys, in what shape or shapes I will now describe.

In some animals, as the mammalia, including man, urea [$CO(NH_2)_2$ or CH_4N_2O] is the chief nitrogenised principle, and it is the one which is richest in nitrogen, containing as much as 44·66 per cent. This organic body (which was the first to be synthesised or made artificially), being very soluble both in water and in the animal fluids, gives little or no trouble in its elimination, as it forms no concretions, and I am not aware that its presence in the blood produces any marked symptoms; at any rate, it can be injected into that fluid with impunity, for we must take care not to confound a condition of blood showing the mere presence of urea with the so-called uræmic poisoning.

From many observations it appears that the average quantity of urea excreted in the twenty-four hours is 512·4 grains, and that for each avoirdupois pound 3·33 grains are eliminated daily. It is in the form of urea, therefore, that the chief part of the nitrogen in a very large and important class of the animal kingdom is eliminated.

The next principle to be mentioned is uric acid ($C_5H_4N_4O_3$), which was formerly called lithic acid, and has recently been synthesised. This acid, combined with more or less ammonia, forms the chief part of the nitrogenised excretion of birds and reptiles, as also of almost all invertebrate animals, and a small part of that of man and the other mammalia. It contains 33·33 per cent. of nitrogen, but, if estimated as urate of ammonia, as much as 37·83 per cent. Its properties, especially as regards solubility in water or the animal fluids, differ greatly from those of urea, for it is with the greatest difficulty that it is dissolved, requiring, when pure, as much as eight thousand times its weight of distilled water at about the temperature of the blood (100° Fahr.). The salts of this acid are more soluble, but yet, in comparison with others, only slightly so, and they and the acid itself readily crystallise out from the fluids in which they are dissolved. It is owing to this property of insolubility that uric acid, although it forms so small a proportion of the urinary excretion in man, so frequently is a cause of disease. In the first place, it may concrete in the kidneys, forming gravel and renal calculi, which, when they reach the bladder, if they remain there for any time, encourage the precipitation of a further quantity of uric acid or urates upon them, and thus vesical calculi are formed; or, secondly, uric acid may be present in the blood and lead to special symptoms in different organs, or become deposited in the form of urate of sodium in various tissues, producing much discomfort.

As it is important to have a knowledge of the relative solubilities of the principal salts of uric acid, as well as of the acid itself, and as no table is known to me which shows their solubility at the temperature of the body, and as great discrepancies exist in the accounts of their solubility at any temperature, I have had a careful set of experiments made, with the results which are set out in the following table:—

Table of Solubilities of Uric Acid and its Principal Salts in Distilled Water. Temperature 100° *Fahr.*

		Parts.
Uric acid	Pure	1 in 8000.
Urate of ammonium (artificially prepared) ...	Acid urate ...	1 in 2400.
Urate of sodium	,, ...	1 in 1130.
Urate of potassium ...	,, ...	1 in 500.
Urate of lithium	,, ...	1 in 220.
Urate of magnesium ...	,, ...	1 in 1600.
Urate of calcium	,, ...	1 in 2800.
Urate of lead	,, ...	Insoluble.
Urate of iron	,, ...	Insoluble.

There is a third body, viz., hippuric acid ($C_9H_9NO_3$) which is found in the urinary excretion; largely in that of the herbivorous mammals; in small and varying quantities in the urine of man; but almost, if not entirely, absent from

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that of the carnivorous mammals. It will be seen, from its formula, that the percentage of nitrogen contained in it amounts to 7·82.

Although hippuric acid has hitherto been regarded as a comparatively insignificant ingredient, at least in the urine of man, we shall, as we advance in our subject, find that it plays an important *rôle* in the metabolism going on in the system—one which to us, as students of disease, is of deep interest.

It is in the form of one or other of these three substances, with comparatively slight exceptions, that the whole of the nitrogenised waste of the body is eliminated from the system by the renal organs, little or none escaping by any other channel.

As uric acid is the principle which will chiefly engage our attention in these lectures, and as a correct knowledge of the mode and place of its formation in the economy is of the utmost importance if we ever hope to arrive at the solution of the problem of the cause of calculi, and to develope some method of preventing their occurrence, and more especially as the views I have arrived at during the study of the subject differ so much from those held by almost all physiologists, I shall not attempt to apologise for occupying your time with the investigation of the nature of this substance, so interesting in its physiology, and in its pathological development leading to much suffering, danger, and even death.

Origin of Uric Acid in the Animal Economy.—There are, at least, two possible theories as to the formation of uric acid. Of these, the first is, that it is formed during the metabolism constantly going on either in the system at large or in special organs, such as the spleen, lymphatic glands, liver, lungs, etc.; and that, when formed, it reaches the blood, and is afterwards rapidly eliminated by the kidneys. From the point of view of this theory, the renal organs are merely the drawers-off or filterers from the blood of the uric acid which it brings to them. On looking over the principal modern books which deal with this subject, and on ascertaining the opinions held by physiologists, pathologists, and the members of the medical profession in general, I find that this view is so popular with them as to be almost universally accepted; in fact, all the attempted explanations of the influence of respiration, of the cutaneous functions, of different kinds of diet and regimen, are based upon the assumption that uric acid owes its origin to a less perfect oxidation of nitrogenised principles in the system than occurs when urea is formed, and that a meat diet powerfully favours the formation of this acid. For the sake of brevity, I shall, in these lectures, call this the *first* view.

Another, which I shall call the *second* view, may be held. In this, it is assumed that the kidney is the organ whose function it is to produce uric acid; that this principle is formed in the renal cells from nitrogenised matters brought to them by the blood; and that, in so far at least as uric acid is concerned, the kidneys do not act in any degree as filterers or strainers. There are few physiologists or pathologists, at the present time, who hold this opinion; and the discovery of uric acid in the blood, which I made in 1847, seemed, at first sight, to militate against it: for it appears to follow, from the fact of the presence of uric acid in the blood, that it must be formed before the blood reaches the kidneys, and not in those organs.

In the course of our investigation into the value of these two views respectively, we shall have occasion to bring forward almost all the facts at present known with reference to the physiology of uric acid, and these require a satisfactory explanation before we can definitely arrive at any choice between the rival theories. I feel most strongly that a correct knowledge of the physiology of this subject is essential, if we hope to advance further in the pathology of uric acid.

The two theories above mentioned may be shortly summarised as follows. In the first, the kidney is regarded simply in the light of a strainer or filterer of the uric acid which is found in the blood, and passes through to it. In the second, the kidney is held to be the actual producer of uric acid, and the presence of this principle in the blood and tissues is explained by resorption from the renal cells—a process which is scarcely appreciable in health, but becomes more and more marked in proportion to the difficulty which the uric acid has in finding its way to the uriniferous tubes.

In considering the physiology of uric acid, I must, in the first place, draw your attention to the fact that there are great differences between the urine of different classes of animals, both in physical condition and in chemical composition. In some animals, the urinary excretion is very thin and watery; in others, it has the consistency and appearance of thick cream—these differences depending, of course, on the ratio between the water and the solid constituents of the excretion. The constitution of the solid portion of the excretion also varies much: in some urines, the urea is abundant, the uric acid very scanty, or even altogether absent; in others, these two constituents are both present in large quantities; while, in a third class, the urea is either very small in amount or entirely absent, uric acid, in some form of combination, constituting almost the whole of the solid portion of the urinary excretion.

1. *Mammalia.*—The urine of man we will not discuss at present, as we shall have to speak about it when dealing with the formation of renal calculi and gravel; it may, however, be mentioned in passing that in constitution it closely resembles a combination of that of the carnivorous and herbivorous mammals, as, indeed, might have been anticipated from our knowledge of the anatomical structure and the nature of the food of man.

The urinary excretion of the carnivorous mammals is a watery and heavy fluid, its specific gravity being sometimes as high as 1070. I have found that of the lion and tiger to be 1063 and 1064, of a distinctly acid reaction, and a not disagreeable odour; nor is it liable, as has often been asserted, to rapid decomposition. The urine is rich in urea, so much so often that a single drop placed on a piece of glass will, after a few minutes, become a mass of crystals; and with nitric acid, it immediately becomes solid, from the formation of nitrate of urea. Uric acid is usually found in it, but in very small quantities, never, at least when the animals are kept in confinement and sparingly fed, reaching the amount contained in human urine. In that of the tiger I have found it readily, and it even crystallised out from such urine when spirit had been added to preserve it. In the lion, I failed to discover it in the only specimen which I examined, but oxalate of calcium was present, a salt which was probably produced by the decomposition of uric acid.

No hippuric acid is found, at least under ordinary circumstances, in the urine of the carnivorous mammals; a fact on which I wish particularly to insist.

Next, as to the herbivorous mammals. The chief points of relation and difference between the urine of these and the carnivorous mammals may be thus summed up. It is usually a heavy fluid. I have found, in the horse, the weight ranging from 1025 to 1045. In the elephant (female) it was 1033; and in the camel, 1047; but only one examination was made in each case. In the cow and ox I have found it as low as 1014 and as high as 1035. It is always alkaline in reaction, except in the sucking animal, and of a peculiar but not unpleasant odour; and I may here mention that my experience is opposed to the statements of many writers, for I have found very little tendency in such urine to undergo decomposition; in fact, I have placed it side by side with human urine, and found that it remained free from decomposition when the latter had become completely destroyed.

The urine of the herbivorous mammal is rich in urea, less so than that of the lion or tiger, and will not often crystallise on spontaneous evaporation, but generally becomes more or less solid on the addition of nitric acid, owing to the copious formation of nitrate of urea.

As to uric acid, such urines may be said to be free from this principle, except under peculiar circumstances; but, as these exceptions are most important from a physiological point of view, they will be referred to further on.

One of the most characteristic substances found in the urine of herbivora is hippuric acid, which derives its name from the fact that it was first discovered in the urine of the horse. Under ordinary circumstances, this acid exists in quantity at times equal to that of the urea.

Hippuric acid is always combined with a base, and, on evaporation of the urine of herbivorous animals, hippurate of sodium crystallises out. I may state here, and we shall find the fact to be not unimportant, that the quantity of hippuric acid in the urine of these animals is very liable to vary, especially in relation to the character of the food taken. It has been asserted that benzoic acid is present; this may be

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so, but it must be remembered that hippuric acid, in the older analyses, was often mistaken for benzoic acid, as, also, that the former, in the process of analysis, may, at times, be converted into the latter.

2. *Birds.*—The urinary excretion of birds, as far as my observations go, is semi-fluid, cream-like, and very rich in uric acid. After being expelled from the body it soon sets, and becomes a hard white mass, in appearance not unlike plaster of Paris. As much as 90 per cent. of uric acid, or even more, has been discovered in it, together with a varying quantity of ammonia. I have always found it distinctly acid in reaction, whether the bird was living on meat or grain. Most observers have failed to find urea in the urine of herbivorous or graminivorous birds. I, myself, have never, as yet, been able to detect it; but in the carnivorous birds a small quantity is said to be always present, probably never exceeding a fifth part of the uric acid. Nothing is known as yet about the presence or absence of hippuric acid in the urine of birds. I have examined the urinary excretion of a large number of birds—*e.g.*, the ostrich, different rheas, the vulture, turkey, common fowl, pigeon, skylark, linnet, green parakeet (budgerigar), canary-bird, robin, and many other birds, and the uniformity of the chemical composition, as well as the similarity in their physical condition, has been very striking.

3. *Reptiles.*—In so far as the eye can discover, or as chemical analysis has succeeded in making out, the urinary excretion of ophidian and saurian reptiles is identical with, or most closely resembles, that of birds. I have carefully examined that of several pythons, boas, cobras, and the common English snake; also of various saurians, as the Australian monitor, etc. Urea is said to be absent, and, with one exception—viz., the common green snake—I have failed to find it. Whether it exists, in traces, in such excreta, as a rule, is at present a moot point. In the chelonian reptiles, the excretion differs from that of the ophidians and saurians, in that it is almost liquid, usually consisting of a clear watery fluid, containing opaque white flakes of urates. These latter vary much in quantity, depending, as I believe, on the length of time which has elapsed since food was last taken, these animals, as is well known, often fasting for a long period; they differ, also, in amount in different chelonians. In the land tortoises, for example, I have found much more uric acid in the form of these white masses, than in the terrapins or water tortoises, although the latter are carnivorous, whilst the former are herbivorous animals.

4 *and* 5. *Batrachians and Fish.*—With regard to these classes of animals but little information has as yet been obtained.

6. *Invertebrata.*—Lastly, one word as to the nature of the urinary excretion in the invertebrates. With the exception of animals belonging to the class arachnida, as the scorpion and spider, which excrete guanine ($C_5H_5N_5O$)—a substance found in guano, and probably derived from uric acid, and closely related to it in composition,—all the invertebrata throw out uric acid or urate of ammonium. It is from Dr. John Davy, whose name is associated with so many physiological researches, that most of our knowledge of the excretion of invertebrate animals is derived. One interesting observation which he makes on the subject of the excretion of caterpillars and moths is this: "The urine of insects in their earlier or their larval state would appear to differ considerably from that of the same insects in their imago or perfect form. Thus, whilst in the latter it was found to consist chiefly of urate of ammonium, in the former urate of ammonium was sparingly detected or not at all; what seemed to be hippuric acid being more abundant." We shall find during the course of these lectures that these facts are not without significance.

Having now given a short sketch of the character and composition of the urinary excretion of the different classes which compose the animal kingdom, we are naturally confronted by the question: Why this difference in the excretion of nitrogen; why, in some animals, does it chiefly take the form of urea, in others, that of uric acid? The supporters of the first view have attempted many explanations, the favourite one being, that it depends on the greater or less activity of the function of respiration. This, I believe, originated with Liebig, and it is a view much insisted on by chemists, for it must be remembered that the uric acid, under the influence of oxidising agents, readily breaks up into urea and other products; thus a slight oxidising cause splits it up into urea, allantoin, and oxalic acid, all of which substances are found at times in the animal economy. Liebig pointed to the fact that mammals, having a high temperature and active respiratory function, throw out but little uric acid and a large quantity of urea, whereas reptiles, with a low temperature and a correspondingly low respiration, throw out their nitrogen chiefly as uric acid. This view was at first sight most plausible, but unfortunately it was founded on limited data; it was, in fact, a most partial view, for we have only to turn to the large class of birds for its refutation. Here we see animals with the highest temperature and a respiration correspondingly active eliminating their nitrogen in exactly the same form as the cold-blooded reptiles.

If other facts were wanting to show the error of this, at first sight, captivating view, the recent experiments set out in the *Comptes-Rendus* of December, 1881, would be sufficient. M. Cazeneuve, in a paper termed "Sur l'Excrétion de l'Acide Urique chez les Oiseaux," describes how he kept a sparrow-hawk in a cage, and fed it on flesh, the bird throwing out a certain quantity of uric acid and urea in the twenty-four hours; he then put it under the influence of a large increase of oxygen, and even kept it for twelve hours in an atmosphere of pure gas. In no instance, however, was the quantity of uric acid diminished or the urea increased, but the ratio between the two remained the same as before. One can hardly help looking upon this fact as conclusive against the idea that urea and uric acid are excreted by animals in proportion to the activity of their respiratory function. Lastly, we may look at the excretion in invertebrate animals, whose temperature is high, while no urea is found in their nitrogenised excreta.

The nature of the food taken has been thought by many to have a powerful influence on the excretion of uric acid, but it needs very little consideration to show the inaccuracy of this idea; for ophidian reptiles, as the python and boa, which live exclusively on animal food, and grain-eating birds, such as the canary and others, whose food consists entirely of seeds, excrete the same nitrogenised products; in fact, it is difficult to separate the urinary excretion of the one class from that of the other, as I have already stated, both consisting of uric acid in combination with some ammoniacal compound. Again, if we compare a toad with a lizard, the little influence of the character of the food is at once strikingly shown; both animals live on flies, yet the urine of the toad is clear and watery, and contains no appreciable uric acid, whereas that of the lizard resembles cream, and consists mainly of urate of ammonium. The excretion of uric acid and of urea, also, is, doubtless, much influenced by the amount of food taken, whether in the same ratio has not yet been determined.

Some physiologists look upon the spleen as the producer of uric acid; by others the liver, the lymphatic glands, or the cartilaginous tissues are regarded as the originators of this principle; but there is one fact which must not be lost sight of, viz., that whether an animal throws out all its nitrogen in the form of uric acid, or in that of urea, it, equally in either case, possesses a spleen, a liver, lymphatic glands, and cartilaginous tissues.

Of course, if we accept the second theory, and regard the kidneys as the producers of uric acid, the difficulty of the question is at once solved: we have only to regard the kidney as containing different cells—some, perhaps, for the formation of urea; some, at least, for the production of uric acid,—and to hold that the number of the latter cells, compared with the other excreting cells of the kidney, differs in different classes of animals. The amount of respiration in any animal would then be of little moment with reference to the excretion of uric acid; also the nature of the food, provided only that the blood contained sufficient pabulum fitted for its supply. Possibly, however, many of us already see difficulties ahead, which have to be resolved before such a view can win acceptance.

GIFTS TO THE ROYAL INFIRMARY, DUNDEE.—At the quarterly court of the governors of this institution, held on the 12th inst., it was stated that the following handsome donations on behalf of the Infirmary, including the proposed children's ward, had been received:—Miss Baxter, £1000; Mr. John Sharp, £1000; Mr. Armistead, M.P., £500; and Mr. and Mrs. Gershom Gourlay, £200—in all £2700.

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GULSTONIAN LECTURES
ON
STERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London, February, 1883.

By J. MATTHEWS DUNCAN, M.D., F.R.C.P.L.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, etc.

Lecture II., Part I.—Its Theory of Causation.

Mr. President, Vice-President, and Gentlemen,—In studying the theory, or inquiring into the causes of sterility in woman, it is advantageous to keep in mind the corresponding condition in plants and in the lower animals, for in all living beings there is more or less similarity of the sexual organs and offices, and disturbance of function in one division will throw light on disturbance in another. On this subject I have made many, but only casual, observations, and have had the privilege of conversation with gardeners and breeders, classes of men in whom are found many of remarkable intelligence and acuteness of observation. But the great storehouse of facts and references on which I rely is Darwin's "Variation of Animals and Plants under Domestication." Plants and some animals propagate otherwise than by sexual generation, but it is only the sterility arising from disturbance of the regular course and consequences of sexual union that has a direct or nearly direct bearing on the present inquiry. The sterility of hybrids, which, considering the theory he is supporting, forms naturally the main study of Darwin, is of comparatively little interest to us, and will not be hereafter referred to, but many of the principles of sterility find strong support in the special sterility of hybrids.

Viewing the subject generally, we may anticipate a great result by pointing out the paramount prevalence and paramount potency of constitutional conditions as causes of sterility. Such are cold and heat, overfeeding and underfeeding, youth and old age, degradation of general health, confinement, and interbreeding.

Local conditions occur in plants that are quite sufficient to account for or cause sterility. Such are contabescence of anthers, monstrous flowers, double flowers, seedless fruit. These local conditions are the result of the general or constitutional conditions of the individuals in which they occur; and they have their place rather in the results of sterility, or of the conditions producing sterility, than in the causes of sterility. They have their analogues in such abortions, dead fœtuses, unhealthy offspring, or monstrous products of animals as are believed to be results of what may be called the sterile diathesis. The causes of sterility are causes of these imperfections, and for that reason they are referred to the sterile tendency. They do, indeed, constitute the sterility to be accounted for. Thus, to wander into hybridism for an example, it is an observation of Gärtner that hybridism in plants, a great cause of sterility, produces also a strong tendency in flowers to become double.

In the vegetable kingdom everyone has observed that source of sterility which may be, no doubt nearly truly, designated a degradation of general health. A plant covered with flowers is brought from a house where its fertility has been stimulated to the highest degree, and placed as an ornament in a sitting-room, where it remains till its charms are lost, and the result is such an injury to its constitutional vigour that it is sterile, or nearly sterile, for one or for several subsequent seasons. Its fertility may never be restored, or only after several years of the medical care of a skilful gardener. The scarlet geraniums which are brought from their healthy homes in full bloom to adorn the houses of inhabitants of densely populated cities soon show the injurious influence of their new surroundings, however well they may be cared for; their flowers become less numerous, or are altogether wanting; then their leafage diminishes greatly in quantity, and their existence becomes a mere lingering. A rose garden, lately in a suburban position near London, gets surrounded by the growing city, and gradually as the buildings increase the fertility of the roses diminishes; the garden becomes useless. Some of our finest forest trees, and among them some plants, grow beautifully in our squares, producing wood in even exaggerated quantity, and a clothing of leaves sufficient for ornament; but there is no wealth of leaves, and there is no seed. In some cases an exception makes the rule more striking, as when a cherry tree in the heart of the City of London lately produced flowers and matured its fruit, so far as maturity is indicated by beauty, size, and taste.

Practical gardeners attribute sexual injury to overstimulation by manure, or what they call overfeeding. This ordinarily produces great growth of the tissues; and when this is restrained by judicious pruning, it forces out a large or excessive crop of flowers and subsequent fruit. In the language of Spencer, there is produced by overfeeding an excess of individuation, the restraint of which results in excess of genesis. The natural tendency of the overfeeding of plants is to produce a degree of relative sterility; and this may show itself in paucity of flowers, or it may show itself in the production of those double, or monstrous, or abortive flowers which are so much admired. The opposite result is produced by moderate or full feeding. Then, in mature plants there is not great growth of tissues, but rather a production of fruit. Sometimes the plant, without assignable cause, but especially if underfed, has an exaggerated production, and is said to run to seed; and, from whatever it may arise, it in a reflex manner injures the plant, which consequently becomes blighted and often dies. Excessive production here seems to take the place of sterility.

The following is an interesting illustration of the effect of overfeeding and of moderately feeding or underfeeding a vine, and it is important because it specifies a particular local condition or disease which is apparently the cause of the infecundity of the overfed plants, and so indicates a line of investigation which may with advantage be pursued in other examples of sterility. In a recent letter from Mr. Thomson, the well-known vine-cultivator, he writes:—"A circumstance has arisen in my own experience that I have never seen noticed in print. A vine called the Alnwick seedling, if grown vigorously in rich soil, fails to set its fruit even when aided. This failure is caused by the exudation from the female organ of a dewdrop of sap, which moistens the pollen, and it does not descend through the pistil and impregnate the ova. When the vine is grown in poor soil the dewdrop does not appear, and impregnation takes place; seeds are formed in perfection, but the pulp for which the grape is grown is almost absent. I know (he adds) no other grape affected in the same way or subject to the same influences."

I know no good account of the sterility of plants as regulated by age, but the influence of age is well recognised. A young fruit-tree bears no fruit, or very little, and that little imperfect, and the careful gardener does not permit it to bear much or even a little, believing that fruit-bearing injures growth and diminishes future fertility. The influence of old age and decay in fruit-bearing trees is also well known: the fruit is ill developed, and there is little of it.

"All know," says Spencer, "that a pear-tree continues to increase in size for years before it begins to bear, and that, producing but few pears at first, it is long before it fruits abundantly. A young mulberry, branching out luxuriantly season after season, but covered with nothing but leaves, at length blossoms sparingly, and sets some small and imperfect berries, which it drops while they are green; and it makes these futile attempts time after time before it succeeds in ripening any seeds. But these multiaxial plants, or aggregates of individuals, some of which continue to grow while others become arrested and transformed into seed-bearers, show us the relation less definitely than certain plants that are substantially, if not literally, uniaxial. Of these the cocoa-nut may be instanced. For some years it goes on shooting up without making any sign of becoming fertile. About the sixth year it flowers, but the flowers wither without result. In the seventh year it flowers and produces a few nuts, but these prove abortive, and drop. In the eighth year it ripens a moderate number of nuts, and afterwards increases the number, until, in the tenth year, it comes into full bearing. Meanwhile, from the time of its first flowering, its growth begins to diminish, and goes on diminishing till the tenth year, when it ceases."

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The evil influences of interbreeding is a subject too extensive to enter upon at any length. In plants it is corroborated by the well-known advantage of crossing of varieties. But it needs no confirmation, for there are self-impotent plants, plants more thoroughly fertilised by a nearly allied species than by pollen of their own species, and there are the wonders of dimorphism with sterility arising from union of individuals not only of the same species but of the same form. In the works of horticulturists is to be found ample evidence that interbreeding of plants tends to weakness, malformation, and sterility.

The influence of heat and of cold is, in plants, well illustrated by the failure of most alpine species to produce flowers and fruit in lowland gardens, and the same failure of lowland plants as they ascend the sides of mountains. A walk in the highlands will show the pines thriving on the hillsides and well covered with cones, but as greater altitudes are reached the trees are observed to become stunted and the fruit entirely to fail.

The abortion-like sterility of plants is illustrated by the bearing of double flowers, of flowers whose seeds do not ripen, or whose seeds though apparently perfect are incapable of germination and growth. In some of the cases of seedless fruit and of fruit with few seeds or with one seed or with imperfect seed, we have also abortion, and at the same time a fine illustration of the working, locally, of the opposition between individuation and genesis. The whole plant, as the vine or the pear-tree, may have the appearance of health, and its fruit alone is unnatural. The tissues of the fruit-capsule are enormously developed, while the seeds have disappeared or are reduced to one or a small number. The luscious pear or the juicy grape are masses of hypertrophy or myxomatous-like degeneration, while the seeds are the subject of extreme hypoplasia. Gardeners generally ascribe these results to over-feeding and overstimulation by manures and heat, but Darwin is more cautious, and in most cases does not analyse the causes farther than is implied in "unnatural conditions of life." No one, according to Lindley and Darwin, has produced double flowers by promoting the perfect health of the plant.

Before leaving vegetable physiology I would point out the frequent occurrence in plants of seeds which, though apparently perfect, will not germinate; they cannot be distinguished from their neighbours otherwise than by their incapacity for growing. The same failure to grow is often observed under closely similar circumstances in the eggs of the fowl and of other birds; they cannot be hatched, although no imperfection is discoverable in them. That there are such ova in other animals and in woman is highly probable, but in them the completeness of the demonstration is unattainable.

Very little is known of the sterility of animals, and it is easily understood that reliable observations can only with great difficulty be made on them, especially in a state of nature. Many authors, and latterly Darwin and his collaborators, have paid much attention to the great subject of the sterility of hybrid animals. Observations and experiments in this department are made chiefly on domestic animals, or wild animals in confinement, and each experiment has a high value. But the sterility of ordinary domestic animals has been little studied. In herds of fine heifers and cows, and in mares, it is occasionally exhibited, but I have no data as to its frequency; and in cattle, at least, observations are imperfect, the animal that, by sterility of one season, disappoints its owner, being generally at once fattened for the butcher.

It is a well-known belief among breeders, which may be historically traced to ancient times, that when the female of any kind is made to breed when very young, she does so at the expense of permanently preventing her own growth to perfection, and she will likely produce offspring that is not of the best quality. This failure is well illustrated in the case of the common fowl and of the turkey, the progeny of chickens and of turkeys one year old being not the best of their kind, and specially difficult to rear. Fanciers breed these animals from a female two years and a male three years old. The occurrence of sterility in early and in elderly life is clearly seen, and its degree easily made out in pluriparous mammals, as the dog and pig, and in birds whose broods can be counted, and whose yearly production of eggs can be also numbered. This subject will be discussed fully when we come to consider pluriparity in woman.

Overfeeding, or the production of fatness or of obesity in the female, is well known to be hostile to fertility, to be an illustration of the opposition of individuation to genesis. By special feeding and fattening turkeys and common fowls the henwife arrests almost completely the production of eggs. They may also be made fewer by starving the birds, and not fewer only, but also smaller. These birds, when highly fed, sometimes exhibit excessive productiveness, two eggs being laid daily—an instance of great intensity of fertility; but this is not regarded with favour, having, I am told by a turkey fancier, an injurious influence, in their case, by delay of the commencement of laying in the season following that of the excessive production. The breeder of cattle prevents by careful management the fattening of the females.

In respect of feeding, comparisons are made between the relative sterility of wild animals and the comparative fertility of domesticated or confined animals of the same species, but the comparisons are not quite satisfactory from the intermixture of the influences of food and of domestication or confinement; and again, in the comparisons of animals fed on rich and on poor pasture, sufficient care is not taken to insure that the compared animals are of the same breed. With this previous reflection I subjoin an interesting passage from Spencer's chapter on nutrition and genesis. "Clear proof," says he, "that abundant nutriment raises the rate of multiplication (and *vice versâ*) occurs among mammals. Compare the litters of the dog with the litters of the wolf and the fox. Whereas those of the one range in number from six to fourteen, the others contain respectively five or six, or occasionally seven, and four or five, or rarely six. Again, the wild cat has four or five kittens, but the tame cat has five or six kittens two or three times a year. So, too, is it with the weasel tribe. The stoat has five young ones once a year. The ferret has two litters yearly, each containing from six to nine; and this notwithstanding that it is the larger of the two. Perhaps the most striking contrast is that between the wild and tame varieties of the pig. While the one produces, according to its age, from four to eight or ten young ones once a year, the other produces as many as seventeen in a litter; or, in other cases, will bring up five litters of ten each in two years—a rate of reproduction that is unparalleled in animals of as large a size. And let us not omit to note that this excessive fertility occurs where there is the greatest inactivity—where there is plenty to eat and nothing to do. There is no less distinct evidence that among domesticated mammals themselves the well-fed individuals are more prolific than the ill-fed individuals. On the high and comparatively infertile Cotswolds it is unusual for ewes to have twins, but they very commonly have twins in the adjacent rich valley of the Severn. Similarly, among the barren hills of the West of Scotland, two lambs will be borne by about one ewe in twenty; whereas in England, something like one ewe in three will bear two lambs. Nay, in rich pastures, twins are more frequent than single births; and it occasionally happens that, after a genial autumn and consequent good grazing, a flock of ewes will next spring yield double their number of lambs—the triplets balancing the uniparæ. So direct is the relation, that I have heard a farmer assert his ability to foretell, from the high, medium, or low condition of an ewe in the autumn, whether she will next spring bear two, or one, or none."

An interesting department of the sterility of animals is that which results from confinement. This seems specially to affect what are vaguely designated the noble animals. Those which are sterile show great variations: some disdain to cohabit or have lost sexual desire; others have increase of sexual appetite, and cohabit freely or excessively, but without impregnation resulting, or with the result very rarely following. Some if impregnated bring forth only abortions, or young which are dead-born, or, if alive, feeble and ill-formed. There is, for instance, as Shorthouse has pointed out, a common occurrence of cleft palate in the lion's cubs born in the Zoological Gardens.

Among birds in confinement there are many good examples of change of sexual habits and of sterility. In some cases they have no eggs, or, if they produce, they have only comparatively few, or they may neglect the eggs when produced, or the eggs duly cared for may be incapable of being hatched. This abortional sterility arising from imperfection of eggs as a result of confinement is well proved by experiments made in France on the common fowl. When these birds were allowed considerable freedom, 20 per cent. of the eggs failed to be hatched; when less freedom was allowed, 40 per cent. failed; when closely confined, 60 per cent. were not hatched.

The power of temperatures that are not according to an

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animal's nature to induce sterility is no doubt very great. Darwin mentions that Mr. Miller, a former superintendent of the Zoological Gardens, believed that the sterility of the carnivora there was increased by increase of exposure to air and cold. In winter, inadequately sheltered cows either cease to give milk or give it in diminished quantity. "And," says Spencer, "though giving milk is not the same thing as bearing a young one, yet, as milk is part of the material from which a young one is built up, it is part of the outlay for reproductive purposes, and diminution of it is a loss of reproductive power." Failure to maintain the cow's heat may entail such reduction in the supply of milk as to cause the death of the calf. Hard living, says Darwin, retards the period at which animals conceive, for it has been found disadvantageous in the northern highlands of Scotland to allow cows to bear calves before they are four years old. Roulin found that in the hot valleys of the equatorial Cordilleras sheep were not fully fecund.

The common fowl will not breed in Greenland or Northern Siberia. "In this country it is fed," says Spencer, "through the cold months, but, nevertheless, in midwinter it either wholly leaves off laying or lays very sparingly. And then we have the further evidence that if it lays sparingly it does so only on condition that the heat, as well as the food, is artificially maintained. Hens lay in cold weather only when they are kept warm; to which fact may be added the kindred one that when pigeons receive artificial heat they not only continue to hatch longer in autumn, but will recommence in spring sooner than they would otherwise do."

On the subject of the interbreeding of animals there is a vast body of opinion as well as of facts showing its power in producing monstrosity and its ally sterility. "If we were," says Darwin, "to pair brothers and sisters in the case of any pure animal, which from any cause had the least tendency to sterility, the breed would assuredly be lost in a few generations." Elsewhere he shows that "long-continued close interbreeding between the nearest relations diminishes the constitutional vigour, size, and fertility of the offspring, and occasionally leads to malformations, but not necessarily to general deterioration of form or structure. This failure of fertility shows that the evil results of interbreeding are independent of the augmentation of morbid tendencies common to both parents, though this augmentation no doubt is often highly injurious. Our belief that evil follows from close interbreeding rests to a large extent on the experience of practical breeders, especially of those who have seen many animals of the kind which can be propagated quickly; but it likewise rests on several carefully recorded experiments. With some animals close interbreeding may be carried on for a long period with impunity by the selection of the most vigorous and healthy individuals; but sooner or later evil follows. The evil, however, comes on so slowly and gradually that it easily escapes observation, but can be recognised by the almost instantaneous manner in which size, constitutional vigour, and fertility are regained when animals that have long been interbred are crossed with a distinct family."

Regarding the very remarkable subject of sterility of sexual connexion with special individuals only, Darwin says:—"It is by no means rare to find certain males and females which will not breed together, though both are known to be perfectly fertile with other males and females. We have no reason to suppose that this is caused by these animals having been subjected to any change in their habits of life. . . . The cause apparently lies in an innate sexual incompatibility of the pair which are matched. Several instances have been communicated to me by Mr. W. C. Spooner (well known for his essay on Cross-breeding), by Mr. Eyton of Eyton, by Mr. Wicksted, and other breeders, and especially by Mr. Waring of Chilsfield, in relation to horses, cattle, pigs, foxhounds, other dogs, and pigeons. In these cases, females which either previously or subsequently were proved to be fertile, failed to breed with certain males, with whom it was particularly desired to match them. A change in the constitution of the female may sometimes have occurred before she was put to the second male; but in other cases the explanation is hardly tenable, for a female known not to be barren has been unsuccessfully paired seven or eight times with the same male, likewise known to be perfectly fertile. With cart-mares, which sometimes will not breed with stallions of pure blood, but subsequently have bred with cart stallions, Mr. Spooner is inclined to attribute the failure to the lesser sexual power of the racehorse. But I have heard from the greatest breeder of racehorses at the present day, through Mr. Waring, that it frequently occurs with the mare to be put several times during one or two seasons to a particular stallion of acknowledged power, and yet prove barren, the mare afterwards breeding at once with some other horse. These facts are worth recording, as they show, like so many previous facts, on what slight constitutional differences the fertility of an animal often depends."

Before leaving the subject of the causes of sterility of animals, I quote a passage from Darwin regarding the results of confinement. "Sufficient evidence," says he, "has now been advanced to prove that animals, when first confined, are eminently liable to suffer in their reproductive systems. We feel at first naturally inclined to attribute the result to loss of health, or at least to loss of vigour, but this view can hardly be admitted when we reflect how healthy, long-lived, and vigorous many animals are under captivity, such as parrots, and hawks when used for hawking, cheetahs when used for hunting, and elephants. The reproductive organs themselves are not diseased, and the diseases from which animals in menageries usually perish are not those which in any way affect their fertility. No domestic animal is more subject to disease than the sheep, yet it is remarkably prolific. The failure of animals to breed under confinement has been sometimes attributed exclusively to a failure in their sexual instinct; this may occasionally come into play, but there is no obvious reason why this instinct should be especially liable to be affected with perfectly tamed animals, except, indeed, indirectly, through the reproductive system itself being disturbed. Moreover, numerous cases have been given of various animals which couple freely under confinement, but never conceive, or, if they conceive and produce young, these are fewer in number than is natural to the species. In the vegetable kingdom instinct of course can play no part, and we shall presently see (he says) that plants, when removed from their natural conditions, are affected in nearly the same manner as animals. Change of climate cannot be the cause of the loss of fertility, for, whilst many animals imported into Europe from extremely different climates breed freely, many others, when confined in their native land, are completely sterile. Change of food cannot be the chief cause, for ostriches, ducks, and many other animals, which must have undergone a great change in this respect, breed freely. Carnivorous birds, when confined, are extremely sterile, whilst most carnivorous mammals, except plantigrades, are moderately fertile. Nor can the amount of food be the cause, for a sufficient supply will certainly be given to valuable animals, and there is no reason to suppose that much more food would be given to them than to our choice domestic productions which retain their full fertility. Lastly, we may infer, from the case of the elephant, cheetah, various hawks, and of many animals which are allowed to lead an almost free life in their native land, that want of exercise is not the sole cause. It would appear that any change in the habits of life, whatever these habits may be, if great enough, tends to affect, in an inexplicable manner, the powers of reproduction. The result depends more on the constitution of the species than on the nature of the change; for certain whole groups are affected more than others; but exceptions always occur, for some species in the most fertile groups refuse to breed, and some in the most sterile groups breed freely. Those animals which usually breed freely under confinement rarely breed, as I was assured, in the Zoological Gardens, within a year or two after their first importation. When an animal which is generally sterile under confinement happens to breed, the young apparently do not inherit this power; for had this been the case, various quadrupeds and birds which are valuable for exhibition would have become common. Dr. Broca even affirms that many animals in the Jardin des Plantes, after having produced young for three or four successive generations, become sterile; but this may be the result of too close interbreeding. It is a remarkable circumstance that many mammals and birds have produced hybrids under confinement quite as readily as, or even more readily than, they have procreated their own kind. Of this fact many instances have been given, and we are thus reminded of those plants which when cultivated refuse to be fertilised by their own pollen, but can easily be fertilised by that of a distinct species. Finally, we must conclude, limited as the conclusion is, that changed conditions of life have an especial power of acting injuriously on the reproductive system. The whole case is quite peculiar, for those

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organs, though not diseased, are thus rendered incapable of performing their proper functions, or perform them imperfectly."

ORIGINAL COMMUNICATIONS.

ABSTRACT OF

REPORT ON THE RELATION OF MICRO-ORGANISMS TO TUBERCULOSIS,

PRESENTED TO THE ASSOCIATION FOR THE ADVANCEMENT OF MEDICINE BY RESEARCH, ON FEBRUARY 1, 1883,

By W. WATSON CHEYNE, M.B., F.R.C.S.,
Assistant-Surgeon to King's College Hospital, etc.

A VISIT was paid to Professor Toussaint of Toulouse, and to Dr. Koch at Berlin, with a view of seeing their methods of experimentation, and the results which they had obtained. Various experiments were seen, and a quantity of material was brought back to England for more detailed examination. The result of the visits and a full account of the observations made will be found in the complete report which will be published in the April number of the *Practitioner*.

It was thought advisable in the first instance to repeat some of the experiments which have led observers, more especially in this country, to object to the view of the specific origin of tuberculosis, and to hold that in rodents, at least, any irritation might produce that disease. The present series of experiments were performed under the best hygienic conditions, with complete isolation of the animals from each other, and thorough disinfection of the instruments employed. In six cases setons of various kinds were introduced —both subcutaneously and into the anterior chamber of the eye; in ten, vaccine lymph, both from the calf and from man, was employed; in three, pyæmic pus was injected—(1) into the eye, (2) subcutaneously, and (3) into the abdominal cavity; and in six, various materials (cork, tubercle hardened in alcohol, and worsted thread) were introduced into the abdominal cavity. None of these twenty-five animals became tuberculous. Some experiments are also cited in the report, in which wounds in rodents have been stitched up with cotton thread, and others in which abscesses have been produced in various ways; but in none of these cases did tuberculosis ensue. In explanation of the former results, it is pointed out that at the time the early experiments on this subject were made the communicability of tubercle by mediate contagion was not recognised; and as the precautions necessary for thorough disinfection of instruments, etc., had not at that time been made out, the channels for the introduction of specific micro-organisms were left unguarded.

Two tubes of serum containing micrococci were obtained from M. Toussaint, who holds that micrococci are the cause of the disease. Toussaint obtains these organisms by inoculation of flasks containing serum, or infusion of rabbit, with the blood of tuberculous animals; and he has in some cases succeeded in producing tuberculosis by the injection of these cultivations into other animals. The material obtained from M. Toussaint was injected into three rabbits, two guinea-pigs, one cat, and one mouse; and of these seven animals, six were under observation for a sufficient length of time for the development, at least, of local tuberculosis. In no instance did tuberculosis occur. (In all the experiments detailed in this report inoculation was made into the anterior chamber of the eye, whenever this was practicable. Syringes purified by heat were employed for the purpose.) Cultivation of these micrococci were also made, and injected into nine rabbits and three guinea-pigs. Of these, four rabbits and three guinea-pigs were under observation for a considerable time without the development of tuberculosis in any case. The total result is that thirteen animals were inoculated with the micrococci with which Toussaint works, and obtained from Toussaint himself; and in no case did tuberculosis occur.

A number of tuberculous organs from animals experimented on by M. Toussaint were also obtained, some of the animals having become tuberculous after the injection of his micrococcal fluid. Careful examination of these organs has shown the presence—often in large numbers—of the tubercle-bacillus described by Dr. Koch, but no micrococci were found. The conclusion arrived at is that the micrococci described by Professor Toussaint are not the cause of tuberculosis. One of the possible explanations of the results, which should not be left out of account, is the following:—Professor Toussaint trusts greatly to carbolic acid as a disinfecting agent for the purification of the instruments employed in inoculation. This antiseptic, though effectual for the destruction of the ordinary forms of micro-organisms, as evidenced by the satisfactory results obtained from its use in aseptic surgery, has been shown to be ineffectual against the spores of bacilli, unless it acts for a long time. The bacillus of tubercle apparently produces spores, and there is no reason to suppose that these are less resistant than those of *Bacillus anthracis*, and other bacilli. An experiment is given which shows that a saturated watery solution of carbolic acid, even though it acts as long as fifteen minutes, is not sufficient to arrest the development of the tubercle-bacilli. Therefore to wash a syringe with carbolic acid is not such a certain means of disinfection in this particular instance as was formerly supposed.

Experiments were also made with cultivations of bacilli obtained from Dr. Koch. Twelve animals were inoculated with these organisms, chiefly into the anterior chamber of the eye, and all of them became tuberculous, and that more rapidly than after inoculation of tuberculous tissue. The tubercles produced in these cases were infective, and caused tuberculosis in other animals. On examination of tuberculous material, Koch's tubercle-bacilli are always found, though in varying numbers. They are most numerous in bovine tuberculosis, and least numerous in human tuberculosis. About eighty organs of tuberculous animals, and thirty-six cases of human tuberculosis were examined, and in all of these, without exception, tubercle-bacilli were found. The inoculation of these bacilli is more certain, and more rapid in its effect than the inoculation of tuberculous material from any source; and this seems only explicable on the supposition that in the cultivation of these bacilli the virus of the disease is present in a more or less pure state, and in large amount. Various facts are pointed out, leading to the conclusion that in these bacilli we have the virus of the acute tuberculosis caused in the lower animals by the inoculation of tuberculous material.

In applying the facts obtained from experiments on animals to the pathology of tuberculous diseases in man, it is pointed out that all that has as yet been absolutely proved is that a variety of materials in man which we class together as tuberculosis produce acute tuberculosis when inoculated into rabbits, guinea-pigs, and other animals, and that this result is due only to the tubercle-bacilli present in the materials inoculated. It therefore remains for inquiry what relation these bacilli bear to the morbid processes in man in which they are found.

Acute miliary tuberculosis in man resembles in every respect —in histological structure, in tendencies, and in the presence of bacilli—the disease produced in the lower animals by the inoculation of tuberculous material, and there can be little doubt that the cause of both diseases is the same, viz., the tubercle-bacillus. It is, however, much more difficult to understand the relation of these organisms to the localised tuberculous processes in man (phthisis, scrofulous diseases of glands, joints, etc.). Phthisis is alone considered in the present report, and with a view of making clear the conception which the author has formed as to the relation of bacilli to this disease, the following facts are brought forward, which he has observed as to the mode of distribution of these organisms in the tissue, and their relation to its histological elements.

Two distinct structures have been described as tubercles in the lungs of rodents, viz., nodules of lymphatic tissue in close proximity to the vessels and bronchi, and nodules which are largely made up of epithelioid cells. If a case of commencing artificial tuberculosis be examined, it will be found that bacilli are only present in the latter nodules; indeed, it is rare even in the later stages to find them in the former, and in that case epithelioid cells will be found as well. The bacillus being the cause of the disease, the nodules containing epithelioid cells are alone tubercles. Further, on careful investigation of these nodules, it will be found that bacilli are only present in the epithelioid cells themselves. In making this statement, only young tubercles, and those in which the bacilli are present in moderate numbers, are referred to. Where there are enormous masses of bacilli, or where there has been confluence of tubercles, forming a largish tubercular deposit, some bacilli may be found in the outer part of the tubercle; but the great majority of them occupy the epithelioid tissue. Where the bacilli are few in number, one need only look for them in epithelioid cells. Around

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the epithelioid cells the tissue becomes inflamed, and converted, more or less completely, into granulation tissue. As the tubercle becomes older, the epithelioid cells at the centre undergo caseous degeneration, and in this case the bacilli are present in the caseous mass, but are often best seen at its margin, where epithelioid cells still exist, and they may also be found penetrating into the inflammatory tissue. The giant-cells of tubercle can be distinctly traced as originating from epithelioid cells, especially from epithelioid cells containing bacilli. As to the origin of these epithelioid cells in the lung, the great majority are undoubtedly derived from the alveolar epithelium. The bacilli escape from the blood-vessels or lymphatics, and pass into the alveolar epithelium, where they grow, and cause multiplication of the epithelial cells until the alveolus becomes completely filled with them. In some instances, however, these cells are probably derived from the endothelium of blood- and lymphatic-vessels. In the case of the liver, the author thinks that they are frequently developed from liver cells; for the bacilli may be found in liver cells at the margin of commencing tubercles, and gradations in size and form can be traced between these liver cells and the epithelioid cells in the centre of the tubercle. The accumulation of the epithelium in the centre of the nodule leads to obliteration of the vessels around, and to fusion of neighbouring nodules.

With regard to phthisis, the two extremes, the rapid phthisis or caseous pneumonia, and the chronic or fibroid phthisis, are considered. In the rapid phthisis the alveoli are distended with caseous material, or, in parts where the process is less advanced, with epithelioid cells. Surrounding these the trabeculæ are thickened and converted into granulation tissue. Here the bacilli are found in moderate or considerable numbers in the caseous material and epithelioid cells, which fill the alveoli. By-and-by the walls of adjacent alveoli disappear, and thus irregular cavities are formed, containing caseous material, surrounded by epithelioid cells and inflammatory tissue. In this case the bacilli are most numerous, and sometimes in enormous masses at the free margin of the cheesy material; and they are also present, though not generally so numerous, in the epithelioid cells at the line of junction of the caseous mass with the surrounding tissue.

In fibroid phthisis the bacilli are, as a rule, extremely few; but here and there, if a cavity exist, or in the centre of a caseous mass, one may find them in considerable numbers. They may, though very rarely, be also found in the giant-cells, which are generally pretty numerous among the fibrous tissue. As a rule, however, the bacilli are extremely few, but nevertheless, if a sufficient number of sections be carefully examined, a few will be found here and there at the margin of or in the caseous masses.

The foregoing facts seem to indicate that when the tubercle bacilli reach the alveolus of a lung, which is in a suitable condition for their growth, they develope in the epithelial cells lining the alveolus. This alveolus becomes filled with cells, neighbouring alveoli become affected, and the same process goes on in them. The further result will depend on the number and growth of the bacilli, and on whether the patient is a good soil for their development. If they develope well we have caseous pneumonia; if they grow slowly and with difficulty, we have fibroid phthisis. In the former case the alveoli become distended early with epithelioid cells, inflammation of the walls of the alveoli ensues, the epithelioid cells soon undergo caseous degeneration, and the pressure of the masses leads to atrophy or sloughing of the walls of the alveoli. Infection of neighbouring parts of the lung occurs both by continuity and also by partial coughing-up and re-inhalation of the bacilli into other parts of the lung. In this rapid phthisis fibrous formation around the alveoli only takes place imperfectly, and the lung rapidly breaks down.

In the case of fibroid phthisis the bacilli are few, and grow only with difficulty. Thus fibrous formation occurs extensively, and giant-cells are entangled in this fibrous tissue. In parts, however, the process may be more rapid, and there cheesy masses are formed, which may lead to breaking-down of the lung and the formation of cavities.

In the report it is pointed out that on this view we have one explanation of the rarity of acute tuberculosis in connexion with phthisis, and of the presence of bacilli in sputum even before physical signs are marked; while it is shown that this view is directly corroborated by the results obtained by Tappeiner in his inhalation experiments. Against the statement that phthisis is due to the tubercle-bacilli might be urged the fact that the bacilli found in the lung after death are often very few in number. Among other facts brought forward with regard to this question, it is stated that very extensive tuberculous processes may be found in animals containing only few bacilli, and that in cases where bacilli alone were inoculated, and where it is certain that the bacillus was the only agent at work. With regard to the production of phthisis by the inhalation of dust of various kinds, it is pointed out that the foreign particles inhaled probably only prepare the lung for the reception of the bacilli, for in those cases also bacilli are found. It has often been urged that the milk of tuberculous cows is infective. This may be the case when the mammary glands become tuberculous, and the mode in which the bacilli might get into the milk was well illustrated by the appearances found in a tuberculous kidney. There not only were bacilli present in the tubercular mass, but they were also found in large numbers in the epithelium of the kidney tubules, and in the interior of those tubules, both in the vicinity of the mass and at some distance from it. The author has not yet investigated the subject of tuberculosis of the kidney, but from what he has seen he thinks it probable that the epithelium of the tubules is the favourite seat of the bacilli in the kidney, just as the alveolar epithelium is in the lung. In that case bacilli would be present in the urine, not merely when there were marked tuberculous masses in the kidney, but also when the disease was but slightly advanced. From analogy it is probable that the same is the case in the mammary glands, and bacilli might be present in the milk, even though the disease of the gland was not sufficiently advanced to be noticeable.

The staining solution employed was the Weigert-Ehrlich solution. The formula is: Of a saturated watery solution of anilin, 100 parts; of a saturated alcoholic solution of the basic anilin dye (methyl violet, gentian violet, fuchsin, etc.), eleven parts. Mix and filter before use. Rapid staining is obtained by warming the solution. The specimens are then decolourised by immersion in nitric acid (one part to two of water), and stained in a suitable contrast dye. Very delicate sections are apt to be injured by immersion in the nitric acid. In this case, after staining them in the Weigert-Ehrlich fuchsin solution, they may be washed in distilled water, immersed in alcohol for a moment, and then placed in the following contrast stain for one to two hours:—Distilled water, 100 cubic centimetres; saturated alcoholic solution of methylen blue, 20 cubic centimetres; formic acid, 10 minims. Wherever it is possible, however, Ehrlich's original method is recommended, as being most rapid, most simple, and most satisfactory. By this method of staining, tubercle bacilli and leprosy bacilli remain red when the fuchsin solution is employed. Psorospermiæ and the outer coat of some parasites also retain the red colour. Lichtheim has further stated that a micrococcus is frequently found in the fæces, which behaves in a similar manner to the tubercle bacillus.

University College, London.—At a meeting of the Council, held on Saturday, March 10, Mr. S. J. Hutchinson was appointed Dental Surgeon to University College Hospital, and Clinical Lecturer on Dental Surgery, *vice* Mr. G. A. Ibbetson, appointed Consulting Dental Surgeon.

The Dental Hospital of London.—The twenty-fifth annual meeting of this institution was held at the Hospital, Leicester-square, last evening, under the presidency of Edwin Saunders, Esq., one of the trustees. In the report, which was unanimously adopted, the Managing Committee congratulated the governors on the continued success and prosperity of the institution on completing the first quarter of a century of its existence; also on the great benefits which the Hospital continues to afford to the suffering poor, 35,893 cases having been treated during the year 1882, being an increase of 5094 on the previous year. That in consequence of the still increasing number of patients it has become necessary to enlarge the Hospital; and the Committee make an urgent appeal for the funds necessary for the extension of the Hospital, and for fitting up the new wing. Towards these objects Mr. Edwin Saunders has promised a munificent contribution of £1200; and Mr. S. J. Hutchinson, to give or collect £250, on the sole condition that twenty more promises of a like sum are forthcoming without delay.

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MEMORANDA ON

EYE-SYMPTOMS IN SPINAL DISEASE.

By W. R. GOWERS, M.D., F.R.C.P.

Of the ocular symptoms associated with spinal disease, two are of especial importance on account of their frequency—atrophy of the optic nerve, and the states of the pupil.

Modern pathological investigation has rendered it improbable that these ocular symptoms are the *result* of the disease of the cord. They are associated almost exclusively with degenerative diseases, and probably depend on a degeneration which is not structurally continuous with that in the cord. They are almost unknown in acute diseases of the cord, except when these follow, or are followed by, degeneration which runs a practically independent course. Considerable interest will therefore attach to any cases that can be brought forward in which these symptoms were distinctly consecutive to an acute lesion of the cord.

Optic nerve atrophy is associated especially with locomotor ataxy, and the association may be considered from the side of the ocular and of the spinal affection.

In what proportion of cases of atrophy of the optic nerves can the signs of locomotor ataxy be detected? As the earliest and most constant of these signs, the loss of the knee-jerk may be conveniently taken as a criterion.

In what proportion of cases of locomotor ataxy do the optic nerves undergo atrophy? It is not probable that a definite answer can be given to this question, because few cases of ataxy are followed to the end, so that the occurrence of atrophy cannot be excluded. But an approximate answer can be secured if the next question can be decided.

When does atrophy of the optic nerves usually commence in the course of ataxy? The course of tabes may, for this purpose, be conveniently divided into three stages—(1) before there is any alteration in gait; (2) when the gait is distinctly ataxic, but the patient is still able to walk, alone or with the aid of a stick; (3) when the patient is unable to walk without the help of another person. It is very important to know in what proportion of the cases of tabetic atrophy the change in the optic nerve commences in each of these stages. If the proportion of cases in which atrophy commences in the first stage is known, an approximate estimate of its total frequency can be formed from the number of cases in the second stage with and without signs of atrophy.

Can any relation be traced, in a series of cases, between the occurrence of atrophy and the character of the spinal symptoms (pains, anæsthesia, etc.)?

In what proportion of cases does tabetic atrophy affect one eye before and more than the other, and which eye is most frequently affected first?

Does concentric limitation of the field always precede, or preponderate over, central amblyopia in tabetic atrophy? In rare cases there are unusual changes in the field of vision (*e.g.*, temporal hemiopia). Observations on such cases are of especial importance, and so also are facts regarding acute failure of sight in this affection.

Does the atrophy always progress to total blindness, or does it sometimes become arrested, and remain stationary for an indefinite time, as does the spinal affection?

Can any instances of considerable and permanent improvement of sight in tabetic atrophy be brought forward?

Observations and microscopical sections illustrating the pathological anatomy of tabetic and other allied atrophies are desirable, especially those which show the condition of the optic chiasma and optic tracts.

In what respects does the optic atrophy of tabes differ from the optic atrophy sometimes associated with other forms of chronic spinal cord disease?

When eye-symptoms occur in general paralysis of the insane, is the case more likely to be complicated with spinal symptoms?

States of Pupil.—The most frequent condition of the pupil associated with spinal disease is the loss of contraction to light, the pupil still contracting on accommodation (reflex iridoplegia, reflex rigidity of the pupil, Argyll-Robertson symptom). Erb has pointed out that in these cases the pupil no longer dilates on a painful cutaneous stimulation (*e.g.*, of the skin of the neck by a faradaic brush). Regarding this condition information is needed on several points.

Can this reflex dilatation be always obtained under normal circumstances?

What is the most convenient and efficient means of obtaining it in regard to (*a*) place and (*b*) form of cutaneous stimulation?

Is it true that there is always loss of reflex dilatation when there is loss of reflex contraction?

The pupils are usually small in this condition, but not invariably, and are sometimes not circular. It is desirable to know whether any relation can be traced between the size and shape of the pupils and other symptoms.

It is not uncommon to find, under the conditions in which reflex iridoplegia occurs, that the pupils contract under the influence of light, but immediately, the exposure continuing, dilate again to their former size, often with slight oscillations. Does this condition go on to loss of reflex contraction?

In total paralysis of the internal muscles—ophthalmoplegia interna (Hutchinson)—the pupils are not usually small. What variations in the size of the pupils are met with in this condition?

Regarding the association of these symptoms with spinal disease, it is desirable to know how frequently they are met with in locomotor ataxy and general paralysis of the insane, and in what other spinal diseases they occur.

Both symptoms occur apart from spinal disease, and facts are needed as to the other conditions with which they are associated, and as to their relation to constitutional syphilis. Does ophthalmoplegia interna begin as reflex iridoplegia?

Ophthalmoplegia externa has been shown to depend on nuclear degeneration. There is some reason to believe that reflex iridoplegia and ophthalmoplegia interna depend on a similar degeneration. Pathological observations on the nature of the lesion in these cases are much needed.

MEDICAL SOCIETY OF LONDON.—The one hundred and tenth anniversary dinner of this Society was held on Thursday evening, March 8, at the Criterion Restaurant. Mr. Francis Mason, F.R.C.S. (the President of the Society) occupied the chair, and, after having disposed of the usual loyal toasts, referred in eloquent terms to the increasing success and prosperity of the Society, stating that from all points of view it had never been in so flourishing a condition. He congratulated the Fellows on their choice of his successor, and expressed a confident belief that in Sir Joseph Fayrer they would have a President who would worthily sustain the reputation of the oldest medical society in London.

MALARIA IN CHILDREN.—Dr. Holt read a paper at the Medical Society of the State of New York (*New York Med. Record*, December 9), in which he stated that this affection had been much overlooked in Europe, and in America, where there was a greater opportunity of studying it. After describing its symptoms and complications in 184 recorded cases occurring in New York, he laid down the following positions:—1. That malaria in early life presents symptoms as distinctive as any other disease of children. 2. The classification of the cases as intermittent or remittent, and the division into hot, cold, and sweating stages, as in adults, leads to misapprehension regarding the cause of the disease and to confusion in diagnosis. 3. In any acute febrile disease presenting an unusual course the spleen should always be examined, especially in malarial districts. 4. In obstinate cases of diarrhœa or bronchitis not affected by ordinary remedies, especially if these symptoms show a tendency to periodicity, malarial fever should always be regarded as a possible cause. 5. Spells of drowsiness and frequent attacks of epigastric pain should always excite suspicion. 6. In children it is even more necessary than in adults to interrogate every organ before making a diagnosis when the symptoms are obscure.

GLASGOW OPHTHALMIC INSTITUTION.—The annual meeting of the subscribers to this charity was held on Monday last, when it was reported that during the year 3306 new cases had been treated—a decrease of 75 outdoor and an increase of 59 indoor patients compared with the previous year: 3139 cases had been cured, 95 relieved, and 72 dismissed as incapable of further benefit. The ordinary income had amounted to £1140; and, with the exception of a small sum, the income had sufficed to cover the expenditure.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

LONDON HOSPITAL MATERNITY CHARITY.

CASES OF INTRAVENOUS INJECTIONS FOR SEVERE HÆMORRHAGE.

(Under the care of Dr. HERMAN.)

[Reported by Mr. W. Coates, Resident Accoucheur.]

Case 1.—*Placental Polypus—Hæmorrhage—Intravenous Injection of Saline Fluid—Death.*

Susan S., aged twenty-eight, a patient of the London Hospital Maternity Charity, was confined on November 27, 1882, of a healthy male child, after an easy labour. The placenta came away without trouble after a little expression. It was her third confinement. She had been in fairly good health whilst pregnant, but had not been able to obtain much nourishment during the last few weeks. After delivery her convalescence progressed favourably until December 6 (nine days), when she lost a little blood. The Maternity assistant attending her reported that the hæmorrhage was slight, that the uterus appeared fairly contracted, and that the bleeding ceased after the administration of a little ergot. All went well for three days, and she had been sitting up a little in the afternoon of December 9, when at 8.30 p.m. an urgent message was received that the patient had been flooding for the last two hours. She was found delirious, extremely anæmic, with cold extremities and marked jactitation. She had lost a great deal of blood, which had soaked through the bed, and was seen in considerable quantity upon the floor. Her pulse was irregular and small, beating 129 in the minute. On examination there was a little blood oozing from the vagina; the os was patulous, admitting one finger. Bimanually the uterus was felt enlarged, and at the fundus a mass could be felt, irregular in shape, about the size of a bantam's egg, adherent to the uterine wall. The smallest of Dr. Barnes's water-bags was at once introduced into the cervix and distended, by this means checking the hæmorrhage, and dilating the cervix at the same time. Brandy, which was with difficulty swallowed, was given freely, and one grain of sclerotic acid injected into the buttock. Dilatation of the cervix was effected with the larger water-bags, and on the arrival of Dr. Herman at 9.30 p.m. the polypus (which proved to be placental) was scraped away with the finger, and the interior of the uterus swabbed out with a solution of perchloride of iron (one in four). Her general condition, however, by this time appeared worse. Her pulse was much weaker. She vomited everything that was given, and tossed herself from side to side in the bed. A vein in the right cubital space was exposed, and one pint of the saline fluid recommended by Dr. Little (*London Hospital Reports*, 1866), at a temperature of about 100° Fahr., was allowed to flow into it through Jenning's syphon. For a few minutes the patient appeared to revive a little, but this was only temporary, as, five minutes after the injection, she was as bad as ever, and appeared fast sinking. Her extremities and nose became stony cold, her pupils dilated, the conjunctivæ were only just sensitive, and the respirations slackened and became embarrassed. One drachm of ether was injected subcutaneously over the region of the heart, and this stimulation, aided by artificial respiration, kept the patient alive whilst a blood solution was prepared. About sixteen ounces of blood were procured from the husband, and allowed to flow into a pitcher containing a solution of phosphate of soda at a specific gravity of 1050 and at about blood-heat. This was filtered and injected into the left median cephalic vein with the aid of Braxton Hicks' apparatus. But she had ceased to breathe before the operation was begun, and died at about 11 p.m.

Case 2.—*Accidental Hæmorrhage—Intravenous Injections of Saline Fluid and Blood—Death.*

Louisa G., aged forty-one, also a patient of the Maternity Charity, sent word she was in labour with her thirteenth child, on December 15, 1882, at 5.30 p.m. It was stated that about an hour previously the patient had been found lying on the bed, swamped in blood, by a neighbour who accidentally called at her house, and as she had not been seen about since morning, it was presumed that she had been bleeding there for some hours. It was gathered from the friends that she had been quite well during her pregnancy until a month ago, when she had fallen down the steps at Broad-street Station. Since then she had complained of occasional abdominal pain; and a week ago fell down her own stairs. There was no history, however, that she had lost any blood at this time, and, as far as was known, she was at the full term of pregnancy. The patient was found blanched, cold, restless, wishful to be "allowed to die," with a weak, irregular, intermittent pulse, beating 120 to the minute; and occasional vomiting. Abdominal examination showed the uterus as large as at full term, the head presenting, the back anterior. Blood was flowing from the vagina; the os was hardly as big as a shilling, and rigid. The head presentation was confirmed. The membranes were unruptured, and no placenta could be felt. An unsuccessful attempt was made to perform bipolar podalic version, and as the hæmorrhage continued the membranes were ruptured, one grain of sclerotic acid injected hypodermically, the smallest of Dr. Barnes's hydrostatic bags distended in the cervix, and iced brandy administered by the mouth. Though persevering attempts were made with the water-bags to effect dilatation of the cervix, scarcely any enlargement could be obtained, the os remaining absolutely rigid. At 6.45 p.m. Dr. Herman saw the patient. There had been no hæmorrhage since the rupture of the membranes, and, as turning could not be accomplished, a firm binder was applied, and another grain of sclerotic acid injected. As the jactitation was more marked, the vomiting persistent, the pulse faster and more feeble, and she appeared to be falling into collapse, twenty ounces of Little's saline fluid with four ounces of brandy at about blood-heat were allowed to flow into a large vein in the right forearm, Jenning's syphon being employed as in the case above related. The pulse improved a little during and after the operation, but the patient did not express herself as feeling any better; in fact, the amount of brandy that had been taken, combined with the loss of blood, rendered her quite delirious. As there was no vaginal hæmorrhage, hot-water bottles were placed to the feet, half a drachm of laudanum was given, and the patient left for two hours. When seen at 10.15 p.m. she appeared worse than before, and was apparently fast sinking. There had been no more hæmorrhage from the vagina; the head was blocking up the os, but this was quite as rigid and no further dilated than when last seen. The husband consenting to give blood, he was bled to twelve ounces, and the blood whipped with a fork as it flowed into a graduated basin. It was then passed through muslin into a similar quantity of saline fluid at a temperature a little over blood-heat. This mixture was again filtered through muslin, and its temperature maintained by placing the containing vessel in a larger one full of hot water. Twenty ounces of the "blood and saline" were now injected into the left median cephalic vein, by means of a ten-ounce brass syringe, about a foot of india-rubber tube, and a suitable glass cannula. The patient appeared to improve a little after the injection; her pulse became stronger, and she recognised those who were around her; but the rally was only temporary, and she gradually sank, and died at 2 a.m. the following morning, eight hours and a half from the time she was first seen.

At the autopsy on the following day the placenta was found at the fundus almost completely detached, except here and there at its margin. The uterus contained a large quantity of recent blood-clot; but about the placenta there was evidence of old as well as recent hæmorrhage. The os uteri was only the size of a shilling, but it appeared healthy. The child was fully developed.

Remarks (by Dr. Herman).—The attention of the profession has recently been called (by some correspondence in the *Lancet*, and also by a communication to the Obstetrical Society of London) to the intravenous injection of saline fluid as a means of saving life endangered by hæmorrhage; and cases have been published in which, after this treatment had been used, the patients recovered. It is impossible for the profession to correctly judge of this, or any other mode of treatment, unless *all* the cases in which it is employed are reported; and therefore the above cases are published. So far as they go they favour the view that the effect of

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intravenous injections is merely that of temporary stimulation. This, however, if it be admitted, is no argument against their use, for in cases in which, if left to nature, death seems imminent, it is proper to use any treatment which, not in itself injurious, offers a chance of safety.

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The Medical Times and Gazette *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, MARCH 17, 1883.

THE CONJOINT EXAMINING BOARD OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Our readers will remember that at the end of October last the Royal College of Physicians appointed a Committee to consider and report as early as possible "what combination the College can best enter into for examination purposes, so as to secure for England, without further delay, one complete Pass Examination Board, which shall be satisfactory to the profession, the Medical Council, and the Government." This Committee resolved that it was desirable in the interests of the profession, and would be to the advantage of the public, that the two English Royal Colleges should combine to form "a common joint examining board for granting their respective licences in medicine and surgery"; and appointed seven of their number as delegates to invite the Royal College of Surgeons to confer with them on the subject of such a combination, and, if it might be, to co-operate with them in framing a scheme for the purpose. The Council of the Royal College of Surgeons cordially accepted the invitation, and appointed delegates to meet those representing the Committee of the College of Physicians. The matter having been thus successfully started, the Board of Delegates went to work with a will, and by the 1st of the present month had drawn up and agreed to a report, comprising:—1. A scheme for constituting an Examining Board in England under the provisions of Clause 19 of the Medical Act; 2. Regulations relating to examiners and the conduct of examinations; 3. Regulations relating to professional education and examination; and 4. Financial arrangements. The report was considered by the Council of the Royal College of Surgeons, and adopted without alteration on the 8th inst.; and, having been approved and adopted by the Committee of the College of Physicians, was considered by the Fellows, and adopted on Monday last, the 12th inst., without alteration, though not, it is understood, without considerable discussion. We congratulate the Colleges on having succeeded in doing what they ought, for the benefit of the profession and the public, to have done long ago. It would be tedious and unprofitable to point out the various obstacles that have hitherto prevented such a combination as that which has now been effected; but the waiting to see the results of repeated efforts of different Ministries to pass a Medical Acts Amendment Bill was one; another was the formation of a complete Conjoint Examination Scheme for all the medical authorities in England and the determination, at the last, of the Royal College of Surgeons of England not to carry the scheme into effect till similar combinations had been agreed to in the other two divisions of the kingdom; while a third was the action taken by the Royal College of Physicians of London in July, 1880, when the College of Surgeons invited them to a conference on the practicability of establishing a joint examination in medicine, surgery, and midwifery. It will be remembered that this invitation was declined by the College of Physicians on the ground that, being bound by the terms of the Conjoint Scheme, dated May 1, 1877, the College could not take part in the formation of any other conjoint examining board until after the expiration of five years from October 1, 1877. The College of Surgeons had taken the common-sense view that a scheme or body into which no breath of life had ever been breathed could not be held to be in operation; but the College of Physicians would not give way, and the matter was dropped. We do not pretend to guess how the College of Physicians satisfied themselves that they were at liberty to consider a new combination in October last, for we have not heard that they have given to each of the other bodies concerned in the great Conjoint Scheme a year's notice of their intention to withdraw from that scheme after the five years' period. But, if we are not much mistaken, that also was one of the terms of the scheme. But we will let that pass, and proceed to notice some of the details of the new scheme.

The new Examining Board is to be constituted of Examiners appointed by the two Colleges. There is to be a Committee of Management, consisting of three representatives from each College, and no member of this Committee is to be eligible for appointment as an Examiner. The Committee is to arrange the examinations, to appoint paid visitors of the First and Second Examinations, and to consider such questions in relation to the examinations as they may think fit, or such as shall be referred to them by either or both Colleges, and shall report thereon. And there are to be three examinations, each partly written, partly oral, and partly practical. The subjects of the First Examination are Chemistry and Chemical Physics, meaning thereby heat, light, and electricity; Materia Medica, Medical Botany, and Pharmacy; Elementary Anatomy and Elementary Physiology. *And synopses are to be prepared indicating the range of all the subjects of this examination, and also that of Physiology at the Second Examination.* We emphasise this regulation as being a very important boon to students, and a great encouragement to them to thoroughly learn the subjects within the prescribed range for each examination. Further, this examination may be taken in two parts at different times, or the whole may be taken at one time. A candidate may go up for examination in all the subjects but the two last on presenting evidence of his having been registered as a medical student by the General Medical Council, and of his having "received instruction" in the subjects of

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the examination; but he cannot be admitted to examination in the second part—viz., in Elementary Anatomy and Elementary Physiology—before the end of his first winter session at a medical school. And a candidate rejected in either or both parts will not be admitted to re-examination till after the lapse of three months from the date of rejection; but *will then be re-examined only in the subject or subjects in which he was rejected.* The subjects of the Second Examination will be Anatomy and Physiology. Again, a candidate may take up the subjects either separately or at one and the same time. If rejected in either part, or in both, he will be referred to his studies for a period of not less than three months; but, again, on presenting himself for re-examination, he *will be examined only in the subject or subjects in which he failed the first time.* The subjects of the Third, or final, Examination will be Medicine, including Therapeutics, Medical Anatomy, and Pathology; Surgery, including Surgical Anatomy and Pathology; Midwifery, and Diseases peculiar to Women. And questions on Forensic Medicine and Public Health will be included in the examination. A candidate may go up for examination *in the three parts separately, or at one time;* and if rejected in this final examination, or in one or more of the three parts into which it may be divided, he will be referred for not less than six months, and *will be only re-examined in the subject or subjects in which he previously failed.* A candidate (unless exempted from registration) will not be admitted to either part of the Third, or final, Examination until his name has been entered in the Medical Students' Register at least forty-five months, nor till the expiration of two years after his having passed the Second Examination. We have not space now to give the regulations relating to professional education or examination more fully, but, as regards evidence of professional education, we must note that only one course of lectures on Anatomy, during not less than six months—in other words, one winter session—and delivered at a recognised medical school, is *obligatory;* and so also as regards "General Anatomy and Physiology." Every candidate must have attended also, at a recognised medical school, one course of lectures on Medicine during not less than six months, or one winter session; and one course of lectures on Surgery during the same length of time. Evidence will be required that each candidate has served as clinical clerk for six months, and as surgical dresser for other six months; and has attended clinical lectures on Medicine for nine months, and clinical lectures on Surgery for nine months. Indeed, practical work and practical examination are largely provided for in the scheme.

It would be very difficult, it appears to us, to produce a better, practicable, scheme of education and examination than is, on the whole, this new joint scheme of the two Royal Colleges. It has been objected, we understand, that it will increase the traffic in diplomas; that a student weak in Surgery will go to another division of the kingdom to obtain a surgical diploma, and then will come to the College of Physicians of London and demand to be examined by that authority alone in Medicine; while a student conscious of deficiency in Medicine will obtain elsewhere a medical qualification, and then apply to the English College of Surgeons for a diploma in Surgery; and that neither College can refuse such candidate for its single qualification. If that is so, the traffic in diplomas will only remain as it is now; and the facilities for the traffic in diplomas will certainly not have been increased. But the Colleges intend honestly to carry out the undertaking that each "will abstain, so far as by law allowed, from the exercise of its independent privilege of giving a qualification necessary for admission to the Medical Register"; and they believe they will have full power to do this, under Section 19 of the Medical Act, 1858, if their scheme be sanctioned by the Medical Council. T
tion enacts that "any two or more of the colleges an
in the United Kingdom, mentioned in Schedule (A
Act, may, with the sanction, and under the directio
General Council, unite or co-operate in conducting
minations required for qualifications to be registere
this Act"; and, moreover, the College of Surgeons
by its enabling Act of 1875, special power to uni
operate for examining purposes with any of the co
bodies mentioned in the Medical Acts, "notwith
anything in any statute or charter contained."
been said also that the colleges should have waite
whether the Medical Act Amendment Bill of th
Government will pass. We dissent entirely fr
opinion. There has been a great deal too much of w
legislation; but some two or three years ago the c
the College of Surgeons leading the way—aband
wearying and sterile policy of waiting, and began,
steadily continued, to reform and improve their
and examination regulations; and this joint sche
latest and crowning result of their labours.
Medical Acts Amendment Bill may, or may not,
in either case the College of Physicians and the
Surgeons will have done their duty towards the p
and the public in combining to form a Joint E
Board for granting their respective Licences in Med
Surgery.

THE NEW MEDICAL ACT AMENDMENT

THE Medical Act Amendment Bill of the Gov
which was introduced into the House of Lords on T
last week, is a very large and lengthy measure; a
come into our hands only so recently that we ca
week, notice more than its principal provisio
Government Medical Act Amendment Bill of 187
only twenty-five folio pages, while this latest one
forty-three such pages. It is intituled "An Ac
consolidation and amendment of the Law relating t
Practitioners," its short title being "The Med
1883." Part I. deals with "admission to medical
It enacts that, "on and after the appointed day,"
whether male or female, who has proved his or he
tency in medicine, surgery, and midwifery by pas
final examination as is mentioned in the Act, and
person (with certain exceptions afterwards m
shall be entitled to have his or her name entere
Medical Register as a registered medical practit
empowers all registered medical practitioners to
due course of law all expenses, charges, and fees
they may be entitled in respect of such practice,
the case of members of a college of physicians, wh
hibited by a by-law of their college from recoveri
their expenses; and it exempts the registered pr
if he desires it, from serving on all juries and inq
from serving all corporate, parochial, ward, hun
township offices, and from serving in the militia.
the disqualifications of unregistered practitioners,
not to be recognised in any Act of Parliament a
practitioners or members of the medical profession
shall not hold any appointment as physicians, su
other medical officers, in the Naval or Military S
Her Majesty, or in any hospital, infirmary, or di
or lying-in hospital in the United Kingdom, whi
supported wholly by voluntary contributions, o
lunatic asylum, gaol, penitentiary, house of c
house of industry, parochial or union workhouse
house, parish union, or other public establishment,
institution, or to any friendly or other society in th

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Kingdom for affording mutual relief in sickness, infirmity, or old age, or as a medical officer of health, or in any emigrant or other vessel registered in the United Kingdom. Clause 9 enacts that in each part of the United Kingdom there shall be established a Medical Board, to be styled the Medical Board of that part of the United Kingdom to which it belongs. The Medical Board of England is to consist of fifteen persons, two of whom are to be chosen by the University of Oxford, two by that of Cambridge, two by that of London, one by that of Durham, one by the Victoria University, Manchester, three by the Royal College of Physicians of London, three by the Royal College of Surgeons of England, and one by the Apothecaries' Society of London. The Medical Board for Scotland is to consist of eleven persons, of whom three shall be chosen by the University of Edinburgh, two by that of Glasgow, two by that of Aberdeen, one by that of St. Andrews, one by the College of Physicians, one by the College of Surgeons of Edinburgh, and one by the Faculty of Physicians and Surgeons of Glasgow. And the number of the members of the Medical Board for Ireland is to be eleven, of whom two are to be chosen by the University of Dublin, two by the Royal University of Ireland, three by the King and Queen's College of Physicians, three by the Royal College of Surgeons in Ireland, and one by the Apothecaries' Hall of Ireland. Thus the Bill stereotypes, *qud* the Medical Boards, all the medical authorities now existing, including those whose examinations were spoken of in the Report of the Royal Commission on the Medical Acts as being "not satisfactory," and adds one new medical body. The Medical Boards are to be corporate bodies; "any person of full age" may be elected a member of a Medical Board, and the same person may be a member of more than one Medical Board. The Privy Council, on the report of the Medical Council, may at any time, as respects any Medical Board, increase the number of authorities entitled to return a member or members to such Board, and also the number of the members of such Board from time to time, and may deprive any constituent authority of the privilege of returning a member or members to a Medical Board, should the Privy Council and the Medical Council consider that such authority has so diminished in importance as not to be entitled to such privilege. The Medical Board of each part of the United Kingdom shall make (and may from time to time revoke, alter, or add to) a scheme or schemes providing for—(1) the holding final examinations for the admission of candidates to registration as medical practitioners; (2) the appointment of examiners for such examination; and (3) the nature and conduct of such examinations, and the qualifications of candidates as to age, moral character, and any other matter necessary or expedient to be determined by rules in relation to such examinations: provided that (*a*) no candidate shall be required to adopt or refrain from adopting the practice of any particular theory of medicine or surgery; and (*b*) that provision be made for the admission of women to the examinations, but such distinctions (if any) may be made as may be judged proper between the cases of men and women, so, however, that the examinations of men and women shall be in all general respects equal as respects proficiency in medical knowledge and experience. These special provisions are old acquaintances in Medical Act Amendment Bills: the first provides for the admission of homœopaths, etc.; and the second, which it will be very difficult to interpret practically, has, if we mistake not, been repudiated by medical women. Uniformity of standard, as far as is practicable, is to be aimed at in the final examinations held by the Medical Boards. At the conclusion of each final examination the Medical Board is to certify to the Medical Council the persons who have passed "with such credit as may entitle them to be registered as medical practitioners." A Medical Board may delegate any of their powers, except that of making, etc, schemes, to a committee of such number of their members as they think fit. Each Board shall elect one of their members to be chairman, and another to be a vice-chairman for the year following such election, and any retiring chairman or vice-chairman shall be re-eligible.

Clause 10 enacts that for the purpose of exercising due control over the Medical Boards, and for other purposes mentioned in the Act, there is to be established a Medical Council consisting of eighteen persons, to be chosen as recommended by the Royal Commissioners for the Medical Acts (see *Medical Times and Gazette*, vol. ii., pages 20 and 21, 1882). Any person of full age shall be qualified to be a Crown nominee, or to be elected and sit as a member of the Medical Council, whether he is or is not a member of the medical profession, and the same person may be a member of any Medical Board or Boards, and also of the Medical Council. This Council is to be a body corporate; its members, like those of the Medical Boards, shall be elected for periods of five years, and retiring members may be again nominated by the Crown or be elected again. The Council shall visit from time to time any examinations conducted or recognised for the purposes of the Act, or inquire into the sufficiency thereof. They are to have power to regulate the performance of their duties by each Medical Board, any Board aggrieved by any order made by the Medical Council having right of appeal therefrom to the Privy Council. The Medical Council may appoint committees of their own body, and delegate to any such committee any of their powers, except that of making orders regulating a Medical Board. They shall at their first meeting elect, from their own members, a President and a Vice-President for one year, and any retiring President or Vice-President shall be re-eligible.

Part II. deals with Medical Education. The Medical Boards are to regulate the preliminary examinations for the admission of persons applying to be admitted as medical students, and the course of medical education referred to in the Act as "the prescribed course." The scheme for the prescribed course shall describe the medical schools which are to be considered as the proper places of education for medical students; the times and places at which examinations are to be held for testing, from time to time, the proficiency of the students in their various branches of study; and the authorities who are to be considered competent for conducting or for appointing examiners to conduct such examinations as are in this section mentioned; and such examining authorities may be all or any of the following authorities, that is to say—*the Medical Boards themselves, or any medical authority in the United Kingdom or elsewhere* (the italics are our own). And it is to be one of the duties of each Medical Board *to ascertain by inspection or otherwise the sufficiency of the education by any schools, and from time to time, by visitation or otherwise, to inquire as to the examinations held by any recognised medical authority.*

Part III. treats of Colonial and Foreign Practitioners Part IV. of Medical Titles, Medical Register, and Medical Authorities. The statutory title of a registered medical practitioner is to be, if he thinks fit to use it, "Licentiate of the Medical Council in Medicine, Surgery, and Midwifery," or any letters indicative of such title. Verily a woefully cumbrous title; and what are to be the indicative initials, —L.M.C., or L.M.C.M.S.M.? We should not like to offer, without further study of the Bill, a positive opinion as to the interpretation and intention of the whole of this part of it; but it clearly enacts that, on and after the day when the Act comes into force, the only "medical qualifying title" for

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registration will, in the case of a home practitioner, be the title of "Licentiate of the Medical Council in Medicine, Surgery, and Midwifery"; though recognised "medical higher titles" held by a registered medical practitioner, will be registrable in a separate column of the Medical Register. And, so far as we can gather as yet, on and after the day when the new measure comes into operation, "if any person who is not a registered medical practitioner, and who practises for gain or professes to practise or publishes his name as practising medicine or surgery, or who receives any payment for practising medicine or surgery, uses the designation of, or represents himself to be, a physician, surgeon, doctor, or apothecary; or uses any designation or description denoting that he is qualified by law to practise medicine, surgery, or midwifery," he shall, on summary conviction, be liable to a penalty not exceeding £20. That is, under this Act—it is, of course, not retrospective—a medical man who is not registered cannot practise, no matter what medical diploma he may hold, without being liable to prosecution and fine, just as if he were the merest pretender and charlatan. This compulsory registration enactment may be accounted for, in part at any rate, by the further enactment that the Medical Council may, with the sanction of the Privy Council, charge a fee for the registration of persons as medical practitioners, *and an annual registration fee* for keeping the name of each medical practitioner on the Register; besides fees "of small amounts for making entries of alteration of names or addresses, or of additions of medical titles, or of restoration of names," or otherwise howsoever. The great advocates of "direct representation" on the Medical Council have worked hard to persuade medical men that the single registration fee hitherto charged is, in the ordinary sense of the term, a tax, and that taxation entitled to representation. Well, the new Bill proposes to give the so-greatly-belauded "direct representation," *and* imposes an annual tax for registration. Will practitioners in general feel that the game is worth the candle?

We cannot to-day speak of any more of the very numerous subjects contained in the Bill before us; but we have said quite enough to show that it is a very comprehensive and ambitious measure, and a revolutionary one. It cannot be doubted that not a few of its proposals will meet with strenuous opposition. It was down for the second reading in the House of Lords in the orders of the day on Thursday; and as it stood second in the list, it was almost certain to come on. As the Bill was not obtained by even the medical authorities in London before Tuesday afternoon, this would have been rather sharp practice; but we are glad to learn that the second reading has been deferred till, we believe, after Easter.

THE WEEK.

TOPICS OF THE DAY.

THE Willenhall Board of Guardians were recently much perplexed by that standing difficulty of school boards—the medical certificate for children absent through ill-health. In this emergency it occurred to them to ask the local practitioners to give such certificates without fees, in order that the parents should not be put to any expense in obtaining the required evidence of their children being really ill. Our readers will not be surprised to hear that the very first two gentlemen to whom the request was made declined to accede to the Board's wishes. It is possible that they may not have forgotten that the educational rate was levied upon them as householders in the same ratio as upon their neighbours, and that to ask them in addition to give up a large portion of their time without remuneration, was calling upon them to make sacrifices which were not justified by the circumstances. Anyway, the Willenhall experiment must be regarded as a failure, and the question remains as to the instrumentality by which medical certificates can be obtained for children who, while too unwell to go to school, are not so ill as to necessitate the calling in of a doctor. To enforce medical attendance in these cases would be manifestly unfair to poor people; and yet, in some manner or other, these certificates must be obtained.

Recently, at the Lambeth Police-court, Hamilton Archibald Jacob, aged fifty-five, who for a considerable time has been practising as a physician and surgeon at different places round Peckham, was charged on remand—at the instance of the Medical Defence Association—with falsely representing himself as a doctor, contrary to the provisions of the Medical Act. The prisoner had represented himself as Dr. Jacob, of Dublin. For the prosecution Mr. A. Tyndall was called, who said he was manager and part editor of the *Medical Press and Circular*. Dr. Archibald Hamilton Jacob was the editor of the same paper in Dublin. The witness had known this gentleman intimately for eighteen years; the defendant was not Dr. Jacob, of Dublin, and not the least like him. He did not remember to have seen the defendant before. The counsel for the prosecution said he had other witnesses present who would prove that the defendant had attended their children as a physician and surgeon. He pressed for the fullest penalty, as it was important, in the interests of the public, that such a system should be put down. The defendant, in answer to the charge, declared he had not been practising this year at all. The magistrate admitted that it was of the greatest importance to put down such a dangerous system; he ordered the defendant to pay a fine of £20, and £5 5s. costs—or, in default of distress, to undergo three months' imprisonment. The prisoner, who said he was without money or goods, was remanded in custody.

At the recent annual meeting of the governors of and the subscribers to the Hospital for Diseases of Women and Children, held in Vincent-square, Westminster, under the presidency of Lord Shaftesbury, the report showed that while the numbers of in- and out-patients during 1882 had been almost the same as for the preceding year, the income amounted to only £775, as against £883 in the year 1881; moreover, the expenditure of the past year had exceeded that of the preceding one by £55—there was therefore a deficiency of £140. Lord Shaftesbury pointed out that one of the favourable features of the Hospital was that it required all patients to pay according to their means: for instance, the charge for out-patients varied from twopence to one shilling. He considered such charges advantageous, because there was an enormous number of people who had an inordinate desire to take medicine, and the payment acted as a check to those with such a peculiar appetite. He regretted that their expenses were in excess of their receipts, but he thought it was very remarkable and very creditable to England that, notwithstanding the agricultural and mercantile distress, the old-existing charities had been kept up, although it was true they had not been able to do much in establishing new ones. There was great need of this Hospital in the populous district of Westminster. The hospital accommodation in this great city of London fell far short of what was provided in Paris, Vienna, and Warsaw, which he did not think was to their credit as a wealthy and Christian nation.

The following statistics show that there is an ample field for the labours of the Blue Ribbon Army and kindred societies. The number of persons arrested for drunkenness on Sunday in England and Wales during the year ended September, 1882, was, according to Parliamentary returns,

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15,921 out of a population of nearly twenty-six millions, and of these 10,901 were *bonâ fide* residents in the districts where the apprehensions were made. Lancashire occupies a very unenviable position in the returns: with a population of nearly three millions and a half, this county had 5497 convictions, 4356 of these being of *bonâ fide* residents; that is, with a population not amounting to one-eighth of that of the whole country, Lancashire had a third of the whole number of convictions. Yorkshire, with a population of nearly three millions, had only 1295 convictions; and London, with a population reckoned at over four millions and a half, had only 3617 convictions. In Wales, out of a population of over one million and a quarter, there were only 309 convictions, so that the Principality occupies the most honourable place on the list, Devonshire coming the nearest to it. With regard to Sunday drinking in Lancashire, it is much greater in some towns than in others. For example, Liverpool, with a population of 552,425, had 1741 convictions; and Manchester, with 341,508 inhabitants, had 1429 convictions; while Oldham, with a population of 111,343, had only 73 convictions; and Wigan, with a population of 48,196, had but one conviction. Liverpool and Manchester combined have a population about one-fifth that of London, but the number of convictions in those cities nearly equalled those in the metropolis.

In the Bill for which Mr. Hastings is responsible, it is proposed to render it compulsory for immediate notice to be given to the local medical officer of health whenever anyone in a house is suffering from an infectious disease. The person on whom it will impose this duty is the occupier of the house, or the person having the charge, management, or control of the building; and if he be prevented by the disease, then whoever may be in charge of the sick man. Furthermore, the notice is to be given at once, as soon as the existence of the disease has been ascertained. Medical men are to be compelled by the Bill to give full notification to the officer of health directly they are of opinion that any patient they may be attending is suffering from an infectious disease; the fee for this declaration being fixed at half-a-crown. The penalty for infringing any of these regulations is to be a fine not exceeding forty shillings. The diseases that are to be considered to be within the operation of the Bill are—small-pox, cholera, typhus, typhoid, scarlet, relapsing, continued, and puerperal fevers, diphtheria, and such other diseases as the local sanitary authority may declare to be infectious.

We understand that the National Smoke Abatement Institution is making arrangements for opening a permanent exhibition in a central part of London, in an extensive range of buildings, for the display of apparatus, fuels, and systems of heating, combining economy with the prevention of smoke, and the best methods of ventilating and lighting. It is intended that the exhibition shall be free to the public, and that it shall include examples of all the most recent inventions and improved apparatus. A lecture-hall will also be provided for the reading of papers, and instruction classes will be inaugurated; also testing-rooms, under the supervision of experts, for the purpose of continuing the series of tests and trials commenced in connexion with the South Kensington and Manchester Smoke Abatement Exhibitions of 1882.

On Saturday last a large number of ladies and gentlemen assembled in the Botanical Theatre of University College to assist in the presentation of a testimonial and memorial to Mr. Erichsen. The memorial consisted of an admirable bust of Mr. Erichsen, in recognition of the eminent services he has rendered to University College and Hospital, and to the advancement of medical and surgical science generally. Dr. William Wood proposed—"That the bust be presented to University College as a permanent memorial of Mr. Erichsen's great and acknowledged services to the School of Medicine of University College, as well as to the students of surgery in all parts of the world." Mr. William Adams seconded the resolution, and it was carried unanimously, amidst great applause. Sir Henry Thompson moved the second resolution—"That the surplus beyond the amount required for payment of the bust be now offered to Mr. Erichsen, as a personal gift from the body of the subscribers, to be devoted by him to any purpose which he himself may select." This was seconded by Dr. Brodie Sewell, and carried. Mr. Erichsen, who received a very hearty welcome, observed that he felt it a proud honour to have his own bust in the same gallery with such men of medical and surgical science as Liston, Sharpey, Turner, Potter, and others who had gone before him. In reference to the other portion of the memorial, he proposed to invest it so as to produce an annual trial of skill in operative surgery, with a permanent prize to that student who proved himself the most efficient.

THE ROYAL COLLEGE OF PHYSICIANS.

At an extraordinary meeting of the Royal College of Physicians of London, held on Monday, the 12th inst., a letter from Sir Arthur Watson, Bart., was read, acknowledging the receipt of the resolution of the College in reference to the death of his father. The President directed the attention of the Fellows to the insufficient sum (£18,000) for which the College building was insured; and it was resolved to increase the insurance to £30,000. Dr. Quain, Sir H. Cooper, Dr. Balfour, and Dr. W. Ogle were admitted Councillors. The Examiners reported that of 123 candidates at the first examination for the licence of the College, eighty-seven were approved. The report of the Committee for considering the best means of protecting the College against fire was received, and authority was given to the Committee to carry out their recommendations at a cost not exceeding £133. The most important business, however, before the College was the consideration of the report of the Committee on Conjoint Examinations, which was received, considered, and, after much discussion, adopted. A notice of the scheme will be found elsewhere in our columns.

THE PATHOLOGY OF TUBERCLE.

Observations on the presence of the bacillus in the sputa of phthisical patients are fast accumulating. The most recent contribution may be found in the last two numbers of the *Berliner Klin. Woch.*, and consists of some practical and theoretical remarks by Dettweiler and Meissen. The sputa were searched not only for bacilli, but also for elastic fibres, in eighty-seven cases. The micro-organisms were detected eighty-five times, the elastic fibres eighty-two times. The bacteria were detected both in and between the cells of the sputum. The number of the bacilli, however, bore no constant relation to the severity of the disease. Where the disease was widespread and the fever high, bacilli were always easily found; they were only sparingly present in the sputa in slight cases. But their number might be very great when the disease could not be said to be severe. Fifty out of eighty-five cases were apyretic. Of these the bacilli were present in abundance in fourteen instances, and thirty-six times were detected more sparingly. The febrile cases numbered thirty-five, eighteen were recorded as producing a plentiful supply of bacilli, and a moderate number were observed in the remainder. In 1878, Salkowski and Greif detected elastic fibres in 75 per cent. of their cases. The present communication gives a much higher rate. Dettweiler and Meissen found them

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with the greatest facility by simply pressing a particle of sputum between cover-glasses, drying and mounting without further preparation. They state that the edge of the thin layer of sputum was the best place to look. The elastic fibres appeared as a network, in coiled threads, or not unfrequently in the shape of a pulmonary alveolus.

PATHOLOGICAL SOCIETY OF LONDON.

THE Council of the Pathological Society wishes to give notice that the ordinary meeting on April 3, and, if necessary, that on April 17, will be devoted to the exhibition of specimens illustrating the Morbid Anatomy of Diabetes. Of late years many, often isolated, cases of diabetes have been recorded, with morbid changes in one or other of the viscera; and the Council is of opinion that the time has now come when the collective experience of the members of the Society, with the facts to which many must be able to gain access in the records of the metropolitan hospitals, should be brought together, and to light. For instance, the nervous system should furnish ample material in several directions: for macroscopic and microscopic demonstrations of the lesions of the central ganglia, which have been asserted to exist; if not thus directly, yet indirectly, post-mortem records can afford valuable information for analysis and short statistical treatment; and further material quite pertinent to the issues involved might be obtained from the asylums for the aged and insane. We are in absolute ignorance of the state of the sympathetic system in diabetes. The condition of the blood is as yet most uncertain. Acetonæmia and fat embolism particularly require careful sifting in this regard. And for the solid viscera numerous are the questions which require more ample material for their settlement, whether we take the lungs, the liver, the pancreas, or the kidneys. The Council trusts that those members of the Society who are in a position to add to our knowledge of the morbid anatomy of diabetes in any direction will set about collecting and condensing their materials, that the time absorbed may be utilised to the full. Notices of communications should be sent as soon as possible to the Medical Secretary.

THE ROYAL COLLEGE OF SURGEONS.

AT the meeting of the Council of the Royal College of Surgeons of England, held on the 8th inst., the chief business was the consideration of the report of the Committee of Delegates appointed by the Royal Colleges of Physicians and Surgeons, in reference to the possibility of the formation by the two Colleges of a Conjoint Examining Board for granting their respective licences in medicine and surgery, under the provisions of Clause 19 of the Medical Act, 1858. The report, which includes a scheme for constituting such a Board, and regulations relating to examiners, to the conduct of examinations, and to professional education and examination, was, after some discussion, adopted without alteration.

ENDOMETRITIS MYOMATOSA.

DR. ADOLPH BERG reports, in a recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie*, a case occurring in the clinic of Professor Horwitz, of St. Petersburg. The patient, aged forty-five, had a submucous fibroid about the size of a fœtal head. There was only slight hæmorrhage. The cervix uteri was dilated with tupelo tents. On the fourth day after the commencement of the dilatation the patient had a rigor, and on the sixth day died. On post-mortem examination purulent endometritis was found; peritonitis, and pus in the Fallopian tubes; leaving little doubt that the peritonitis had arisen by extension of the endometritis. The uterine wall was thick, and harder t usual, containing very few vessels, and an excess of fib tissue. Its mucous membrane was thickened, but vascular than usual. The tumour was composed alr throughout of smooth muscular fibre. The case seem us interesting, first, as showing one of the dangers of tation of the cervix. Dr. Berg argues that the endomet did not result from the dilatation, but it appears to us his reasons are insufficient to exculpate this process blame. Secondly, as showing the dependence of the sy toms which accompany uterine fibroids upon the state of uterus, not upon the tumour. The absence of hæmorrh in such a case as this was unusual, and the explanation found in an unusual condition of the uterus. It has stated that tupelo tents were used. These have been n lauded in Germany and America; not much employe England. We may therefore mention that the first tu tent used, after being in the cervical canal six hours, sho a scarcely appreciable increase in volume.

OVARIOTOMY STATISTICS.

SOME copies of last week's *Medical Times and Gazette* issued, containing a letter on the above subject, referri Mr. Knowsley Thornton in terms that would not gained admission to our columns had not the letter some strange mischance, escaped all editorial notice the journal was actually printed. So soon as attention directed to the matter the publishers recalled and canc the whole edition with the exception of the small nu of copies that had already been distributed; and a edition, omitting the letter alluded to, was issued. scarcely need be added that we regret that the letter not brought to our notice in time to give the write opportunity of altering it. We take this opportuni observing that the paragraph on "Ovariotomy Statist in our issue of February 24, did not give Mr. Thorn compilation as fully as it was originally given in the *delphia Medical News*. In that journal the date to w each set of statistics comes down was given in a foot and there it was expressly stated that Mr. Tait's stat are "to August 5, 1882."

THE HEALTH OF FOREIGN AND COLONIAL CITIES.

THE average annual death-rate during the last quar 1882 in twenty-nine colonial and foreign cities havi aggregate population exceeding 14,000,000 persons was to 25·0 per 1000. In the twenty-two European cities average rate was 25·0 per 1000, against 22·9 in twenty- of the largest English towns. Among the twenty colonial and foreign cities, the lowest death-rates were in Christiania, 20·3 in Brussels, 20·4 in Philadelphia 20·5 in Geneva; but the rates ranged upwards to 2 Venice, 32·0 in Calcutta, 32·6 in St. Petersburg, and 3 Madras. The deaths from small-pox in Paris, which been 248 and 120 in the two preceding quarters, fu declined during this quarter to 101. The deaths refer small-pox in St. Petersburg, which had been 173 and in the two preceding quarters, rose during the qu under notice to 279, and showed increasing preva towards the end of the year. The fatal cases of small-p Baltimore were no less than 374, against but 45 and 1 the two preceding quarters; during the last four wee the year as many as 192 deaths resulted from the dis The fatality of small-pox in Vienna and Buda-Pesth sh a marked decline during the quarter. Diphtheria c 532 deaths in St. Petersburg, 496 in Berlin, 381 in P delphia, and 300 in Baltimore, each number showing s siderable increase upon that returned in the prec

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quarter. The deaths referred to typhus and typhoid fever in St. Petersburg, which had been 507 and 217 in the second and third quarters of 1882, were 231 in the last three months of that year. Typhoid fever was also fatally prevalent in Berlin, Prague, New York, and Philadelphia.

DRAIN-TESTING, GLASGOW.

The Sanitary Inspector for Glasgow has given in his report to the Town Council on "drain-testing" for the past twelve months. It states that of 236 properties, the drains of which were examined, only seven were found thoroughly tight and efficient, 229 permitting the escape of sewer-air into the dwellings. A suggestion was made that all drains should be tested and certified by a competent officer before their use is sanctioned.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The Council of the College has again taken a step which has caused much excitement in student circles in Dublin—namely, the promulgation of a new schedule for certificates of attendance on hospital practice, and on lectures to be filled up by candidates for the primary and final examinations for the letters testimonial of the College. The schedule enters into minute details, and an intending candidate has to sign, in the presence of the Registrar or other person authorised by the College, a document in which he "solemnly and sincerely" declares, besides other things, that he has regularly attended the hospital practice and several courses of lectures required by the regulations of the Council; that he has read the schedule, and that the statements made therein in reference to such attendance are in every respect correct and true; and that he agrees that if, on the faith of these statements, the licence of the College shall be granted to him, it shall be revoked in case those statements shall be found to be in any respect false, and he undertakes, when called upon, to deliver up the diploma to be cancelled.

THE PARIS WEEKLY RETURN.

The number of deaths for the ninth week of 1883, terminating March 1, was 1194 (661 males and 533 females), and of these there were from typhoid fever 31, small-pox 9, measles 23, scarlatina 2, pertussis 6, diphtheria and croup 47, dysentery 1, erysipelas 2, and puerperal infections 5. There were also 51 deaths from acute and tubercular meningitis, 227 from phthisis, 56 from acute bronchitis, 90 from pneumonia, 81 from infantile athrepsia (20 of the infants having been wholly or partially suckled), and 35 violent deaths (27 males and 8 females). The number of deaths is almost exactly the same as that for last week, and still remains above the mean of the last four weeks, which is 1174. Among the epidemic diseases the deaths from diphtheria have increased from 38 to 47, and those from measles remain at 23. The births for the week amounted to 1254, viz., 638 males (458 legitimate and 175 illegitimate) and 621 females (428 legitimate and 193 illegitimate): 76 infants were either born dead or died within twenty-four hours, viz., 44 males (30 legitimate and 14 illegitimate) and 32 females (25 legitimate and 7 illegitimate).

CARCINOMA OF THE PANCREAS.

Some statistics dealing with large numbers of post-mortem examinations on the subject of cancer of the pancreas are reported in the *Wiener Med. Wochenschrift*, No. 8. Out of 24,111 examinations collected from various hospitals in Vienna, 2005 were found to have primary cancer, and 29 times the organ diseased was the pancreas. These numbers were obtained by Aloïs Biach, and stated before the Vienna Medical Society in a dissertation on the whole subject of disease of the pancreas. Gussenbauer and Winiwarter in 1876 examined an enormous number of records of autopsies from the Pathological Institute of Vienna, to determine the frequency with which carcinoma of the stomach occurred. From the year 1817 to the year 1873, out of 61,287 cadaveric sections, 903 times cancer of the stomach was found, and the pancreas was the seat of secondary disease in 100 instances. The pylorus was the seat of the cancer in 542 cases, of which 34 were associated with secondary affection of the pancreas. Primary cancer of the pancreas may be scirrhus, encephaloid, colloid, cylindrical, epithelioma, or melanoma. In 73 cases taken from literature, Biach found that the disease was situated 19 times at the head of the pancreas, 13 times in the body, and 31 times in the whole gland; in the remainder the site was not mentioned.

THE ESSENTIAL NATURE OF DISEASES OF THE HEART.

M. Martin, in an elaborate paper on the pathogeny of heart diseases, in the *Revue de Médecine* for February, 1883, divides all heart affections into two groups—viz., those of valvular origin, and those of vascular origin. These groups resemble each other in that each has an acute and a chronic stage, the latter being almost always a consequence of the former; in both groups, too, the original lesion—whether it has a chief valvular focus, or whether it depends upon a number of minute vascular foci—may be the starting-point of a twofold inflammatory process, partly muscular and partly interstitial. The former process is always compensatory. As regards the latter, whether the process has commenced in one of the valves and spread thence to the muscular wall of the heart, or whether it has commenced as a periarterial lesion, is a matter of little moment, for the ultimate result is the same—viz., diminution of the power of the heart, and finally asystolism. But, granting that no hard and fast line can be drawn between the two groups, or even that ultimately it should be shown that all lesions of the heart have their origin in some vascular change, still M. Martin thinks that his proposed classification might be retained with advantage, as corresponding with unquestionable differences in the etiology and mode of evolution of these changes.

GERMAN CONGRESSES.

The twelfth congress of the German Society of Surgery will be held at Berlin from April 4 to 7. All communications respecting it to be addressed to the President, Geh.-Rath B. von Langenbeck, Hotel du Nord, Berlin. The second congress of the *Gesellschaft für Innere Medicin* will be held at Wiesbaden from April 17 to 20, under the presidency of Prof. Frerichs.

THE MANCHESTER ROYAL INFIRMARY.

The following resolution has been carried by the Board of Management on the resignation of Dr. William Roberts, F.R.S., the Senior Honorary Physician:—"That this Board has received with very great regret the resignation of Dr. William Roberts, who for nearly thirty years has been an officer of this institution, during twenty-eight of which he occupied the post of Honorary Physician; and, whilst recognising the honour and benefit which this institution has derived from his valuable services, they cannot part with his more active assistance without congratulating him on the eminence which he has so justly attained in his profession, and which compels him to retire from the onerous duties in connexion with the Manchester Royal Infirmary; and the Board have much pleasure in requesting his acceptance of the position of Honorary Consulting Physician."

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OPHTHALMOLOGICAL SOCIETY.

It has been decided by the Council of this Society to devote the meeting on June 7 to the consideration of the Ocular Symptoms which are associated with Diseases of the Spinal Cord. At the request of the Council, Dr. Gowers has undertaken to introduce the subject, and has prepared the statement, which appears elsewhere in our pages, of the points to which it is desired that members should chiefly direct their communications.

THE TREATMENT OF TUMOURS OF THE STERNUM AND ANTERIOR MEDIASTINUM.

There are very few internal regions of the body which have escaped the knife of the surgeon. Dr. Ernst Küster, in a paper read before the meeting of the Berlin Medical Society on January 17, which is reported in the *Berlin. Klin. Woch.*, No. 9, commenced by giving the outline of a case in which he had performed an unusual operation. The patient was a powerfully-made man, aged thirty years, and was admitted into the Augusta Hospital on October 24. There had been no previous illness, and there was no history of syphilis, nor any existing signs of a past syphilitic affection beyond what will be mentioned. During the winter of 1881-82 the man experienced a dull pain in the chest, and in April, 1882, a tumour was noted at the right edge of the sternum, which continued to grow, and failed to diminish in size under treatment for some weeks with iodide of potassium. The tumour was the size of a goose's egg, and grew from the right part of the sternum and the neighbouring third and fourth costal cartilages. The skin over the tumour was movable, smooth, and slightly reddened; the swelling was elastic, and there was a sensation of fluctuation to be detected, pparently deep down, but no pulsation. The heart and lungs gave no signs of disease. The tumour was repeatedly punctured with a fine syringe, without anything more than a few drops of blood escaping. The end of the needle seemed freely movable, as though it were in a cavity. The following operation was performed on October 27, with perfect antiseptic precautions. A skin-flap was cut from below and turned upwards; then an exploratory incision showed that the tumour was solid. As the tumour dipped down between the third and fourth costal cartilages into the anterior mediastinum, it was found necessary to resect both the rib cartilages and the corresponding half of the width of the sternum, although it only grew from the periosteum of these bones. In clearing the growth from the anterior mediastinum, the right pleura was opened, the right internal mammary artery was cut, and the pericardium was placed in danger, but fortunately not wounded. The artery was secured by acupressure. The pleural wound was immediately guarded by antiseptic gauze, which, when the skin-flap was laid down, was drawn out of the wound so that a corner depended, by which the gauze could easily be removed by traction when necessary. The collapse of the lung disappeared without any unfavourable signs. The pulsations of the heart were visible for some time in the pit-shaped depression, but these finally disappeared as cicatrisation became complete. Recovery was perfect. The tumour was examined by Grawitz, and found to be a real gumma, with a softened central portion. Küster's diagnosis of a sarcoma was therefore incorrect, and yet he argued that the best thing had been done for the patient. Gummata which were broken down in the centre, he said, were incapable of absorption by antisyphilitic remedies, and so were liable to do damage by bursting in any direction, either outwards or inwards, and if the latter, then possibly into a pleura, or the pericardium, or some of the large vessels. In the *Centralblatt für Chirurgie*, No. 42, 1882, König had reported a case, which occurred in a woman aged thirty-six years, of an osteo-chondroma of the sternum which he removed, and in which both the pleural cavities and that of the pericardium were opened, and yet the patient recovered. Küster adds, in a footnote, that in some experiments on rabbits he found that it was possible for both pleural cavities to be opened, and for the animals to survive in some instances. Küster speculates on the value of the operation above described. König was of opinion that tumours of the sternum were so rare that it might be thought that the operation was of no great value. It is possible that such tumours are not so rare as König thinks. Küster recommends the operation for dermoid cysts and for lipomata, but not for the lympho-sarcomata. He mentions a case of congenital lipoma in a child one year old, described by Krönlein, which spread through an intercostal space and reached the anterior wall of the thorax, and there rapidly developed. In this case von Langenbeck extirpated only the outer half of the tumour, and the child succumbed from erysipelas.

FATE OF THE LATEST IRISH CONJOINT EXAMINATION SCHEME.

The latest scheme proposed for the establishment of a complete examination in medicine, surgery, and midwifery by the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland has fallen through, in consequence of the Council of the College of Surgeons having negatived the following resolution, considered by the College of Physicians to be essential to the working of the scheme, viz.:—"Resolved—That the Colleges do bind themselves not to grant separate diplomas, except to candidates who already hold, in the case of the College of Physicians, surgical diplomas approved by the College of Physicians; and in the case of the College of Surgeons, medical diplomas approved by the College of Surgeons." As the aim of the resolution was to endorse and carry into effect the principle of complete qualification in medicine, surgery, and midwifery for admission to practice, the King and Queen's College of Physicians of course could not consent to abandon it.

SCHOOL OF SURGERY, ROYAL COLLEGE OF SURGEONS IN IRELAND.

It is stated that Dr. James Little, Professor of Practice of Medicine, is about to resign his chair owing to the multiplicity of his professional engagements. Dr. Little succeeded the late Dr. Charles Benson as Professor of Medicine about eight years ago, and speedily gained a high reputation as a fluent, able, and attractive lecturer. His resignation will be a grievous loss to the College School.

SOME INTERESTING ABDOMINAL OPERATIONS.

Dr. Leopold, of Leipzig, contributes to a recent number of the *Archiv für Gynäkologie* an account of thirty cases of laparotomy performed by him. The series contains some cases of especial interest, and we therefore think it worth referring to. It comprises seventeen ovariotomies, with four deaths; seven cases of spaying, with one death; and six of removal of the uterus for fibroids, with two deaths. Listerian precautions were carefully observed, with the exception that in the later cases the spray was not used during the operation, but instead the air of the room carbolised beforehand. Among the ovariotomies may be noted a case of a dermoid cyst, about the size of a child's head, of which the pedicle was so long that the tumour could be pushed up to the liver; and another in which there was a dermoid cyst in each ovary. Another case was that of a patient who had an ovarian tumour of about the size of the fist, and had for twelve years suffered from severe attacks of pain, chiefly in the left iliac region, attacking her about half an hour before defæcation

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Upon opening the abdomen the cyst was found so firmly adherent on all sides that it could not be removed. There were extensive adhesions connecting the sigmoid flexure and upper part of the rectum with the cyst, uterus, and left tube. These adhesions, upon which the pains were thought to depend, were ligatured and divided. The patient recovered, and defæcation was no longer preceded by pain. Spaying was done three times for dysmenorrhœa. In two of these relief followed, which has as yet been persistent. Dr. Leopold unfortunately does not give the date of his latest information as to these. In the third the pains returned after the lapse of a year. In four cases this operation was done for fibroids. In one both ovaries were removed, and menstruation ceased. In another, one ovary was so adherent that it was impossible to get it out. The other was removed, with its tube, and the vessels running to the tumour were ligatured on each side. For seven weeks the patient had no hæmorrhage, but then the hæmorrhage recurred as before the operation. In the third a similar operation was performed, with the result that the patient died from uterine hæmorrhage eight hours after the operation. In the remaining case, both ovaries were atrophied and firmly adherent, so that it was impossible to remove either of them. The vessels on each side were therefore tied. The result was gradual diminution in the size of the tumour, the amount of hæmorrhage, and the severity of the pain. Dr. Leopold thinks that in all such cases, in which it is found impossible to remove the ovaries, the vessels going to the uterus should be ligatured. In the cases in which the uterus was removed for fibroids, the stump was treated in the manner recommended by Professor Schroeder, of which we gave a short account in our number for March 3. One of the two deaths was from peritonitis on the seventh day; the other from exhaustion on the second day, without signs either of peritonitis or of hæmorrhage.

MEDICAL STUDENTS' REGISTER.

The Medical Students' Register for 1883 was published during February. It contains, in addition to the Register proper, data of the examining bodies whose examinations fulfil the conditions of the Medical Council as regards preliminary education; of the places of medical study whereat students were registered as having commenced medical study in 1882, with a statement of the number of students registered at each place of study; and of the number of students registered during each year from the commencemement of such registration in 1865. The information contained in the Register proper is arranged in four columns, the first of which gives the name of each student, the second the preliminary examination that he passed and the date of passing it, the third the date of registration, and the fourth the place and the date of the commencement of medical study. The number of students registered during the year 1882 was 1862, of whom 653 registered in England, 585 in Scotland, and 424 in Ireland. The issue of the Register so early in the year, the amount of information given in it, and its general arrangement and "get-up," reflect great credit on the industry, care, and skill of Mr. Miller, the Registrar of the General Medical Council.

At a meeting of the Senatus Academicus of the University of Aberdeen which was held on the 10th inst., the honorary degree of LL.D. was conferred upon Dr. James Ross, of Manchester, author of "The Diseases of the Nervous System," "The Graft Theory of Disease," and other well-known works, and Assistant-Physician to the Manchester Royal Infirmary.

The Hebdomadal Council of the University of Oxford have elected Dr. E. B. Gray, of Exeter College, Senior Physician to the Radcliffe Infirmary, as Lichfield Clinical Lecturer in Medicine; and Mr. Alfred Winkfield, F.R.C.S. Eng., Senior Surgeon to the Infirmary, as Lichfield Clinical Lecturer in Surgery at that institution. These lectureships have been created in place of the Clinical Professorship which was some time ago resigned by Dr. Acland, the Regius Professor of Medicine.

At the monthly meeting of the Faculty of Physicians and Surgeons, Glasgow, held on Monday last, it was intimated that Mr. William J. Mackenzie had presented to the Faculty the entire medical library collected by his father, the late Dr. William Mackenzie, the distinguished oculist. A cordial vote of thanks was passed to Mr. Mackenzie for the valuable gift.

At a meeting of the managers of the Royal Infirmary, Aberdeen, held on the 12th inst., it was stated that last year's deficit was £555, and that there was a total debt of £3300. It was remitted to the Committee of Management and Finance to devise means of paying off this debt.

The weekly returns of the health of our troops in Egypt at date March 14 show a slight increase of sickness—640 men out of 9174 being in hospital. This increase may probably be attributed to the warmer weather which has set in. At Alexandria, though the city is used as a sanatorium for invalids from Cairo, there is a smaller proportion of patients to efficients than in the capital.

Our contemporary *Nature* states that an International Congress for the protection of animals is to be held at Vienna in September this year. A large number of local societies, as those of Berlin, Cologne, Munich, Dresden, and Hanover, besides several Spanish, Italian, and Russian societies, have given notice that they intend sending representatives to the Congress. Anti-vivisectionist societies will not be invited to attend, as the promoters of the Congress, eminent men of science, do not consider them as societies for the protection of animals, and hold that they are generally incompetent regarding questions relating to such protection.

Miss Edith Shove, M.B. Lond., has been appointed Medical Superintendent of the female staff at the General Post Office.

The *Times'* correspondent at St. Petersburg notices a statistical report just issued on Suicides in Russia. From this document it appears that (though the figures given do not include three or four provinces, from which information was still wanting) some 2000 persons make away with themselves in each year. The greatest number of cases occur in the district of Moscow, after which come St. Petersburg, Warsaw, and Irkutsk. During the last five years 7713 cases have been registered. Suicide in the Russian army, as in that of Germany, has increased during the last few years.

The Hammond Prize.—The American Neurological Association offers a prize of $500, to be known as the William A. Hammond Prize, and to be awarded at the meeting in June, 1884, to the author of the best essay on the "Functions of the Thalamus in Man." The prize is open to all nationalities, and the essays are to be based upon original observations and experiments on man and the lower animals. Essays are to be addressed (postage paid) to Dr. E. C. Seguin, 41, West Twentieth-street, New York, on or before February 1, 1884.—*New York Med. Journal*, February 24.

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ON ANÆMIA IN YOUNG CHILDREN.

By DR. ARCHAMBAULT.

The following lecture, delivered at the Hopital des Enfants Malades by Dr. Archambault, appeared in the *Gazette des Hopitaux* for October 31 and November 7:—

The anæmia of young children is a disease of which no one as yet has given anything like a complete account; and that is why I wish to tell you what I think of it, regarding it as an impoverishment of the blood characterised by a diminution in the number of red globules. This condition, well known in the adult, likewise exists in children, the diminution of globules ordinarily being accompanied by an increase of serum, so that there exists at the same time a relative aglobulia and hydræmia. So understood, anæmia is a morbid condition which we meet with once in about every eight or ten children brought to this hospital. Even in a well-grown infant, to all appearance quite well, what is called in the world "a fine child," if you examine it with some care, you will often find a certain amount of pallor, only a slight colouring of the tissues, the skin of the entire surface being delicate, smooth, and pale, without any of that marbling which is the sign of a rich circulation. The capillary network seems in this little being to be void of blood. It is the same with the mucous membranes, and if the lips still appear to be coloured, they have not the carnation hue which characterises blood rich in red globules, and sometimes, during the sleep of the child, they become pale. What I say concerning the labial mucous membrane applies equally to the gums, which are colourless, and to the palatine arch, which has become of a yellowish white. Moreover, the child is sometimes apathetic and heavy, all the while not being ill. The conjunctivæ are pale; the eye is, so to say, transparent. The child is very lively, but it is also very impressionable—the slightest sound or a bright light causing it to start. Frequently convulsions seem imminent. Perhaps I exaggerate somewhat here, but it is intentionally, for they frequently supervene in these children. I am well aware that the opinion I am expressing is in complete contradiction with that which prevails with the public, which regards fresh-coloured, robust infants as those which are predisposed to convulsions.

I have rarely observed my colleagues examine the condition of the heart and large vessels in these young children, the principal features of whose portrait I have just drawn, and that for two reasons: first, the books are quite silent on this question; and secondly, it is generally believed that no *bruits de souffle* exist in a child only a year or eighteen months old, or that if these sounds exist they cannot be verified. This is a double error, for the *bruits de souffle* are not only manifest in young infants, but they are even more intense, or at all events more frequent, in them than in adults. I may add that I have always found them in all cases. Their verification, it is true, is not always very easy, because young children are generally indocile, and all medical examination alarms them. It is necessary, therefore, that the little patient should be amused and reassured as much as possible, in order that the examination may be made leisurely and with good effect. The *bruits de souffle*, then, that we may perceive in these cases are characteristic of anæmia, although some practitioners have absolutely denied this; and when we join these stethoscopic signs heard in the vessels to the physical characteristics already adverted to, there can exist no doubt as to the diagnosis of the anæmia. The *bruits de souffle* which in the adult are perceived at the aortic orifice, soft *souffles* which correspond to the ventricular systole, and are distinguished from the sounds due to organic lesion, only exist in the child as functional sounds, while in him they are also perceived in the veins. Their recognition in the heart is, then, of less importance in the child than in the adult; and West regards it as quite an exceptional occurrence.

The child may, however, undergo special palpitations in consequence of sudden movements or under emotional influence, and the heart may beat in a disordered manner, and sometimes so energetically that a metallic sound may be heard as if there were lesion of the orifices. But when the child is at rest again, and when the moral impression it has undergone has calmed down, these disordered sounds disappear, giving place in the anæmic child to the signs appertaining to a feeble heart. These are true nervous palpitations accompanied by a tinkling of the valves, resulting in these anæmic subjects from insufficiency of red globules, and from a great excitability of the nervous system analogous to that observed in chlorotic young girls. These children are simply anæmic subjects, to whom, in place of giving digitalis, it is far more proper to prescribe iron, wine, Barèges water, etc.—in a word, a tonic medication. When you have clearly verified the signs of this anæmia you will have made the diagnosis of a condition which is very common in young children, whatever may have been said about it sometimes. It exists in equal proportion in little boys as in little girls during early infancy; but from the age of seven or eight boys are less disposed to it than girls; the latter, more disposed to become chlorotic, will much oftener present the *bruits de souffle*, the boys becoming more fortified. It is a predisposition inherent in the female sex, which tends to increase with age, and to become prominent under the condition of chlorosis towards the ages of fifteen, sixteen, or seventeen. Perhaps this peculiar state also depends upon the more sedentary life which young girls usually lead. In any case this action can only be secondary, and we have to seek for other causes of anæmia having a more direct operation.

(To be continued.)

MEDICAL MATTERS IN PARLIAMENT.

House of Lords—Thursday, March 8.

The Medical Acts.—Lord Carlingford introduced a Bill to consolidate the Acts relating to Medical Practitioners.

House of Commons.

The Pollution of the Brosna.—In answer to Mr. Sullivan's question about the pollution of the Brosna River by the sewage of Mullingar Gaol, Mr. Trevelyan said that the river was not polluted solely or principally by the sewage of Mullingar Gaol. The whole of the town sewage was discharged into the Brosna, and the town sewers entered it at a point above the discharge of the prison sewers. The Prison Board were most anxious to make a better arrangement; and whenever the town sewerage shall be completed, the Board will at once take steps to connect the prison sewers with it.

A Case of Fine for Non-vaccination.—Mr. P. A. Taylor inquired whether the Home Secretary's attention had been called to a case decided in the Westminster Police-court by the sitting magistrate on February 10, when Mr. Armfield was fined for the non-vaccination of his child, though he had transmitted, in accordance with the statute, to the vaccination officer a certificate from a registered medical practitioner that "the child was not in a fit state to be vaccinated," as it was suffering from an eruption; whether such certificate was not by law "a reasonable excuse"; whether the magistrate ordered the defendant into custody till the fine was paid; penalties being recoverable in the first instance by distress, not by imprisonment; and whether such imprisonment in a police-cell with ordinary criminals was lawful.—Mr. Hibbert replied that a report had been received from the magistrate, who stated that he did not consider the certificate furnished was a "reasonable excuse." The defendant might have appealed against this decision, but did not avail himself of that privilege. The magistrate further stated that he did not order the defendant into custody; but the latter refused to pay the fine, and the gaoler, thinking that he was responsible for the defendant's safe keeping, placed him in the cells for a few minutes while he went for instructions to the chief clerk, who directed the defendant's immediate discharge. For such temporary detention there would appear to be statutory sanction under Jervis's Act (11 and 12 Vic., cap. 43, sec. 20).

Friday, March 9.

Irish Wakes.—Mr. Corbett, referring to a letter in the *Freeman's Journal* of the 6th inst., asked the Chief Secretary for Ireland whether it was true that a wake had been allowed to be held for two days and nights on the body of a man who died in St. Andrew's parish, Dublin, of fever of a very malignant type; that the man's widow was struck down and died in a few days, and that some of his children

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had taken the disease, and are now in Cork-street Fever Hospital; and whether he would cause inquiry to be made, with a view to prevent like occurrences in future.—Mr. Trevelyan, in reply, said that he had made inquiry on the subject, and the facts were substantially as stated. The dispensary medical attendant, who is, he was informed, newly appointed and inexperienced, cautioned the people against holding a wake; but further inquiry is being made as to his action in the matter. Active steps had been taken by the local sanitary authority to prevent any further spread of the disease.

Oversizing of Cotton Cloth.—In answer to Mr. Broadhurst, the Home Secretary stated that the facts placed before him as regards the oversizing of cotton cloth are sufficient to justify a medical inquiry being made into the effect of the process upon the persons employed in it.

Sale of Poisons.—Replying to Mr. Warton, Mr. Mundella said that it is the intention of Government to introduce, in the House of Lords, a Bill for the further regulation of the sale of poisons, which will include provisions respecting the sale of so-called patent medicines of a poisonous character.

MONDAY, MARCH 12.

Unsound Meat on the "Orient."—In reply to Mr. Ritchie, who inquired whether a quantity of meat returned from Egypt in the *Orient* as unsound had not been offered for sale in the London market, under the authority of the War Department, and had been seized and destroyed by a sanitary authority,—Mr. Brand stated that the *Orient* took out seventy-five tons of frozen meat in her cold chamber; and that this meat was drawn upon to September 6. At that time between thirty and forty tons of meat remained on board, and were brought home. The meat was placed in a cold chamber in the Victoria Docks; and a well-known firm of butchers, accustomed to deal in frozen meat, was instructed to take steps for the disposal of such of it as was fit for food. They sent two sample lots to London, one of which was condemned, and the other passed by the Holborn District Inspector. The whole of the meat in the cold chamber was then seized and condemned by the City Sanitary Authority.

TUESDAY, MARCH 13.

Glanders among Army Horses.—In reply to Dr. Cameron, the Secretary of State for War said that two cavalry horses and one of the artillery, besides six other animals, had been destroyed on account of glanders in Egypt. The troops were encamped on ground, or on ground adjacent to that which had previously been occupied by the Bengal Cavalry, and it was reported, after the return of the Lancers to India, that some of their horses or baggage ponies had been destroyed by glanders.

Compulsory Vaccination.—In answer to questions put by Mr. P. A. Taylor, Mr. Chamberlain said that the contracts with public vaccinators contain a provision that the vaccination shall be performed in accordance with certain instructions to public vaccinators issued by the Privy Council in 1871; that copies of these instructions have been freely issued by the Local Government Board, and they will be prepared to furnish copies whenever applied for. No further means of making the instructions known appeared to the Board to be necessary.

ANTIDOTUM ARSENICI.—A very important new preparation (in the new American Pharmacopœia), whose name will probably convey to most of our readers no idea of its use or value, is *Ferri Oxidium Hydratum cum Magnesia*. Much better would it have been for the Committee to have adopted the name of the German Pharmacopœia, instead of this ponderous appellation. *Antidotum Arsenici* conveys a very definite idea, and is brief. The new antidote, without doubt, is superior to the old hydrated sesquioxide of iron; indeed it is merely the old friend in a new and improved garb. Magnesia added to a solution of a sesquisalt of iron precipitates the sesquioxide. The excess of magnesia is not irritant, like ammonia or potash, and has the further advantage of adding to the efficiency of the antidote. In a case of arsenical poisoning, agitate magnesia in excess with the tincture of chloride of iron, or with any of the sesquiiron solutions, pour off the liquid, and administer the bulky precipitate freely—the work of a moment, at a time when seconds well tended will yield, it may be, years of life.—*Phil. Med. Times*, January 27.

REVIEWS AND NOTICES OF BOOKS.

The Medical Language of St. Luke. By the Rev. WILLIAM KIRK HOBART, LL.D. (Dublin University Press Series.) London: Longmans, Green, and Co. 1882.

THE object of the volume before us is to prove from internal evidence that "The Gospel according to St. Luke" and "The Acts of the Apostles" were written by the same person, and that the writer was a medical man. The plan of the book may be briefly described, and we would take the opportunity of stating our belief that the mode of dealing with the subject is eminently scientific and, so far as we know, novel. All the words which are found only in the Third Gospel or in "The Acts of the Apostles," or almost exclusively in these two books, are named, and quotations are given from Hippocrates, Galen, Aretæus, and Dioscorides to show that the same words were in common use amongst medical writers to express the same meaning. The result of this study is certainly to prove beyond reasonable doubt that in the Third Gospel and in "The Acts of the Apostles" the descriptions of the miracles of healing were written by one who not only was familiar with the diseases in question, but who used such language as it would be unreasonable to suppose that anyone but a medical man could have had at his command; and, further, that in dealing with non-medical subjects he wrote in a style common in the Greek medical writers of the time, and one which a physician would be likely to employ. This peculiarity of phraseology being identical throughout the two books in question, leaves no doubt that they are the work of the same hand. A very interesting note is appended at the end of the volume, showing the probability that, in accompanying St. Paul on the three occasions referred to in the Acts of the Apostles, St. Luke was present as his medical adviser.

In conclusion, we would say that by his intimate acquaintance with the above-mentioned Greek medical writers, and his profound and exhaustive study of these two books of the New Testament, Dr. Hobart has formed in support of his proposition a chain of evidence which is absolutely complete.

The Essentials of Bandaging. By BERKELEY HILL, M.B. F.R.C.S. Fifth Edition. London: Smith, Elder, and Co. 1883. Pp. 320.

THE rapidity with which the editions of this little book succeed each other proves that it needs no commendation from us. The chief additions contained in the present edition are in the paragraphs on ophthalmoscopy and laryngoscopy, which are from the pens of gentlemen eminently qualified to impart information on these subjects. Descriptions of Thomas's splints for hip and knee diseases, and Croft's plaster-of-paris splints, have been added, with engravings. But we cannot help regretting that Mr. Hill should have sanctioned with his approval the practice of treating hip-joint disease during the acute stage, even when there is flexion, with a Thomas's splint. It seems to us that any method which precludes the application of extension during the early stage fails to meet the scientific requirements of the case. We are sure that this edition will enjoy the same popularity as its predecessors.

Clinical Lectures on Diseases Peculiar to Women. By LOMBE ATTHILL, M.D. Seventh Edition. Dublin: Fannin and Co.; London: Longmans, Green, and Co. 1883.

IN regard to the present edition we would observe that, so far as we can judge from a somewhat hasty glance through its pages, it deserves as much favour with the profession at large as did its predecessors. We believe that it is the fourth edition that has appeared in the last ten years—a sufficient demonstration that it supplies a real want. There is but little alteration and no new material in this edition. The sections on subinvolution and inversion of the uterus have been re-written, and these constitute the chief and almost only changes. This volume may be considered to represent the matured experience gained by a Master of the Rotunda Hospital, for Dr. Atthill has just completed his seven years' tenure of office—a fact which cannot but increase the practical worth of the book.

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REPORTS OF SOCIETIES.

THE CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 23.

ANDREW CLARK, M.D., President, in the Chair.

CASES OF SUPPOSED HYDROPHOBIA TREATED BY CHLORAL, ONE OF WHICH RECOVERED.

THE notes of these cases were read by Dr. BROADBENT. *Case* 1.—The patient, a boy aged twelve or thirteen, was admitted into St. Mary's Hospital on February 25, 1876, having suffered for two days from violent convulsive attacks. The paroxysms were ushered in by a loud, deep inspiration, and there were, first, momentary rigid extensions of the body, followed by rapid rotatory movements of the head, with loud laryngeal sounds, which lasted two or three minutes, after which the boy moaned and complained of pain in the head. These attacks were at once brought on by an attempt to drink, by the sight or sound of falling water, by the contact of a cold object or pressure on the heart, or by light thrown into the eye in attempts at ophthalmoscopic examination. In the intervals the boy was conscious and fairly clear in intellect; his countenance was pale and anxious; the skin clammy; temperature normal; pulse 108, small, weak, and hesitating; respiration sighing. There were frequent extensive jerks of the body and limbs. The idea of hydrophobia had occurred to his parents, but the only dog the boy was known to have played with was alive and well. The boy himself spoke only of the same animal until directly asked if he had ever played with a strange dog, when he said he and some companions had found and shut up a strange dog, and that it had bitten him on the hand, but he had forgotten which. There was found, however, on the fleshy part between the thumb and finger of the right hand a small scar surrounded by an extensive induration like that of a chancre. After a trial of nitrite of amyl with no good effect, chloral (twenty grains), brandy (one ounce), and beef-jelly (two ounces) were given by the bowel every three hours. The boy slept, had only slight occasional spasms, and was soon able to drink milk. On February 28 he was apparently well, and the chloral was suspended; but on the evening of the 29th he had a violent relapse, which continued on March 1. Chloral was again given till March 11, when he had been up and running about the wards for several days. He remained in the hospital till April 2, and was kept under observation for some time longer. When he was taken to the hospital chapel the first notes of the organ threw him into a state of uncontrollable excitement, with violent throwing about of the arms, and he could not for a time bear the sound of a barrel organ. The case was submitted to the Society exactly as it was written out six years before from the notes of Mr. Jackson Garrett, at that time resident medical officer. If the boy had died there would have been no doubt as to the disease being hydrophobia. The symptoms, while not corresponding in all particulars to those seen in some fatal cases, were extremely similar, and the induration round the bite was corroborative evidence. The circumstances excluded emotional excitement as a cause of spurious hydrophobia, and there was nothing in the boy's previous history or character to suggest that he was a likely subject for hysteroepileptic simulation of the disease. Chloral was given partly because it seemed best adapted, from its physiological effect, to relieve the spasms, partly in the hope that it might rob death from such a disease of part of its horror. *Case* 2.—A healthy girl, a month after being bitten by a strange cat, complained of nausea, sickness, and loss of power in the arms, and next day, after feverishness and thirst, became excited and unmanageable, and was brought to the hospital at 10 p.m., July 31, 1881. She was excited and delirious, but could answer questions; asked for water, but could only take it out of a spoon after hesitation and with evident effort: it was swallowed with difficulty, and provoked spasms of the pharynx and neck. Chloral and bromide of potassium were given in beef-tea by the rectum. During the night the child became rapidly worse, more delirious and excited, with hawking up of viscid mucus, and complete inability to swallow. She died exhausted within seventy-two hours after admission. At the post-mortem examination there was found some congestion of the brain and upper part of the spinal cord, especially in the floor of the fourth ventricle, and sections of cerebral cortex and all other parts showed congestion of vessels and a few punctate extravasations into the perivascular spaces, but no cellular infiltration. *Case* 3.—A man aged twenty-six, who had gone through much excitement and anxiety, which had led to some alcoholic excess, five years after being bitten by a dog, was suddenly seized with choking while drinking spirits after giving evidence in a court of law; apparently some of the liquid got into the larynx. He was seized with panic that he was going mad. After three days' excitement and sleeplessness he was brought to St. Mary's Hospital on October 25, 1876, about 10 a.m., in a wild and anxious condition, dreading the approach of liquids, and on any attempt to swallow them seized with spasms of the pharynx and neck, and gasping for breath. He could swallow solids. He could be quieted by firmness, but soon relapsed. Among his complaints, one was that he was in a fog and could not breathe; another, that he was going to be murdered. He hawked and spat, and pulled at his throat. During the evening, after removal to an isolated ward, he was quieter, and could drink liquids. In the night he slept at times, at others was noisy, and he tried to strangle himself and to get out of the window. On the morning of the 26th he was calmer; through the day his condition varied, but at 4 p.m. he was rational and tranquil, and eating bread-and-milk. Soon after this the visit of his wife and child brought on a paroxysm of greater and more violent excitement. In the evening he was put under chloroform, and could then both breathe and swallow. The excitement, however, returned; it was followed by exhaustion, and he died about 10.45 p.m. At the post-mortem examination, fifteen hours afterwards, the rigor mortis was very great. All the internal organs, but especially the lungs and kidneys, were congested. The membranes, cortex, and white substance of the brain, pons, and medulla were greatly congested, as was also the spinal cord. There were no embolisms. *Case* 4.—The patient, a boy aged thirteen and a half, was admitted on January 18, 1883. He had been bitten by a puppy three months old, five months previously, on the finger; the wound was cauterised within five minutes, and twice subsequently; the dog was confined, and a week later killed, because it was then thought to be going mad. The boy read all the accounts of cases of hydrophobia he could find, and constantly talked about it. On January 15 he had pain in his back, but up to the 17th had only symptoms of a bad cold. On January 18 he could not swallow liquids or suck an orange; spasms were induced by the attempt. There was an excessive flow of saliva and foaming at the mouth. He started up at times, saying he could not breathe, and was excited. On admission the prominent symptom was emotional excitement. He would not allow liquid to be brought near him. The abdomen was retracted and hard; face flushed and wild; pulse frequent; temperature 107°. An enema of gruel and castor oil was ordered, and after this an enema of beef-jelly, brandy (half an ounce) and chloral (twenty grains) every three hours. Three hours later he asked for and tried to drink milk. It was with much difficulty that he got the spout of the feeding-cup to his mouth, and when he did so the fluid provoked a most violent spasm of the neck and arms, and great respiratory distress. He afterwards, however, sucked an acid-drop, and swallowed the saliva. Respiration irregular and jerky, 36. Much moaning and whining. Pain and tenderness at epigastrium. The gruel and castor oil did not return, and the beef-tea and chloral had to be given upon it at seven o'clock. During the evening and night the patient became more and more excited and violent, starting up, clutching his throat with both hands, beating his head against the wall, screaming, and saying he was choking. The respiration was rapid, catching, oppressed; the pulse extremely frequent; perspiration pouring off the face; at times convulsive paroxysms of neck and arms. At 11 p.m., after a second administration of chloral, brandy, and beef-tea enema, he was so violent that restraint by bandages was necessary. At 2.45 a.m. of the 19th twenty grains of chloral were given hypodermically, and the patient slept three hours. At 10 a.m. he was quiet, listless, and drowsy, but contact of the hand or turning down the bedclothes caused a long deep inspiration. He complained of no pain. Respiration more even; pulse 130, small and weak; temperature 107°. At

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11 a.m. the urine had to be withdrawn by a catheter: the amount was sixteen ounces; the specific gravity 1030; no albumen or sugar, but urates thrown down on cooling. After this the spasms were slight and infrequent, but the exhaustion increased. There was much foaming at the mouth. The temperature remained at about the same point. Sordes formed on the teeth. The patient died at 10.25 a.m. on the 20th, about forty-three hours after admission. The administration of chloral was suspended when the spasms ceased, beef-tea and brandy only being given. On post-mortem examination, three hours after death, the rigor mortis was extremely pronounced. The cerebral meninges, cortex, and white centres were extremely congested; puncta cruenta larger and more numerous than natural; membranes over pons and medulla milky and specially congested; no excess of serum in ventricle; nothing noteworthy in chest or abdomen, except two living round worms in small intestine just above the ileo-cæcal valve.—The author added that he was convinced the last two cases were not true hydrophobia; that of the man obviously was not. These spurious cases seemed to warrant the assumption that the higher nervous centres might so influence the lower as to create reflex spasms apparently characteristic of hydrophobia. This also afforded an explanation of the connexion between the symptoms and appearances—that is, of the relation borne by the dynamic changes which preceded the structural wreck revealed on post-mortem examination.

The PRESIDENT inquired whether there was any difference in the state of the urine during and between the clonic paroxysms.

Dr. BROADBENT replied that the urine was repeatedly examined, but no albumen or sugar was ever detected.

Dr. DYCE DUCKWORTH congratulated the author on the result of his treatment. He had no doubt in his own mind that the case was one of hydrophobia. This was shown to be so in every particular, and the patient presented the complete series of symptoms assigned as belonging to the affection. He could not doubt but that chloral was a most useful drug in this disorder, and he believed that his patient, an account of whose case was published in the *Lancet* some years ago, had his life unusually prolonged by the administration of chloral per rectum, which mode of giving the drug was assuredly the right one. The knowledge we have of the mode of action of the drug also indicates its use in cases of hydrophobia. In the diagnosis of spurious cases, the blowing of a current of air on the patient may be used as a means of distinction: true hydrophobia would be shown in the instant occurrence of an attack of convulsions. A great thing was to give time; and if chloral enabled this to be done, we might be hopeful of some cases. Hydrophobia may be likened very much to the effects of snake-poison in this respect.

Mr. PICK could not yield his full concurrence in the views advocated by Dr. Broadbent. From what he had seen and read he certainly should not be perfectly satisfied that the case was one of hydrophobia. The want of premonitory symptoms in the character of local irritation about the bitten part and in the general feeling of malaise where the patient experienced an ill-defined sense of impending evil were not present in the example narrated by Dr. Broadbent. The excessive mental terror between the attacks, too, was absent.

Dr. WHIPHAM narrated the outlines of three cases of rabies in animals, with the object of showing that, from personal observation, he had been unable to make out any spasm of the muscles of the neck or glottis. One instance happened in a sow who was bitten by a rabid dog in April, and manifested the signs of rabies in September of the same year. This beast foamed at the mouth, bit at everything, chewed straw, and became furious when set before water, but no spasm could be detected. The second example occurred in a dog who ran down the village towards the horse-pond and tried to drink; but here no rigidity was perceptible, although Dr. Whipham said he stood near enough to observe the animal's motions completely. The third animal was also a dog who showed undoubted signs of the disease, but when attempts to drink were made there seemed to be no spasm of the glottis or cervical muscles.

Dr. EWART spoke of the particularly valuable series of cases rendered by Dr. Broadbent, but wished to strongly insist upon the error of our ways in the matter of nomenclature. If there be a disease called rabies in the dog, and if the virus of this be communicable to man, why do we not use similar terms for the disease in one as for the other? If there be a specific virus we surely ought not to change its name because it is communicated from animals to man. It is most unphilosophical also to say that one case is spurious and another is true, solely on the result of the case. The curability or incurability of a disease ought never to be made a test of the nature of the disease. The post-mortem appearances, too, are practically similar, so far as he knew, in the true and spurious instances.

Dr. LONGHURST remarked that although chloral was a useful, it was also a powerful remedy, and asked what was the total amount of the drug prescribed in the different cases.

The PRESIDENT demanded what were the precise differentia by which the real were diagnosed from the spurious cases, and also asked Dr. Broadbent to enlighten the Society on the subject of his theory of the explanation of false hydrophobia. He remarked that the age of the patient was one in which *bizarre* conditions of the nervous system were apt to arise; there was intense reflex excitability at this period of life, and the sensations so dominated the will as almost to place it in complete abeyance.

Dr. MAHOMED inquired whether it was not incumbent on physicians to perform inoculation experiments on lower animals in all cases of alleged hydrophobia.

The PRESIDENT explained how difficult such a course would be when we consider the legal encumbrances.

Dr. DUCKWORTH stated that Dr. Lauder Brunton had injected the saliva of a patient suffering from hydrophobia under the skin of a dog, with a negative result.

Dr. BROADBENT, in reply, said that he had not expected to find such a consensus of opinion as had been expressed by several members; it was not to be wondered at, therefore, that some dissentient voices were to be heard. He fully agreed with the remarks which Dr. Ewart had made, and believed that we ought to have distinct names for distinct diseases. The differentia were to be found in the occurrence of a clear history of inoculation in the true disease, and in the presence of a tender indurated cicatrix. It was solely on the etiology that the nature of the cases was decided: in the one there was evidence of specific inoculation, and none of a morbid state of the emotions; in the others there was a history of such conditions as would tend to lead on to a morbid dynamic state of the higher cerebral functions. In the policeman, for example, there seemed to be a chain of circumstances all tending to make the man extremely excitable. The total amount of chloral administered in the last case was 220 grains. In the case of recovery Dr. Broadbent said he could not recall the total quantity used.

TWO CASES OF PSEUDO-HYPERTROPHIC PARALYSIS IN ADULTS.

This paper was read by Dr. KINGSTON FOWLER. *Case* 1.—A male aged forty, a blacksmith. No evidence of heredity. A brother similarly affected (Case 2). The patient has had four attacks of acute rheumatism. Twelve years ago he was noticed to have a peculiar swaggering gait. Five years ago he himself noticed that he had difficulty in ascending stairs, that he was easily tired by walking, that he could not rise from a chair without difficulty. He was an in-patient in the Middlesex Hospital in 1879. His weakness increased subsequently, and he frequently fell down. He noticed in December, 1880, that he could not stand steadily with his eyes shut. In January, 1882, he observed that his legs and arms were increasing in size. There has been no difficulty in micturition or defæcation. Mental power is unimpaired. The patient has the characteristic attitude and gait of the disease as seen in children. He cannot rise from a chair without great effort. When placed upon his back on the ground he is powerless to rise. The triceps on both sides and infraspinati are remarkably enlarged; both biceps are atrophied. In the paper various measurements are given, showing the gradual change in the circumference of the arm and calf. The electrical reactions are given in detail. The paper is accompanied by photographs of the patient, and drawings and microscopic specimens illustrating the condition of the muscles. Reasons are given for regarding the disease as essentially the same as that occurring in children. Other cases in adults are cited. *Case* 2.—Brother of the above. He has lately been noticed to have a difficulty in ascending stairs. There is marked enlargement of the

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muscles and of the calf and triceps of both sides. The case is detailed on the same plan as case No. 1.

Dr. BROADBENT said the members were greatly indebted to Dr. Fowler for the minute and accurate record of his cases, which was beyond all praise. From his experience he was gradually led to the conclusion that hypertrophy of muscle was an association of the age of the patient. He mentioned the instance of two sisters of about the age of twenty, who had been under his care, both of whom exhibited the disease in a characteristic form, but the enlargement of muscles was much less pronounced, being not at all like the exaggerated dimensions found in children. He thought, therefore, that the primary change was muscular atrophy. He instanced another case of a man who had been a soldier for twenty-one years, and a grave-digger for years afterwards, in whom muscular atrophy came on, at the age of fifty, in those districts specially affected by the disease in question, but there was no hypertrophy. Dr. Ross had published a similar case. From these data he was inclined to think that the hypertrophy was an incident of the age of the sufferer, where the tissue which should have become muscular is transformed or has its place occupied by fat.

Dr. GREEN related the case of a young man, aged twenty-two years, in whom the hypertrophy of the calves and triceps muscles was a notable feature, and on the strength of that sample he called Dr. Broadbent's inference in question.

Dr. EWART thought he had met with a case of the disease in a young woman amongst his out-patients. There was no hypertrophy and, curiously, no want of symmetry about the affected muscles, such as is usually the case. He inquired how many times the disorder had been witnessed in the adult female.

The PRESIDENT spoke in terms of high praise of the paper read by Dr. Fowler, and remarked that no hypothetical statements were to be found strewn in between the facts. It would seem also that this class of affections was much overlooked—these alterations of the anatomical tissues of a definite system.

Dr. FOWLER thanked the President for his words of encouragement, and said, in reply, that the disease in the female, so far as he knew, had only been recorded in Dr. Broadbent's case of the two sisters. It would appear that the atrophy preceded the apparent hypertrophy, which was anatomically due to a deposit of fatty tissue in between the proper muscular protoplasm.

The meeting then adjourned.

THE PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 6.

J. W. HULKE, F.R.S., President, in the Chair.

THE PRESIDENT announced that the Council had determined that the discussion on Diabetes should take place on April 3rd prox.

HYPERTROPHY OF ONE RAMUS OF THE LOWER JAW.

Mr. CHRISTOPHER HEATH showed a young woman, aged thirty-six, suffering from this condition, and gave the following history:—At the age of twenty-five she had an attack of left hemiplegia, the face being affected as well as the limbs. The limbs soon recovered, and the face probably did so also to a great extent, but ever since then the condition now present had been gradually coming on. It was evident that the right side of the chin was very much thrust over, but this was due entirely to hypertrophy of the left ramus, the body being symmetrical on the two sides; the condyle was enlarged, and the movements of the jaw were much restricted. He referred to the drawing of a very similar case in a woman of the same age in Dr. Robert Adams's Atlas, but in this instance there was distinct rheumatoid arthritis of one hand and one foot, of which there was no sign in his own patient. He proposed to remove a portion of the hypertrophied ramus, so as to enable the teeth to be approximated. (In connexion with this patient Mr. Nathaniel Stevenson exhibited a very minute incandescent electric lamp attached to the end of a catheter, through which the wires passed to the battery; it was admirably adapted for illuminating the mouth in such a case as this.)

Mr. ROGER WILLIAMS referred to a specimen of exostosis of the angle of the jaw which he had seen.

The PRESIDENT noticed that there was no great enlargement of the articular end of the bone in this patient, as in Dr. Adams's case.

Mr. CROFT asked Mr. Heath whether he thought this was a case of hypertrophy rather than of osteitis deformans, and he inquired whether there had ever been any pains in the jaw. As to the pathology of this affection, without examining the vascular and nervous supply (which could not be done in the present instance) it was difficult to form any opinion.

Mr. HEATH, in reply, said there had been no pain in the jaw. He thought the bone might be unusually dense. He had had an opportunity of showing the patient to Sir James Paget, who pronounced it not to be a case of osteitis deformans, an opinion which might be accepted as final. He hoped on a future occasion to bring the portion of bone removed before the Society.

RHEUMATOID ARTHRITIS.

Dr. NORMAN MOORE exhibited some vertebræ showing rheumatic arthritis from a Roman tomb discovered in digging the foundations of the library at St. Bartholomew's. The skeleton to which the bones belonged was entire, and lay in a stone sarcophagus preserved at St. Bartholomew's. The vertebræ showed lipping of the edge of the centra, irregularities on the intervertebral surfaces, and in some places anchylosis with considerable formation of osseous tissue. There was nowhere any loss of substance. In the middle dorsal vertebræ there was bony union on both sides, but lower down, though the sides of the centra were lipped, fresh bone had been formed on the right side only. Della Chiaje had described rheumatic arthritis as shown by bones found at Pompeii, but the St. Bartholomew's tomb (ascribed by antiquarian authorities to the fifth century) had perhaps furnished the earliest case of the disease in England.

Mr. BRUCE-CLARKE said that there was in the Oxford Museum a specimen of an atlas anchylosed to the occipital bone, which the late Professor Rolleston always used to say came from a tumour of a date earlier than that of the Christian era.

Mr. CROFT asked why this was called rheumatoid arthritis. He thought the term should be limited to cases of undoubted association with rheumatism.

The PRESIDENT said that at Saffron Walden a large cemetery had been dug out some years ago, and many similar specimens found; some of them had been preserved in the Saffron Walden Museum.

Dr. MOORE, in reply, did not think that a history of rheumatism was a matter of so much importance, and instanced the finding of a deposit of urate of soda in the joint where there was no history of gout. He had himself collected twenty cases of this coincidence, and it was, he thought, still more likely that rheumatic pains would be overlooked.

OLD FRACTURE OF STERNUM.

Mr. ARBUTHNOT LANE showed a fracture of the sternum at the junction of the first and second portions, and dislocation of the second and third left costal cartilages from their ribs. There was no fracture of ribs or vertebræ. He also described a form of articulation that occurs in the first costal cartilage when it becomes sheathed in bone; it might be either a single arthrodial joint, or a form of mixed articulation. These conditions were exemplified in the specimen shown. Their purpose is to obviate the rigidity of the cartilage, and to allow of the free movement of the sternum in respiration.

Mr. SYMONDS said no doubt the nodule on the inner aspect of the sternum was an evidence of old fracture, but it was a little difficult to explain its origin. There was no evidence of comminution of the bone on its anterior surface. Possibly it resulted from rheumatoid arthritis setting-in in the old fracture.

A BONY PROCESS FROM THE HEAD OF THE FIBULA.

Dr. HALE WHITE showed this specimen. There was a bony process one inch in length, lying in the fibres of the soleus. He believed it was a unique specimen.

Mr. HENRY MORRIS asked whether it was not possible that this was an instance of ossification of the tendinous structures in the soleus. Such a change was common in the neighbourhood of the trochanter major in the glutæi muscles.

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The PRESIDENT referred to similar processes sometimes found in the adductor muscles of people who rode a great deal, and such processes used to be common in the deltoid amongst the soldiers in the Prussian army. In both cases they would be due probably to repeated bruisings.

Dr. WHITE, in reply, said the process was in the muscular fibres, and not in a tendinous part; it appeared to be true bone. The fact that it occurred only on one side made it very difficult to found a theory of its causation.

SACCULATED BLADDER.

Dr. HALE WHITE showed this specimen, which came from the body of a woman who had been under treatment at Guy's Hospital for hæmaturia and pyuria, the cause of which could not be determined, and who had died from the effects of the cystitis. All the viscera were healthy, except the bladder; in this, between the orifice of the urethra and the left ureter, there was a small opening leading into a tolerably large cavity containing offensive purulent urine. A small abscess was found in the right kidney, and behind the uterus. There was abundant evidence of cystitis. This affection was very rare in the female. The chief causes of sacculation of the bladder were stricture, stone, spinal disease, and pelvic trouble. In this case he thought there must have been the formation of a pelvic abscess, and its rupture into the bladder.

Mr. EVE asked in what proportion of these cases the ureters and pelves were found to be dilated, as he fancied that this did not usually occur, the sacculation acting, so to speak, like a safety-valve.

Mr. BARKER asked if there was any evidence of stricture of the urethra. From the contents having been so very offensive, he would ask whether this possibly could have been a dermoid cyst which had ruptured into the bladder.

Mr. CROFT asked whether the bladder had been explored by the finger during life, and whether the opening of this sac could have been recognised by this method.

Mr. HENRY MORRIS, referring to the statistics that had been quoted from Guy's Hospital, asked as to how many cases of enlarged prostate there had been amongst them. He thought enlargement of the prostate was a commoner cause than stricture.

Dr. MOORE referred to the case of the celebrated Casaubon published by Sir T. Mayern, in whom this condition of bladder was found. It was probably the oldest case on record.

The PRESIDENT said that Percival Pott had recorded a case of sacculated bladder mistaken for strangulated hernia, and operated upon, the mistake not being found out until the swelling was opened and the urine let out.

Dr. WHITE, in reply, said there was no stricture of the urethra. He did not know whether the bladder had been explored digitally or not. The question of this being a dermoid cyst had not occurred to his mind; he did not think there was sufficient fœtor for that. As regarded Guy's Hospital, the exact statistics were: out of 3000 examinations, 20 cases of sacculated bladder were found, all in males; 11 were attributed to stricture, 5 to stone, 1 to spinal disease, 1 to fracture of spine, 1 to enlarged prostate, and 1 was unaccounted for.

CASES OF SARCOMA OF THE BLADDER.

Mr. ROGER WILLIAMS showed two cases. The first, a medullary growth, was taken from a man aged sixty-two, who had had frequent micturition for four months, and had also had pain in the left leg. There was no stricture, and nothing wrong could be made out as to his bladder; there was a firm hard mass above the pubes, which did not alter when his bladder was emptied. He had been worse for two months, passing blood at times; the stream was always small. After death the left kidney was found to be small and sacculated, the pelvis and ureter being dilated; the right kidney was slightly sacculated; the bladder was flattened by the tumour against the pelvis; the iliac vein on the left side was blocked. One inch above the orifice of the left ureter in the bladder there was an opening leading to a small diverticulum, attached to which was the new growth, about the size of an apple. There was a good deal of cystitis. There was suppuration going on in and around the growth, which consisted mainly of large rounded cells and tracts of spindle cells. The second case was a museum specimen. There was a growth springing from the base of the bladder, about the size of a hen's egg, near the opening of the right ureter. It was taken from the body of a man aged sixty; but there was no clinical history. There were no secondary deposits. Microscopically, it was a mixed sarcoma, composed of round and spindle cells.

Mr. BOWLBY thought that the first case had lasted too long for a medullary sarcoma, and in such cases suppuration was very unusual. The microscopical appearances, too, were not those of medullary sarcoma; there was too much fibrous tissue. In the second case the growth was papillated, which was very rare for sarcoma, and here too the fibrous tissue preponderated, the cells being very small and of the connective tissue type. He thought both specimens were fibromata.

Dr. HADDEN alluded to a growth at the trigone of the bladder that he had lately seen, post-mortem, in a man aged sixty-two.

Mr. EVE agreed with Mr. Bowlby that the tumours were not sarcomata, but one case he thought was either a papilloma or an epithelial cancer, some of the cells of which might have dropped out.

Mr. ROGER WILLIAMS was understood to say, in reply, that in his opinion these were cases of sarcoma.

UTERINE FIBROMYOMA.

Dr. FINLAY showed this specimen, taken from the body of a woman aged fifty-nine. She had noticed a swelling in the abdomen for fifteen years. The catamenia had ceased for ten years. On admission, there was a hard tumour reaching nearly up to the umbilicus, somewhat nodulated. Death occurred from peritonitis. At the autopsy there was found a large, smooth, globular tumour attached to the fundus of the uterus, with some nodules at upper part. There were adhesions to the intestines here and there. The upper part was degenerated and softened; the lower part was fibrous, and it had perforated the bladder, where it appeared as a fungating mass. Secondary nodules were found in the heart, left lung, and left kidney. It was a myosarcoma, but probably had only become sarcomatous at a recent date. He referred to two similar cases in vols. viii. and ix. of the Society's *Transactions*.

Mr. EVE thought that these so-called spindle cells were really embryonic cells undergoing transformation into spindle-shaped muscular fibres—a change the development of which he had been able to study in a case of myosarcoma of the kidney.

Dr. DAWSON WILLIAMS, referring to the case of which Mr. Eve had just spoken, did not consider that the transformation from one form of cell to another had been by any means proved in that instance.

BACILLI IN CHARBON.

Mr. DAVIES-COLLEY showed, under the microscope, bacilli taken from the sputa in a case of charbon. The patient was a man, forty-three years of age, who had been struck on the cheek by a piece of hide. A red swelling soon formed there, and he had a rigor, and was delirious that same evening. He rapidly got worse, and came under observation on the third day of his illness. There was then a bright red swelling, with a black depressed centre, near the corner of his mouth. The glands behind the angle of the jaw were swollen. The swelling in the cheek was excised on the fourth day; abundant bacilli were found in the serum of the excised portion; the blood contained micrococci; bacilli were found in the sputa, urine, fæces, and sweat. Last year he had published an account of seventeen cases of charbon at Guy's Hospital, of which four had proved fatal. Since then there had been about ten cases. The chief feature in this case was that there was no ring of vesicles round the central swelling. The man was in a fair way of recovery.

Mr. BRYANT showed a drawing of another case. The patient was a man, thirty-three years of age, employed in the same yard as the above patient. He first noticed a little papule on the cheek below the lower lid, and did not think much of it. However, it rapidly increased in size; he became ill in himself; swelling of the glands in his neck appeared; and after four days he came into the hospital. On admission he was very torpid and cyanotic; there was retching; on his face there was the typical central slough, surrounded by a zone of vesicles. The part affected was freely excised, but the patient nevertheless died in ten hours. Bacilli were found in his urine.

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Dr. MAHOMED showed the viscera of this patient. The lesions found in the stomach, intestines, and lung were exactly similar to those observed in the skin—*i.e.*, a central slough surrounded by a zone of congestion. There were some sloughs separating, and some actually separated, in the stomach. In the intestines the sloughs occurred mostly in connexion with the valvulæ conniventes, but they extended quite down to the rectum. There was some œdema of the mucous membrane of the cæcum. About twenty nodules were found in the lungs—some solid, others more of the nature of hæmorrhages. The mesenteric glands were not much enlarged, but on section many of them contained small hæmorrhagic nodules of bacillus growths. It was noteworthy that there was very little œdema throughout the body; there were no subserous hæmorrhages and no pleuritic effusion. At Bradford pulmonary lesions were common; at Strasburg intestinal lesions prevailed. This depended upon whether the disease was inhaled or swallowed with the food. In London the skin was the commonest seat of the lesion. He called attention to the evidence from this case that the intestinal lesion could be cured.

SPECIMENS OF ALBUMINOUS URINE.

Dr. RALFE brought four specimens of albuminous urine of different forms—viz., serum albumen, acid albumen, alkali albumen, and peptonuria,—with a view to showing that none of the proposed tests were sufficiently reliable without the aid of heat. He suggested that a piece of wire-gauze did away with the necessity of carrying a spirit-lamp.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, FEBRUARY 16.

DR. TRIPE, President, in the Chair.

A PAPER was read by KEITH YOUNG, A.R.I.B.A., entitled, "Notes on the Relation between Structural Defects in Hospitals and the Spread of Diseases." He would not, he said, touch on the causation either of enteric fever or the septic diseases incident to surgical cases, as being within the region of pathological controversy, and he would also insist at the outset on the necessity of eliminating all other means by which erysipelas might be conveyed into a ward from without, as by nurses or medical officers, before referring it to the condition of the drains. The diseases liable to spread thus in hospitals may be divided into two classes—(1) septic or traumatic diseases, and (2) enteric fever. One of the most striking instances of the prevalence of septic diseases in a badly built and ill-managed hospital was that of the Radcliffe Infirmary at Oxford, which had on two occasions—viz., in 1852 and 1874—to be closed in consequence. The former outbreak was referred by Mr. Netten Radcliffe to faulty administration, as well as to defective drainage and ventilation; the latter to the drainage and the ventilation only. Other hospitals, as the Royal Infirmary at Manchester, and even one erected within the last ten years, have on examination revealed a state of things almost passing belief. Drains ventilated into wards and cisterns, water-supply pipes passing through drains, drain-pipes badly jointed or not jointed at all or choked with filth—defects showing inconceivable ignorance in the architects, and criminal neglect in the builders of these institutions. The various systems of ventilation by artificial or mechanical means have in every case where they have been introduced into hospitals given most unsatisfactory results. In the Bristol General Hospital, Guy's (new wards), St. Mary's (old system), Liverpool Royal Infirmary, York County Hospital, Edinburgh Royal Infirmary, and the Ménilmontant Hospital at Paris, more or less elaborate systems have been tried, with partial and doubtful success in two cases, and absolute failure in the rest. As regards enteric fever, a comparison of the experiences of the London Fever Hospital and that at Homerton is interesting and suggestive. In the former, between the years 1855 and 1878, no fewer than 5569 enteric patients were admitted, and nineteen only of the inmates, ten of whom were nurses engaged in the enteric wards, contracted the disease. In 1881, three nurses and a servant in the same wards took the disease coincidently with successive stoppages in the sluice-pan. After this was put right, no more cases occurred. At Homerton, on the other hand, in six years and a half, during which the hospital was used for fever patients, seventeen nurses and three servants were attacked, or, comparing the number of attendants, seven times as many as at Liverpool-road. Dr. Collie, of Homerton, explains the difference by the ages of the nurses, who are, he affirms, much younger, and therefore more susceptible, there than at the London Fever Hospital. Mr. Murphy attributes it, on the contrary, to the drainage, which in the Fever Hospital is admirably arranged, with ample ventilation, no syphon-traps at the foot of the soil-pipes, and a large intercepting shaft or tank outside; whereas at Homerton the soil-pipes are sealed by syphons below, liable to constant fouling, and ventilated above by one-and-a-half inch pipes, obviously inadequate to the purpose. The lessons to be drawn from these, and the numerous illustrations afforded by such reports as those of Dr. Bristowe and Mr. Holmes, are to secure as perfect an administration as possible, free ventilation by natural means with air from pure sources, the isolation of wards from all possible contamination from the air of other parts of the building—especially the laundries, post-mortem rooms, and closets—and the complete and speedy removal of all foul matters from the premises, with air disconnexion from the sewers.

In the subsequent discussion the PRESIDENT referred to the reports of the Kew Commissioners and of Mr. Rogers Field on the unsatisfactory results attending the use of Tobin's tubes, which acted as inlets or outlets indiscriminately with variations of temperature, and the practical failure of cowls. He also condemned syphon traps at the bottom of soil-pipes as tending to imprison foul air, maintaining that the evils attributed to sewer-air were most often really due to the air in the house-drain, that of the main sewer being frequently the purer.

Mr. WYNTER BLYTH, too, insisted on the exaggerated ideas prevailing in some quarters on the dangers of sewer-air, and thought that ventilation was in some hospitals carried too far, and bronchitis or pneumonia set up in place of imaginary dangers. He referred to a new method of artificial ventilation by means of water causing a vacuum and washing the incoming air.

Dr. WILLOUGHBY thought that much error and confusion might be avoided if the expression "sewer-*air*" were strictly applied to the comparatively innocuous air in well-ventilated sewers, and "sewer-*gas*" to the noxious gases evolved by the putrefaction of stagnant sewage and deposits.

Dr. TRIPE called attention to the recommendation of the Royal Commissioners on Hospitals for Infectious Diseases, that medical officers of health be authorised to order the removal of patients thereto.

ACADEMY OF MEDICINE IN IRELAND.

SUB-SECTION OF STATE MEDICINE.

THURSDAY, FEBRUARY 8.

C. A. CAMERON, M.D., President, in the Chair.

THE PRESIDENT delivered an introductory address, dealing at considerable length with the subject of public hygiene from the earliest times, and referring particularly to the sanitary laws and their administration in foreign States. In Plato's "Ideal Republic," in the writings of Xenophon, Hippocrates, and in the theocratic legislation of the Jews, were the earliest references to sanitary laws and the duties of the professor of preventive, as compared with curative, medicine. In the middle ages little was done to promote the public health. The first general Public Health Act passed in the United Kingdom dealt exclusively with Ireland, and came into operation in 1818—a most valuable Act. The Towns Improvement Act of 1847 also dealt only with Ireland, and some of its sanitary provisions were superior to those of the Public Health Act of 1878. The fatal defect was the purely permissive nature of its provisions. The various Sanitary Acts were reviewed in detail, and praise was given to the Irish Registrar-General for showing the death-rate per thousand persons in sixteen different classes of society in Dublin in his weekly returns since January last. The sanitary organisations of the chief continental States and of the United States were fully described. Except in

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Scandinavia, they were inferior to the British sanitary administration. The municipal authorities had very little power, and the sanitary police were altogether under the control of the Government. In some Belgian and French towns municipal bureaux of health had recently been instituted somewhat on the model of the British local boards of health. In one department of public health—namely, the systematic inspection of food, drugs, and poisonous colours—the sanitary authorities of France, Germany, Belgium, and Holland were more vigilant and active than is the case in the United Kingdom. In Holland a most severe system of compulsory notification of infectious diseases existed.

Dr. GRIMSHAW, Registrar-General for Ireland, congratulated the Academy on establishing in connexion with it a Department of Public Health. He then read a paper on "Some Points concerning the Relations between Census Statistics and Health Statistics." Having referred to the misuse of statistics, and their consequent depreciation in the minds of many persons, he dwelt forcibly on two points. First, on the errors in calculating death-rates on estimates of population founded on the rate of increase between census periods. He showed that in Ireland it was wrong to treat the town population as stationary, as producing errors in death-rates, which, however, were not greater than those founded on estimated populations. He pointed out that estimates founded on the number of inhabited houses were also liable to serious error. With the view of classifying the population into various social grades or "strata," he made observations on the value of a "social" census, and said that, at the suggestion of the Dublin Sanitary Association, such a census had been compiled for the Dublin Registration District, so that now it was possible to strike death-rates for various social grades of the community in that district. Since the commencement of the present year these death-rates had been struck for each year, and as the result of the experiment, during the four weeks it was in operation, the death-rate was as follows, as compared with a total death-rate of 30·6 per 1000:—Professional and independent class, 22·45; middle class, 25·4; artisans and petty shopkeepers, 26·1; general service class and workhouse inmates, 37·2 per 1000.

The PRESIDENT of the COLLEGE of PHYSICIANS asked whether the increase in the population in 1877-78 depended in any way on the state of the harvest. To him the social aspect of the statistics initiated by the Registrar-General was a new phase, and of enormous interest.

Dr. MACSWINEY considered statistics of the duration of life of various classes would have a most important bearing upon life assurance. The present life tables worked injuriously to the insurer. From Dr. Grimshaw's statistics it would appear that the actual expectation of life in some classes is much greater than in others, and thus the premium payable on a policy of life assurance, instead of being settled by an estimate based on the general statistics of deaths, would depend rather on the social position of the individual as the important factor.

Dr. J. W. MOORE expressed his sense of the importance of the two points in Dr. Grimshaw's paper—first, in regard to the erroneous calculation of the changes in population consequent on the distant periods at which the census was taken; and secondly, the tabulation of the social position of the population concerning death-rate. Both points were carefully attended to in certain northern nations, local estimates being made every two years, particularly in Copenhagen. He took exception to the grouping of the wives and children of the artisans in the different classes, as erroneous statistics would result. He instanced the high mortality among the knife-grinders in Sheffield from the disease called knife-grinders' rot. In that particular trade, if they distributed the mortality over the wives and children, the estimate would be a false one. He would therefore group together the wives and children as belonging to the artisans generally, and so with the wives and children of the middle and upper classes. Thus the individuals themselves, who bore the heat and toil of the day in the various occupations, would form the factors of the death-rate.

The CHAIRMAN thought that to group the wives and children of artisans would involve too great minuteness of detail, and would be unnecessary in presence of the admirable statistics on the mean expectation of life as to persons of all ages founded on two millions of years of life in connexion with life assurance in the manuals of the Odd Fellows Community. Men seldom insured their lives before twenty-one or twenty-two, and from the time a man started at a particular trade until he died there was a certain amount of information as to his mean expectation of life at any particular period. But they had no such information with regard to whole classes of the population, their wives and children. He thought, therefore, Dr. Grimshaw's classification was admirable. The death-rate of Dublin was, in his opinion, greatly influenced by the relatively large population of poor people in the city in comparison with English and Scotch cities; and if there were statistics like those which the Registrar-General had collected in the last four weeks, these would be data to compare the sanitary condition of Dublin with that of those cities. The income-tax of Dublin was greatly exceeded by that of English and Scotch cities of the same population, showing that Dublin was the poorer. Dr. Grimshaw's statistics would in a year or two prove the truth of his opinion.

Dr. GRIMSHAW replied: He did not think the harvest had anything to do with the increased population—an estimated increase in 1876 of 10,528, and in 1877 of 7613,—but that it was due to the labour market in America being then extremely low; and so when the labour market rose, towards the end of 1879, the movement of the population to America increased, and was stimulated by the bad harvest here. As to Dr. MacSwiney's point concerning life assurance, he had asked a number of people connected with assurance companies whether they really considered the high death-rate in Dublin had any effect in increasing the premium, and they said not, that assurance business paid as well in Dublin as anywhere else. As to Dr. Moore's point, he submitted that the death of a tradesman, for instance, from knife-grinders' rot affected his family, as the family might then starve. The Chairman's point about the income-tax he did not consider sound. Income-tax was paid by persons of great incomes. There was a large class of persons in English towns with enormous incomes from £20,000 to £40,000 a year, while there were few such in Dublin, and as persons with from 10s. to £2 a week paid no income-tax the amount of income-tax was no index of the death-rate. The chances of life to a man's family with £1000 a year were quite as good as in the case of a man with £100,000. At a certain level of comfort there was no difference in the risk to life. Mr. Wilson, of his office, had two years ago suggested the social classification adopted.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, March 5, 6, 7, and 8, the following candidates were successful:—

For the Licence to practise Medicine—

Baker, George Lowbridge, London.
Barry, Thomas David Collis, Liverpool.
Gormley, John William, Drogheda.
Howard, Timothy, Sandymount, Dublin.
Rowe, William John Vivian, Rathgar, Dublin.

For the Licence to practise Midwifery—

Baker, George Lowbridge.
Gormley, John William.
Hamilton, William Robert, M.D., M.Ch. Royal Univ. Ire., Fivemiletown, co. Tyrone.
Hoey, John Colclough, Kingstown, co. Dublin.
Howard, Timothy.
McGee, William, Donnybrook, co. Dublin.
Rowe, William John Vivian.

The following Licentiates in Medicine, having complied with the by-laws relating to Membership, pursuant to the provisions of the Supplemental Charter of December 12, 1878, have been duly enrolled Members of the College:—

Nolan, Andrew O'Kelly, Licentiate 1865, Gort, co. Galway.
Blake, Richard Marlay, Licentiate 1876, Dundalk.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 8:—

Bennett, Frederick William, Princess-road, Leicester.
Collins, Edward Treacher, 1, Albert-terrace, Regent's-park.
Crocker, John Hedley, Gunnislake, Calstock, Cornwall.
Evans, William Arnold, 14, Burngreave-road, Sheffield.
Horrocks, William Henry, 18, Great Measby-street, Liverpool.

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Jones, John Hervey, Eccles, Manchester.
Oliver, Franklin Hewitt, Maidstone.
Reynolds, Ernest Septimus, 2, Seymour-grove, Old Trafford, Manchester.
Rowland, John Jones, 19, Argyle-square, W.C.
Slader, George William Burgess, Pendilo, Amroth, Pembrokeshire.
Walker, Joseph, Kirkby, Liverpool.

The following gentlemen also on the same day passed their Primary Professional Examination :—

Satchell, Charles George, University College Hospital.
Spreat, John Henry, St. Bartholomew's Hospital.

And on the 1st inst. :—

Williamson, Herbert Holdrich, University College Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

Bateman, Hinton E., M.R.C.S., L.R.C.P.—House-Physician to the Royal Hospital for Diseases of the Chest, City-road, *vice* Mr. R. J. Collyns, whose appointment has expired.

Evans, J. Fenton, M.B.—House-Physician to the Bristol Royal Infirmary, *vice* Mr. J. Paul Bush, who has been appointed House-Surgeon.

BIRTHS.

Cunningham.—On February 6, at Blackett-place, Edinburgh, the wife of Surgeon-General J. P. Cunningham, A.M.D. (retired), of a daughter.

Fisher.—On March 7, at West Walks, Dorchester, the wife of Fred. Bailey Fisher, M.R.C.S., L.R.C.P., of a daughter.

Greenfield.—On March 9, at 7, Heriot-row, Edinburgh, the wife of William Smith Greenfield, M.D., F.R.C.P., of a son.

Harington.—On February 14, at Secunderabad, India, the wife of H. N. V. Harington, L.R.C.P., I.M.D., of a son.

Stewart.—On March 11, at Radcliffe-gardens, South Kensington, the wife of Howard D. Stewart, L.R.C.P., of a daughter.

Webb.—On March 19, at Windsor, the wife of Wm. Wilfrid Webb, M.B., Bengal Army, of a son.

Whipple.—On March 12, at 4, Chichester-street, St. George's-square, the wife of Surgeon J. H. C. Whipple, Coldstream Guards, of a daughter.

MARRIAGES.

Bruce—Quarrell.—On February 14, at Umballa, Punjaub, India, Lewis Stanhope Bruce, Deputy Surgeon-General Bombay Army, to Ellen Mary, eldest daughter of W. C. Quarrell, solicitor, of Barbourne, Worcester, etc.

Buckell—Buckell.—On March 7, at Salisbury, Arthur Edward Buckell, M.D., third son of Leonard Buckell, M.D., of Chichester, to Ellen Maria, third daughter of the late W. Buckell, of Salisbury.

Tidbury—Henderson.—On March 1, at La Valetta, Malta, James Tidbury, Surgeon Army Medical Department, to Agnes, youngest daughter of the late Robert Henderson, Esq., of Glasgow.

Weddell—Cumming.—On March 14, at Crouch Hill, William Henry Weddell, M.R.C.S., to Jane Eliza, youngest daughter of the late John Cumming, Glenelg, South Australia.

DEATHS.

Broadbent, Charles William, fifth son of John Broadbent, M.R.C.S., at South Collingham, Notts, on March 8, aged 24.

De Voogt, Johanna Gosewina, wife of J. E. De Voogt, M.D., at Pau, France, on March 2.

Dunbar, Georgina Fairlie, wife of Surgeon-General J. A. Dunbar, H.M. Bengal Army, at 2, The Cedars, Clapham Common, on March 6, aged 60.

Field, Norman George, eldest son of George P. Field, M.R.C.S., at 31, Lower Seymour-street, Portman-square, on March 9, in his 8th year.

Gordon, Lilian Forbes, daughter of John Gordon, M.D., at 10, Amersham-road, New Cross, S.E., on March 10, in her 3rd year.

Hunter, Reginald Guyer, infant son of Surgeon-General Hunter, M.D., Hon. Surgeon to the Queen, at 21, Norfolk-crescent, Hyde-park, on March 11, aged 12 months and 3 days.

Jacobs, Henry, F.R.C.S., at 3, Russell-road, Kensington, on March 8, aged 63.

Laycock, William, M.R.C.S., at Stonebridge Park, Willesden, on March 8, aged 73.

Lowry, Thomas Harvey, M.D., late R.N., at Malling Place, West Malling, Kent, on March 8, aged 65.

Payne, George Speke, M.R.C.S., formerly of Andover, Hants, at East Peckham, Kent, on March 4, aged 76.

Pilkington, William Henry, M.D., J.P., at Clayton House, Clayton-le-Moors, on March 7, aged 62.

Pollard, George E., L.R.C.P., L.R.C.S., eldest son of E. W. Pollard, M.R.C.S., of Brompton-square, S.W., at Corby, Lincolnshire, on March 11, aged 30.

Powell, William, M.R.C.S., at Hayes Cottage, 77, Water-lane, Brixton, on February 28, aged 74.

VACANCIES.

Cambridge Friendly Societies' Medical Association.—Principal Medical Officer. Salary £175, with house free of rent, rates, and taxes. Candidates must not be more than forty-five years of age. Applications, stating age, qualifications, whether married or single, and with testimonials, to be sent to Mr. W. P. Littlechild, 5, Queen's-lane, Cambridge, of whom further information may be obtained, not later than March 23.

Charing Cross Hospital.—Assistant Physician and Assistant Physician Accoucheur. (*For particulars see Advertisement.*)

General Infirmary, Hertford.—House-Surgeon and Secretary. (*For particulars see Advertisement.*)

Great Northern Hospital, Caledonian-road, N.—House-Surgeon. (*For particulars see Advertisement.*)

Liverpool Northern Hospital.—Assistant House-Surgeon. Salary £70 per annum, with residence and maintenance in the Hospital. Candidates must possess a medical and surgical qualification from one or more British colleges or institutions recognised under the Medical Act. The election will take place on April 6, at 12 noon, when selected candidates, to whom notice will be sent, are to be in attendance. Applications and copies of testimonials to be addressed to the Chairman of the Committee, not later than March 31.

Manchester Royal Infirmary, Dispensary, and Lunatic Asylum.—Honorary Assistant-Physician. (*For particulars see Advertisement.*)

Nottingham Dispensary.—Resident Surgeon. Salary £200 per annum, with furnished apartments, coal, and gas provided in the institution. Candidates must be on the Medical Register as having obtained two qualifications (one to practise medicine and the other surgery) in the United Kingdom, and unmarried. The successful candidates must pledge himself to remain in office for the term of three years. Applications, stating age, with testimonials, to be sent to the Committee at the Dispensary before March 24. The election takes place on April 2.

St. Peter's Hospital for Stone and Urinary Diseases, etc., Henrietta-street, Covent-garden, W.—House-Surgeon. Appointment to be made for six months. Honorarium twenty-five guineas, board, lodging, and washing. Candidates must be M.R.C.S., and have held the position of house-surgeon at a public institution. Applications, with testimonials, to be sent in on or before March 21.

York Lunatic Asylum.—Resident Medical Superintendent. (*For particulars see Advertisement.*)

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Hailsham Union.—Mr. John Woods has resigned the First District: area 10,561; population 3040; salary £56 per annum.

APPOINTMENTS.

Atcham Union.—Edward Cureton, L.F.P.&S. Glasg., L.R.C.P., Edin. L.S.A., to the Workhouse.

Tynemouth Union.—Robert Anderson, M.D. and L.R.C.S. Edin., to the Cramlington District.

West Derby Union.—John J. Tisdall, L.R.C.S., L.R.C.P., L.M. Edin., as Assistant Medical Officer at the Walton Workhouse. Rowland Owen, L.R.C.S., L.R.C.P., L.M., as Assistant Medical Officer at the Walton Workhouse.

APPOINTMENTS FOR THE WEEK.

March 17. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Mr. H. H. Statham, "Music as a Form of Artistic Expression."

19. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Medical Society of London, 8½ p.m. Mr. Hugh Smith, "On a Case of Bigelow's Operation." Dr. Manson, "On Distoma Ringeri and Endemic Hæmoptysis."

20. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Pathological Society, 8½ p.m. Dr. Finlay—Epithelioma of Stomach, with Secondary Nodules in the Skin. Mr. Horsley—Adeno-Sarcoma of Testicle and Abdominal Viscera. Mr. A. Barker—1. Lymphatic Cyst; 2. Bladder producing Obstruction of the Ureters and Renal Disease. Mr. Clutton—Tumour of Skull and Bladder. Dr. Angel Money—Rheumatic Nodules, with Microscopic Specimens. Dr. Cavafy—Heart Disease and Rheumatic Subcutaneous Nodule. Dr. Drewitt—Rheumatic Nodules (two living cases). Dr. Davies-Colley—Sarcomatous Ulceration of the Back. Dr. F. Taylor—Sarcomatous Ulceration of the Back.

21. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

22. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

23. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, March 10, 1883.

BIRTHS.

Births of Boys, 1304; Girls, 1176; Total, 2480.
Corrected weekly average in the 10 years 1873-82, 2360·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	882	766	1648
Weekly average of the ten years 1873-82, corrected to increased population ...	920·6	895·9	1816·5
Deaths of people aged 80 and upwards ...	...	...	70

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	2	3	4	3	...	2	1	1
North ...	905947	1	5	4	3	9	1	4	...	2
Central ...	282238	...	5	2	...	3	...	1	...	1
East	692738	...	11	5	2	12	...	...	...	2
South	1265927	1	6	5	3	18	1	4	...	3
Total	3816483	2	29	19	12	45	2	11	1	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·948 in.
Mean temperature	38·8°
Highest point of thermometer	52·1°
Lowest point of thermometer	22·6°
Mean dew-point temperature	27·4°
General direction of wind	N.E. & N.
Whole amount of rain in the week	0·15 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 10, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Mar. 10.	Deaths Registered during the week ending Mar. 10.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2480	1648	21·7	52·1	22·6	33·8	1·01	0·15	0·38
Brighton	111262	67	48	22·5	51·0	23·0	33·5	0·84	0·26	0·66
Portsmouth ...	131478	85	44	17·5	...	...	...	...	...	...
Norwich	89612	46	44	25·6	...	...	...	...	...	...
Plymouth	74977	45	32	22·3	57·6	24·5	38·6	3·67	0·00	0·00
Bristol	212779	110	87	21·3	55·9	22·5	35·4	1·83	0·02	0·05
Wolverhampton .	77557	49	32	21·5	50·9	17·0	33·1	0·62	0·21	0·53
Birmingham ...	414946	276	190	23·9	...	...	...	...	...	...
Leicester	129483	65	48	19·3	50·2	17·5	33·2	0·67	0·31	0·79
Nottingham ...	199349	145	89	23·3	52·5	15·0	33·9	1·06	0·32	0·81
Derby	85574	66	30	18·3	...	...	...	...	...	...
Birkenhead ...	88700	64	41	24·1	...	...	...	...	...	...
Liverpool	566753	395	304	28·0	54·2	25·4	35·9	2·17	0·01	0·03
Bolton	107882	77	55	26·6	55·4	19·0	33·3	0·73	0·21	0·53
Manchester ...	339252	194	192	29·5	...	...	...	...	...	...
Salford	190465	130	73	20·0	...	...	...	...	...	...
Oldham	119071	67	62	27·2	...	...	...	...	...	...
Blackburn	108460	83	59	28·4	...	...	...	...	...	...
Preston	98564	74	63	33·4	...	...	...	...	...	...
Huddersfield ...	84701	51	34	20·9	...	...	...	...	...	...
Halifax	75591	42	32	22·1	...	...	...	...	...	...
Bradford	204807	124	75	19·1	54·4	19·8	34·9	1·61	0·54	1·37
Leeds	321611	209	157	25·5	56·0	18·0	36·3	2·39	0·55	1·40
Sheffield	295497	168	113	20·0	54·0	13·0	32·5	0·28	0·00	0·00
Hull	176296	119	91	26·9	54·0	10·0	32·7	0·39	0·70	1·78
Sunderland ...	121117	96	61	26·3	52·0	28·0	36·5	2·50	0·85	2·16
Newcastle	149464	93	70	24·4	...	...	...	...	...	...
Cardiff	90033	64	27	15·6	...	...	...	...	...	...
For 28 towns ...	8620975	5484	3801	23·0	57·6	10·0	34·5	1·39	0·30	0·76
Edinburgh	235946	114	87	19·2	52·9	28·4	37·2	2·89	0·23	0·58
Glasgow	515589	336	310	31·4	...	...	...	...	...	...
Dublin	349885	217	238	35·5	56·3	26·9	37·2	2·89	0·04	0·10

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·95 in. The highest reading was 30·54 in. on Sunday morning, and the lowest 29·57 in. on Thursday morning.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Temperance Appellations.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The alternative of *aquabibe* for those who object to be called hydropots is good as far as it goes; but the author of the suggestion will see that the word should be *aquabibs*. We do not write "aquaduct."

I am, etc., D.

[As far as our own experience goes, we have never seen the word "aqueduct" in print.—Ed.]

A Country Practitioner.—You will find a very good abstract of the principal laws affecting the medical profession in Churchill's "Medical Directory"; amongst them those relating to certificates in lunacy.

Sanitary Certificates, Brighton.—Touching the suggestion of issuing official certificates as to the sanitary state of houses in the town—to which we lately drew attention—the Works Committee of the Town Council, to whom the matter was referred for consideration, report that, in their opinion, no authority exists for granting such certificates.

Jerry Buildings.—Several summonses have been issued at the instance of the Wandsworth Board of Works, in reference to the bad drainage of houses in Falcon-road, Battersea. The owners of these dwellings have, fortunately, not escaped the vigilance of the district officer.

Police Appointments.—Mr. Other Windsor Berry, M.R.C.S., L.S.A., etc., of Bracondale House, Wimbledon, has just been elected Surgeon to the V Division of the Metropolitan Police in the vacancy occasioned by the resignation of Mr. Walter Chapman, F.R.C.S., of Lower Tooting.

Havenscroft Convalescent Home.—At the anniversary meeting of the Gilmerton Convalescent Homes, lately held, it appeared that since the home for adults was opened, four years ago, upwards of 500 patients had been received, and in the great majority of cases they had gone back to their homes with renewed health and strength. Though the adjoining Children's Convalescent Home had been open for less than two years, yet upwards of 400 children had already been received for periods varying from two to four weeks. When this Home was projected, fears were expressed that it might interfere with the objects of the Sick Children's Hospital, but in practice it had proved a much valued auxiliary to that institution.

Ajax.—In Birmingham there are twenty-two coffee-shops, and it is estimated that the weekly customers are between 130,000 and 140,000.

The Statistical Society.—The total number of medical practitioners in Churchill's "Directory" for the past year was 24,571. The total number of Members of the College of Surgeons, according to the last published Calendar of that institution, is 17,279, including 1186 Fellows, 621 of whom obtained that distinction by examination.

Artizans' Dwellings, Paris.—Efforts are about to be made with the view of solving the artizans' dwellings difficulty. One scheme suggested is that the city should raise a sum of about a million sterling—which it could do at 4 per cent.—and lay it out in the construction of convenient residences with plots of ground attached. The dwellings would be beyond the crowded limits of the city, and access would be obtained to them by a cheap service of tramcars. Under this scheme it is thought that working men and their families could get healthy and decent house accommodation at rents varying from £6 to £17 per annum.

The Walsall Cottage Hospital.—The annual report thankfully acknowledges the valuable services, gratuitously rendered, of the surgeons and sisters. The subscriptions and donations during the year amounted to £523 17s. 4d., against £500 13s. 10d. in the previous year.

Increase of Salary.—The Vestry of Hampstead has raised the salary of Dr. Greyson, Medical Officer of Health, from £125 to £150 per annum.

Mr. Smithson, Liverpool.—The number of candidates examined for the diploma of membership of the English College of Surgeons during the past collegiate year amounted to 666, of which number 254 were referred to further studies for six months.

The Friendly Societies actir.—In the private Bill being promoted this session by the Birmingham Corporation, one of the provisions has for its object the establishment of a sick, superannuation, and burial fund for the workpeople employed by the Corporation. This proposal has produced great consternation among the friendly societies. If the principle implied in this clause be admitted, there is, it is contended, no reason why railway companies and other large employers of labour should not take the same means of binding their workpeople to their service, and the reason for the existence of friendly societies might cease. Strenuous opposition to the Bill will be given now the clause in question has been discovered, although too late for the second reading.

New Workhouse Buildings.—The Guardians of the Wandsworth and Clapham Union have resolved upon the erection of a new workhouse, the estimated cost of which is between £50,000 and £60,000. The Lambeth Workhouse having become insufficient for the increasing requirements of the parish, has been enlarged by the addition of 180 beds, making up a total number of 1350 inmates.

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A Disgusted Member.—The College has no power to remove his name' however much his conduct in circulating such handbills appears to deserve it. The General Medical Council publishes a list of names and qualifications of those who have been erased from the Medical Register by their order.

A Worthy Example Imitated.—The good example set by the Viscountess Valentia, at Bicester, has been followed by the Hon. Mrs. Drummond, at Buckingham. A class of nearly forty ladies has met at the White Hart Hotel to go through a course of instruction in first aid to the injured in the hunting-field. The course consists of five lectures. By special request the instructor to the Bicester class, Dr. H. Crookshank, of Mayfair, went down specially from London to deliver the lecture, which will be continued weekly.

Brighton: the Proposed Park.—The time has expired for petitioning against the Bill for confirming agreements for the purchase by the Corporation of Preston Park, in order to adapt it for a public park; and no petition having been presented against the Bill, it will pass through the House of Lords unopposed.

Newcastle-under-Lyme.—The borough is now declared free from the epidemic of small-pox which has prevailed for six months. Thirty-six cases have been under treatment, and nine deaths have occurred. The last patients at the hospital were discharged last week.

Important to Milk Dealers.—At the Widnes Police-court, fourteen milk-dealers were summoned last week for keeping unregistered milk-houses. From the evidence it was shown that many of the defendants had been warned that they ought to register, and on the Act coming into force large placards were circulated through the district concerning it. The cases having been proved, the magistrates said it seemed that some of the defendants appeared to have been under the impression that personal registration was sufficient, but they must clearly understand that, on changing their premises, the new building in which the sale was carried on must be registered. The local authority had to be satisfied that the building was a proper one in which to carry on the sale of milk. All the defendants were liable to a fine, but the Bench were of opinion that the local authority had not properly done their part in bringing the Act of Parliament under the notice of dealers in the district. The Act provided that the authority should from time to time give public notice by advertisement in the newspapers circulating in the district concerning the Act. Clear evidence of this having been done had not been given, and the magistrates had therefore decided not to convict. The summonses were consequently dismissed.

M.A. Oxon.—The boat-race was won by Oxford in 1881-82. Mr. Darbishire is a member of the College; he is an old Bartholomew's man.

The late Epidemic at Bangor: Medical Fees.—The solicitor to the Local Board, who had been consulted as to the liability of the Board to pay the doctors' fees for attendance upon patients at the fever hospitals during the late epidemic, has advised that the Board was responsible for payment in respect of patients sent to the hospitals who were unable to pay themselves. In the case of patients in a position to pay he advised that they, and not the Board, were responsible to the doctors. It was resolved to act upon this advice.

The Doctor's Claims, Bangor.—At the last meeting of the Local Board it was decided to offer, without prejudice, £219 14s. in settlement of the claims by the medical men for attendance upon patients in the fever hospitals during the late epidemic.

A Generous Gift.—At a meeting of the Local Authority of Uphall, the chairman, Mr. Robert Bell, in the name of himself and Mrs. Bell, presented to the parish the titles of the large fever hospital recently erected at Broxburn, as a free gift, to be used for the treatment of infectious diseases. The building is admirably adapted for such a purpose, and has been erected at considerable cost.

Paterfamilias.—The climate of Kentucky is very mild and salubrious. The mean annual temperature ranges in different parts of the State from 50° to 55° Fahr. The extreme range is less than in the States north and west. The healthfulness of the climate is attested by the low death-rate, and by the strength and vigour of the population.

Relative Longevity.—The relative longevity in various occupations has not yet been made out from the census returns of 1881. In 1851, out of every thousand persons between the ages of twenty-five and fifty-five, forty died on the average. Classified according to the most favourable mortality, and increasing downwards, the returns gave the following result:—Below the average—1, merchants; 2, weavers; 3, cobblers; 4, carpenters; 5, blacksmiths; 6, labourers. Above the average—7, miners; 8, tailors; 9, bakers; 10, butchers; 11, liquor dealers.

The Inequality of the Law.—"When my grocer poisons me," says a French journalist, "they simply fine him; but when I poison my grocer, they send me to the guillotine!"

G. L. C., Brompton.—The object of the Cemeteries Bill, just published, is to apply to cemetery arrangements, generally, the principle on which the Burial Laws Amendment Act, 1880, is based. *Inter alia*, it relieves burial authorities—whether burial boards, sanitary authorities, or companies—from the existing obligation to divide burial grounds into consecrated and unconsecrated parts, and to apply for consecration, and also to provide consecrated chapels.

Beer-drinking in Bavaria.—According to a report of Mr. Coope, Secretary of Legation at Munich, the old antagonism between the fiscal authorities and the brewers and drinkers of the national beverage is still in full force. From a comparative table of the beer taxes of different countries, compiled by Mr. Coope, it appears that Bavarian beer-drinkers are, after all, better off in this respect than their English brethren, though worse off than their German neighbours. The total of such imposts on each hectolitre of beer is estimated to be in most parts of North Germany equal to 1s., while in Bavaria it is 3s., and in England 3s. 6d. In Austria it is even as much as 4s. 9d., while in Italy it is 5s. 8d.; and in Norway, in which sober country the beer taxes attain a maximum, it is 6s. 5d.

H. F. S.—Sir John Soane was architect to the Royal College of Surgeons, opposite to which, in Lincoln's-inn-fields, stands his Museum, which may be inspected on Tuesdays and Thursdays during the present month.

A Physician and his Donkey.—At his own expense a physician tells a story about a small donkey he sent to his country house for the use of his children. One of his little daughters going out with the nurse to admire the animal in the paddock, was distressed when the donkey brayed dolefully. "Poor thing, poor thing!" she exclaimed, and turned to her nurse and said, "Oh, I am so glad! Papa will be here on Saturday, and then it won't feel so lonesome."

St. John Ambulance Association.—Since the opening of the present winter session, 2725 certificates have been awarded to men and 1639 to women, being a very considerable increase on former years, especially as regards male pupils. Mr. N. Barrington Kennett, one of the deputy-chairmen, has proceeded to Bombay to open a centre there.

State Prisons, America.—From the *Chicago Tribune* of a recent date, it appears the mortality per annum per 1000 in twenty-seven state prisons averages no less than 25 per 1000, ranging from 3·048 in Wisconsin to 77·625 in Mississippi; while small prisons, like Tennessee and Texas, containing apparently only some 500 convicts, have 108 and 122 deaths in the year. The Southern prisons seem those in which health deteriorates, and this may be accounted for by climatic considerations, but generally the death-rate is striking. Even in New York the mortality of Clinton Prison is 20·68.

Paddy again!—When a gentleman at a banquet was speaking of a friend of his who had the small-pox twice, and died of it, an Irishman who was present inquired whether the man died of the first or of the second attack.

COMMUNICATIONS have been received from—

Mr. J. Dixon, Dorking; Dr. Robinski, Berlin; The Registrar of the Apothecaries' Hall, London; The Secretary of the Royal Hospital for Diseases of the Chest, London; Dr. Irwin, London; The Rev. N. K. Hobart, Dublin; Messrs. Cassell, Petter, and Galpin, London; M. Henry Kimpton, London; Dr. Norman Chevers, London; Dr. E. F. Willoughby, London; The Secretary of the Dental Hospital, London; Mr. S. J. Hutchinson, London; Mr. J. Chatto, London; The Honorary Secretary of the Medical Society of London; Dr. A. T. Thomson, Glasgow; The Registrar-General for Scotland, Edinburgh; Dr. A. B. Garrod, F.R.S., London; Dr. Percy Boulton, London; Mr. Watson Cheyne, London; Dr. J. W. Moore, Dublin; Mr. T. M. Stone, Wimbledon; Dr. Mercier, Dartford; Dr. Brookhouse, Nottingham; The Honorary Secretary of the Pathological Society, London.

BOOKS, ETC., RECEIVED—

Allen's Human Anatomy, sections i., ii., and iii.—A Compend of the Practice of Medicine, by D. E. Hughes, M.D.—Questions on Human Anatomy, by S. O. L. Potter, M.A., M.D.—Report on the Sanitary Condition of the Whitechapel District for the Quarter ended December 30, 1882.—The Photography of Microscopic Sections, by James Whitson, M.D., F.F.P.&S.G.—The Agricultural Depression at Home, etc., by John Pearce—What to do in Cases of Poisoning, by William Murrell, M.D., M.R.C.P.—Indigestion, Biliousness, etc., by J. Milner Fothergill, M.D.—Smoke Abatement—Note sur les Microbes de la Blennorrhagie, par le Dr. Frédéric Eklund—Reasons against a General Law of Compulsory Notification of Infectious Diseases—Situation de Réseaux Téléphoniques—Rapport sur l'Emploi Médical de l'Eau Minérale Naturelle, etc., de Saxon, Suisse, Valais, par E. Reichenbach—Auscultation and Percussion, by Samuel Gee, M.D.—How to Examine the Chest, by Samuel West, M.D., M.R.C.P.—A Practical Treatise on Diseases of the Skin, by James Nevins Hyde, A.M., M.D.—A Treatise on Fractures, by Lewis A. Stimson, B.A., M.D.—Annual Report of the Barnwood House Hospital for the Insane, near Gloucester, for 1882—Congrès International de Médecins des Colonies à Amsterdam, Septembre, 1883.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Gazzetta degli Ospitali—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—New York Medical Journal—Australasian Medical Gazette—Glasgow Herald—Philadelphia Medical News—Ciencas Medicas—Australian Medical Journal, August, September, and November—Oxford Chronicle and Berks and Bucks Gazette—Journal of Cutaneous and Venereal Diseases—Western Medical Reporter—North Carolina Medical Journal—Detroit Lancet—Boston Home Journal, March 3—Philadelphia Medical Times.

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ORIGINAL LECTURES.

THE LUMLEIAN LECTURES
ON
URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

By ALFRED B. GARROD, M.D., F.R.S., F.R.C.P., etc.,
Consulting Physician to King's College Hospital.

Lecture I., Part II.

Let us pass on to another point in the physiology of uric acid. How can we explain the fact that, in proportion to the weight of their bodies, some animals excrete so large a quantity of such an insoluble principle as uric acid, or even as urate of ammonium, the one requiring 8000, the other 2400 times its weight of water at the body temperature to dissolve it? The human subject excretes, on an average, in the twenty-four hours, about one part of uric acid for each 120,000 parts of his weight: or, estimating the weight of a man at about ten stone and a half, throws out about eight grains of this acid daily. This is an average arrived at from a very large number of observations, which you will find detailed in Dr. Edmund Parkes's valuable work.

In the case of the lower animals, I could find no facts on record relating to this subject, and therefore had to undertake to supply them for myself by means of the following observations and experiments. I had a cage constructed with a glass floor, so as to be able to collect the whole of the excreta of the twenty-four hours from the bird that occupied it, and from such I carefully ascertained the quantity of uric acid—no difficult process.

1. A canary bird was kept in the cage, its food consisting of a supply of canaryseed, millet, and hemp, together with water. In twenty-four hours, I found that the excretion of uric acid was 2·1 grains, and the weight of the bird was 277 grains, so that the ratio of the uric acid excreted in twenty-four hours to the weight of the bird itself was 1: 132·2.

2. An Australian grass-parrakeet was next kept for twenty-four hours in the same cage, and fed on the same food. The weight of the excreted uric acid was 3·1 grains; that of the bird 415 grains. The ratio of the uric acid to the weight of the bird was 1 : 133·8.

Had I calculated the weight of the bird from the weight of its excreted uric acid, taking the ratio in the case of the canary for my standard, I should have estimated the weight of the parrakeet at 409 grains instead of 415, a calculation not very far from the truth for such an estimate, when we consider that a few seeds more or less in the crop of the bird would have covered the difference. The observation was repeated with a second parrakeet of the same weight, and the same result was obtained, viz., 3·1 grains of uric acid in the twenty-four hours. In the sparrow-hawk, eating an enormous quantity of flesh, Cazeneuve found the average daily excretion about 34 grains; and, estimating the hawk (he does not give the weight) at nine and a half ounces—a weight which is probably above the true average—the ratio of the weight of uric acid to that of the bird would be 1 : 110. Let us, then, take 1 : 120 as a fair ratio, including in the calculation both carnivorous and graminivorous birds, and we arrive at the somewhat startling conclusion that the bird, in proportion to its weight, excretes 1000 times more uric acid than man.

In cold-blooded animals, as the reptiles, it is difficult to perform such observations as we have now detailed; but there is one observation bearing upon this point which I have come across. Dr. Busch, more than twenty years ago, found that the kidney-cells in a common vineyard snail contained a granular matter, consisting of uric acid or an urate, which required fifty times the weight of the body of the snail to dissolve it.

In pursuit of this subject, I made further observations on the relation between the daily weight of the uric acid excreted, and the weight of the renal organs themselves. In the case of a lark I found that the ratio of the weight of bird to that of kidneys was 125 : 1, in that of a linnet 118 : 1, in that of a turkey 172 : 1, but this latter bird was in a fattened condition, so the ratio may be somewhat misleading. Taking the lark and linnet, therefore, after calculating their daily excretion of uric acid, we find that it amounts to more than the weight of the kidneys of the same birds. Let us reflect on these facts. Is it possible to conceive, if we assume that the uric acid first exists in the blood, that the amount of this fluid passing through the renal organs could excrete as much of this principle as we have found, as a fact, to be thrown out? True, in the case of man, who excretes only $\frac{1}{1000}$th part of the uric acid thrown out by birds, we could easily imagine this to be the process; but the more we consider the facts about birds, the more difficult does it become to believe in this explanation; and, if we go further, and hold it impossible, then the first view as to the formation of uric acid appears to me to fall to the ground.

As this question is of the utmost importance to physiology, and as its decision must necessarily be followed by weighty consequences, it is essential that nothing should be left undone which might help us to the truth. With this object before us, there arise many points which must be determined; and, first of all, we must ascertain the condition of the blood of various animals, especially with regard to the presence or absence of uric acid. I have obtained many such data from observations made during a long course of years. I have several times examined the blood of man in health, and many hundred times in various diseases; and the conclusion at which I have arrived is this: that, in absolute health, the uric acid in the blood is inappreciable by our tests, and that this fluid does not contain the $\frac{1}{1000000}$th part of its weight of the acid; while in gout the blood is very rich in this principle, as I showed in 1847; that uric acid is also found, in much smaller, but still appreciable quantities, in individuals who who are developing a gouty condition, or who are under the poisonous influence of lead. This subject, however, I have already discussed elsewhere.

In the blood of various other mammals, as the ox, sheep, and pig, I have never found a trace of uric acid by the uric acid thread test.

I have also examined the blood of several species of birds, as the turkey, common fowl, pigeon, and duck, repeatedly in some instances, and have found it as free from uric acid as that of the mammal.

The turtle is the only reptile whose blood I have analysed; here I found oxalates present, but no uric acid. As seen in this country, however, the turtle can hardly be regarded as being in a normal condition, having in many cases taken no food for weeks, or even months. The only other observation on the blood of reptiles that I know of is one by Dr. John Davy, who examined the blood of two snakes (*Viper communis*), but failed to detect any uric acid in it. The result of these observations must be looked upon as somewhat striking, and even startling, to those who regard the uric acid in the urine as simply a filtration from the blood, when we remember that the blood of birds, whose urinary excretion is almost entirely composed of uric acid, is as free from that principle as the blood of the herbivorous mammal, in whose urine it is usually difficult to detect a trace; or, again, that the blood of the bird is as free as, and often freer than, that of man from uric acid, though it excretes daily about $\frac{1}{120}$th its own weight of that principle, man eliminating not more than $\frac{1}{120000}$th.

Let us go a step further in the inquiry, and let us assume, for the sake of argument, that the blood of a bird contains, which it certainly does not, $\frac{1}{20000}$th of its weight of uric acid—a quantity which, if present, could easily be detected by my so-called "uric acid thread test"—and let us make a rough calculation of the quantity of blood which passes through the kidneys in the twenty-four hours. The figures contained in the table may be regarded as sufficiently correct for the purpose of illustration.

I assume the weight of the bird to be represented by a

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certain figure, for convenience sake, and all the appended numbers have relation to that number.

TABLE—*Illustrative only.*

Weight of bird	277·0
„ heart	4·0
„ kidneys	2·5
„ blood in body (calculated at 8·5 per cent. from starting)	23·5
Weight of uric acid excreted in twenty-four hours	2·1
Weight of blood thrown from left ventricle at each beat of heart	1·0
Pulsations of heart in twenty-four hours (120 per minute)	172,800
Weight of blood passing through kidneys at each beat	0·10 (?)
Weight of blood passing through kidneys in twenty-four hours	17,280

Assuming that one-tenth of the blood that leaves the left ventricle at each beat passes through the kidneys, in which case nearly seven thousand times the weight of the organs would pass through them in twenty-four hours, then the whole of that quantity would not contain one-sixth part of the uric acid excreted during the same time by the bird. We have, in this illustration, given every possible advantage to the supporters of the first theory; for we have assumed not only that what I should imagine to be a most abnormally large amount of blood passes through the kidneys, but also that the blood contains a much larger quantity of uric acid than is really the case. Add to this that we have assumed, in the calculation, that no trace of uric acid escapes filtration in every passage of blood through the renal vessels—a most improbable assumption, seeing that, if arsenic is given to a person, and after a few days its administration is stopped, the metal can be detected in the urine for two, three, or even four days afterwards, although in constantly decreasing amounts. This I observed for myself many years ago. We shall soon have occasion to see what the filtering powers of the kidneys really amount to; in other words, how much uric acid they can excrete from a blood which is known to be rich in that principle.

Before passing on, I would say a word with respect to the data contained in the above table. The bird was weighed with its feathers on; the weights of the heart and kidneys were the mean of several observations which I had made; the weight of blood in the body was calculated from the experiments of Welcker on the starling, forwarded to me by Dr. Michael Foster; and the number of pulsations of the heart, and the quantity of blood thrown from the left ventricle at each, were the result of calculations from data obtained from different sources. I am desirous, however, that the table should be regarded as being one made only for the purpose of illustration.

The next point is to ascertain what takes place when uric acid, in the form of one of its salts, is administered by the stomach or injected into the blood. In 1849, I gave urates of ammonium, sodium, and potassium, with the following results.

A man was passing, on an average, 8·07 grains of uric acid in the twenty-four hours, taking no drug. Urate of potassium was given in five-grain doses three times a day. The dose was afterwards increased to ten grains. During the time he was taking the urates the average excretion of uric acid was 8·25 grains—*i.e.*, practically the same as before. I find appended to this case a note of no little interest, viz., that, during the administration of the urates, the man, who had some eczema, experienced a great increase of skin-irritation, which subsided on their discontinuance. This goes far to prove, first, that the substance was absorbed into the blood; and, secondly, that some forms of eczema are closely connected with the presence of uric acid in the blood. To another man I gave, at first urate of sodium, and afterwards urate of ammonia, in doses of fifteen to thirty grains, without the slightest detectable increase of uric acid in the urine.

Subsequently, Wöhler and Frerichs found that, when urates of potassium and sodium were taken, there was an increase of the urea and a sediment of oxalate of calcium in the urine, but no augmentation of the uric acid.

Neubauer found that, in rabbits, the exhibition of large quantities of uric acid was followed by a corresponding increase of the excreted urea, but no uric acid was discovered in the urine. The injection of the urates into the veins was followed by the same negative result as ensued when uric acid was given by the stomach.

If the kidneys act merely as strainers off from the blood of the uric acid brought to them by that fluid, how can we explain these facts? Is it not impossible to do so? If, however, we regard the kidneys as the producers or manufacturers of uric acid from matters brought to them by the blood, then all difficulty with respect to the facts above mentioned vanishes, and we see at once why the amount of uric acid has no necessary relation to the character of the food, but depends on the activity of the formative cells, and the quantity of pabulum brought to them during a given time. Before we proceed to discuss another point in the physiology of uric acid, you must allow me for the moment to assume, what I shall afterwards have an opportunity of proving, that, in the kidney-cells, this acid exists combined with ammonia, or, at any rate, with a base yielding ammonia, and not with any fixed base, as soda, potash, or lime; but that, when it is found in the blood, or deposited in the tissues, either of man or the lower animals, it is in the form of urate of sodium.

As far back as the year 1847, when I first found uric acid in the blood, I proved that it was in the form of the soda salt; this was shown not only by its crystalline form, and by its leaving when burnt an alkaline ash, which imparted to flame the peculiar colour, but also by other chemical tests; and subsequent observations have abundantly confirmed what was then first shown.

Before the beginning of this century, Wollaston had proved that the deposits which occur in gouty subjects, and are commonly called chalk-stones, are composed of this same urate of sodium; and there are on record a few instances of such deposits in the lower animals, some natural, others produced artificially by arresting the elimination of uric acid, which latter have been found to have the same composition as the others. A few years ago an interesting case of this sort came under my notice, which, as it strikingly illustrates the question which we are now considering, I will relate as concisely as possible.

An Australian grass-parrakeet, which had been quite recently imported, came into my possession, and within a few weeks of its arrival I found on the digits of its claws little white nodules or protuberances, most of them larger than a pin's head. The bird soon sickened, and slowly died. It was afterwards found that each of these nodules contained a cheesy matter, which, under the microscope, exhibited the appearance of being made up of innumerable very fine needle-like crystals, polarising light with great intensity and, when chemically examined, yielding an abundance of uric acid, but no ammonia. When incinerated, it yielded the characteristic soda ash. The deposit was, therefore, composed of urate of sodium. It was afterwards discovered that not only were the digits of the claws studded with this matter, but that it extended along the shaft of each leg, and there was a long rod of the same substance in front of the cervical vertebræ, behind the trachea. On the board will be seen drawings showing not only the microscopic characters of the deposit, but also the appearance of the leg and claw. Unfortunately the kidneys of this bird were not examined till the contents of the abdomen were dried and shrivelled up.

Zaleski, in his work on the function of the kidneys, has given drawings of the post-mortem appearances of animals, in the various tissues of whose bodies deposits had been produced as a result of ligaturing the ureters.

Let us now see how these facts can be explained on one or other of the two theories of the formation of uric acid. On the first, it is not difficult to suppose that uric acid may be formed, either in that shape or as urate of sodium (at any rate, it would exist in the blood as the soda salt), and become deposited, under certain circumstances, in different organs and tissues of the body; but then comes the difficulty of explaining how it is that it is thrown out by the kidney combined, not with soda, but with ammonia. I cannot conceive any satisfactory explanation under this theory. I know of no chemical conditions which would render such a change possible, and would cause urate of sodium to be filtered through as urate of ammonium.

Let us now, for a moment, adopt the second view, and assume that urate of ammonium is produced in the kidneys,

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and that it sometimes becomes resorbed (the word, though uncommon, is the best expression of the process) into the blood after its formation. How is it that it then becomes changed into urate of sodium? There is no difficulty here, for I have shown that, when urate of ammonium is added to a solution containing a large excess of either phosphate or chloride of sodium, it is converted into urate of sodium, and will crystallise out as such. However, in order that I might remove all doubt about this fact in the case of blood, I made the following experiment:—I took a considerable quantity of the serum of the blood of a healthy pig, ascertained, by the "thread test," that it was practically free from uric acid, and then proceeded to add to it a concentrated solution of urate of ammonium. The serum was thereupon allowed to remain a short time at the temperature of the body, and subsequently dried on glass and scaled off. On searching for uric acid, it was separated easily in the crystalline form; not, however, as it had been added to the blood-serum as urate of ammonium, but as urate of sodium. All difficulty, therefore, as to the explanation of the change in the salt as it passes from the kidney-cells into the blood is at once removed, and it necessarily follows that the tissue-deposits which occur in disease must be composed of urate of sodium.

It may, however, be asserted that uric acid exists in the urine of man chiefly as urate of sodium, not as the ammonia salt, and that I have only assumed that it exists as urate of ammonium in the kidney-cells. The former of these assertions is doubtless true with regard to the urine of man and the carnivorous mammal. With reference to the latter, I must still ask that the truth of my assumption may be taken on faith for a short time, until I have an opportunity of proving it.

The explanation of the presence of urate of sodium in the urine is most simple, for urate of ammonium, excreted, as it is, in small quantities by man, meets at once with large amounts both of phosphate and chloride of sodium, and with mere traces of any ammonia salt. Hence the same change ensues as when urate of ammonium is dissolved in blood-serum, and it becomes converted almost entirely into urate of sodium. I have made many observations tending to elucidate this subject. If healthy human urine, dense in character, but not giving any deposit on cooling, has a hot concentrated solution of urate of ammonium added to it, it frequently throws down a copious precipitate, on being kept in the cold; this I have found to consist mainly of urate of sodium, thus showing that a similar change ensues whether the ammonia salt is absorbed into the blood or is sent forwards and united with the other constituents of the urinary excretion. There is no doubt that the urate deposit in urine must vary much, although, as a rule, it is mainly composed of the soda salt; for, if salts of magnesium or calcium, or even potassium, are contained in the urine, some of the soda salt will be replaced by urates of these bases; and, again, if the urine becomes ammoniacal by decomposition, then urate of ammonium, a most insoluble salt, as will be seen from the table of solubilities, will crystallise out.

I may state that urate of sodium in excess of ammonia salts is converted into urate of ammonium in the same way that urate of ammonium in excess of soda salts is changed into urate of sodium; but when either of these urates meets a solution with equivalent quantities of both ammonia and soda salts, then both urates crystallise out on evaporation; and hence it follows that the crystals, although often mainly composed of one urate, necessarily contain at least traces of the other, and sometimes much more than traces, according to the relative amounts of the different salts contained in the urine. I think it will be found that a clear understanding of the action of the different salts upon each other will explain nearly all the discrepant statements to be found in different treatises upon this point.

As I have already said, those who consider that uric acid is formed before it reaches the kidneys usually look to some other organ as its source, the spleen having been often fixed upon. On this subject Dr. Michael Foster makes the following remark in his work on Physiology:—"The constant presence of uric acid is remarkable, especially since it has been found, even in the spleen of animals, such as the herbivora, whose urine contains none." And again he says:—"No less suggestive is the fact that the increase of uric acid during ague and during ordinary pyrexia seems to run parallel to the turgescence, and therefore, presumably, the activity of the spleen." As I had never examined the spleen for the presence of uric acid, I made the following experiment:—

One thousand grains of the spleen of the ox, and the same amount of the spleens of the turkey and common fowl, were dried in a water-bath and reduced to powder. This was afterwards treated with distilled water, first made alkaline with carbonate of sodium, and afterwards dialysed for two or three days into distilled water. The dialysed fluid was then evaporated to a syrupy consistence. A drop of that obtained from the ox was strongly acidified with nitric acid, and evaporated to dryness; a very distinct colour from the production of murexide was obtained, which became intensified by the action of the vapour of ammonia. When the same syrupy fluid was acidified by acetic acid, and a few drops allowed to dry spontaneously on glass, distinct evidence was obtained of the presence of uric acid crystals, which became unmistakable when polarised light was employed. On treating the concentrated fluids obtained from the birds in the same way—viz., for the production of murexide and for the crystals,—it was with the greatest difficulty that any indication of the presence of uric acid could be detected by either test. These experiments were repeated, and with the same results. Unless the process of dialysis be employed, the uric acid is much masked by a peculiar matter which accompanies it in its solutions. This is at least partially got rid of by dialysis.

If the spleen be the organ in which uric acid is formed, why should not this acid be present in the urine of herbivorous as well as carnivorous mammals? On the same assumption, should we not expect that uric acid would exist in much larger quantities in the spleen of animals whose urinary excretion consists mainly of that principle, than in others whose urine is often devoid of it? As far as my experiments go, the very reverse is the case; for, while uric acid was easily detected in the spleen of the ox, in that of the bird it was most difficult to discover it.

Again, it would naturally be expected that in animals that throw out uric acid the spleen would be larger, proportionally, than in others; but I am not aware that such is the case. It must also be remembered that uric acid has been asserted by different observers to be present in other organs besides the spleen, as the liver, lymphatic glands, and brain; and from this last W. Müller separated about one part of uric acid in 40,000 parts of weight, yet no one would consider that the production of uric acid is one of the functions of the brain.

Assuming that our second view is correct, and that the kidneys are the true formative organs, then an explanation of the presence of uric acid in the spleen, liver, and other parts is not difficult. When, from any cause, there is an appreciable back-flow of uric acid from the renal organs, and resorption, then the blood becomes more or less impregnated with that principle, as we find to be the case in disease; and, under these circumstances, it is attracted by various tissues, and becomes united with them. That such attraction or elective affinity does exist for certain poisons I have full proof in a case of arsenical poisoning which came under my care in the hospital about twenty-five years ago. A young man had swallowed a dessertspoonful of arsenious acid. As he survived this four days, there was plenty of time for the poison to be absorbed. I embraced the opportunity of examining the principal organs of the body for arsenic, and found it in all parts, though in very different amounts. The liver appeared to be most rich in the metal, then the spleen and the skin. May it not be the case that, when uric acid exists in the blood, it is attracted differently by different organs, and thus the spleen and liver more frequently contain appreciable quantities than other tissues? Or again, may it not be that in some organs, as the spleen, the substance of which, if not acid during life, rapidly becomes so after death, while the blood remains strongly alkaline, the uric acid becomes less soluble, and more easily retained? Or, yet again, may it not be that, being united to these organs, the uric acid escapes certain destructive influences to which, if it remained in the circulating fluid, it might be exposed?

Although I have been drawn, by force of the arguments in its favour, into regarding the second view of the origin of uric acid as the more sound, yet I do not wish, even in my own mind, to become a partisan of any theory, desiring only to arrive at truth: and I have therefore endeavoured equally to seek out and discuss facts which are antago-

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nistic to one or other view, with those which appear to favour it.

Before concluding this, the purely physiological part of our subject, I will state that there are a few facts which demand full explanation under any theory which claims to be accepted as the true one. For instance, the urine of the sucking-calf, and of the young of other herbivora, contains uric acid in notable quantities, while that of the adult animal is usually free from it. How can this be reconciled with the view that uric acid is formed in the kidneys? There are also other facts closely allied to these which appear to be equally difficult of explanation by the second theory.

In the course of these lectures, I hope to be enabled fully to solve these difficulties; and, in so doing, to bring before you many observations, the results of which may prove to be of great service and value, both in pathology and in therapeutics.

CROONIAN LECTURES
ON
MODERN THEORIES AND TREATMENT OF PHTHISIS.

Delivered at the Royal College of Physicians, Feb. 28, 1883.

By JAMES EDWARD POLLOCK, M.D.,
Consulting Physician to the Hospital for Consumption and Diseases o the Chest, Brompton.

Lecture I., Part II.

The well-known teaching of the modern school is that the primary block of the lung is due to pneumonia or inflammatory products, and I beg your patient hearing if I briefly describe it.

Catarrhal pneumonia begins in catarrh of the smallest bronchi, extending to the alveoli, which become packed with exudation rich in young round cells. The acute cases are a frequent result of measles and whooping-cough. Under favourable circumstances the cells fill with fat-globules and disintegrate, and the contents of the alveoli become fluid and are absorbed or expectorated. In less favourable cases the lung tissue becomes consolidated, the cellular element increases in the alveoli, fatty changes are incomplete, the cells lose their rounded form, and shrink into irregular shapes; this represents cheesy transformation. Every form of pneumonia may end in this necrosis of the cells and caseation. In this process the walls of the alveoli are pressed on, their bloodvessels become compressed and the walls are broken down, and the form of destruction of lung tissue with which we are familiar takes place. In chronic catarrhal pneumonia a formation of connective tissue fills up the collapsed cells, so that the lung becomes tough and impermeable to air. The pleura is thickened and adherent, and from it bands extend throughout the lung, contracting its volume as the tissue shrinks; the whole side is drawn together, and the bronchial tubes become dilated, giving rise to the phenomena of cavity. These are the more chronic and favourable cases. The diaphragm is drawn up and the heart displaced in their advanced stage.

But the two points on which the German and French schools are at issue are the influence of cheesy transformation of the morbid products in the lung and the secondary eruption of tubercles in chronic cases of phthisis. It seems acknowledged on all sides that cheesy deposits, in breaking up, give rise to or are followed by an eruption of miliary tubercle, either in the neighbouring part of the lung or in the opposite lung. Laennec described this, and it was known that it is at the period of softening of such masses that the appearance of fresh tubercles occurs. Thus cheesy transformations in some part or other originate tuberculosis, which is in this instance a secondary disease. Cheesy masses in some way infect the system. Buhl says that miliary tubercles constantly depend on pre-existing cheesy products. Tuberculosis is an infectious disease caused by reception into the blood of the tubercular poison. He compares it to pyæmic septicæmia. Laennec knew that a secondary eruption of tubercle takes place in a lung already broken down by primary disease: he called it "secondary"; Niemeyer called it a "complication"; but both referred it to a previous caseation of the mass in the lung, which the German said was inflammation, but the Frenchman "tubercle." In either case we see it was regarded as an infecting agent, and this is important as leading on to more modern views still. I must beg your patient indulgence in this recapitulation. We are taking note of the successive theories of phthisis; we are watching the evolutions of thought in observers at different dates; and we must remember that all this time phenomena other than those of tubercle were being equally studied, and old doctrines of disease overturned.

In examining the relations of scrofula to phthisis, we shall find that cheesy transformation of the products of slow inflammations of lymphatic glands is held to be an infecting agent, and that such matters carried in the blood, or by the lymphatics, are deposited in distant parts, and there, as in the lung, originate phthisis, or in another lymphatic far from that originally affected. Thus, we have a step in the direction of blood-poisoning—septicæmia—or at least that morbid products are so carried and deposited, for septic they are not. If this be the origin of phthisis, the inflammation theory is interfered with; but, again, what is it which has originated the scrofula that started the lymphatic enlargement? Are we then driven back to the old "diathesis," or "constitution," which covered so much ignorance on our parts? In pursuing this line of thought, we are compelled to ask why some persons get catarrhal pneumonia—that is, a block of a portion of lung by inflammatory products, which will not liquefy nor be absorbed, but undergo cheesy degeneration,—and others get croupous or sthenic pneumonia, by which a fibrinous exudation is poured out into the alveoli of the lung, nay, of a whole lung, and in the course of fifteen or twenty days is wholly liquefied or cleared out, leaving the delicate structure of the alveoli unimpaired? These two diseases are so unlike in their morbid products, in their symptoms, and in their results and sequences, that they have no right to the same name. Indeed it was in an evil hour that such identity was stamped on them, for they do not possess any point in common, excepting that of their seat. They both affect the lung, but this may be said of several other disorders.

The German school will not acknowledge "constitutions," or delicacy of system, leading to those deposits which will not clear up, but go on to poison the system, and produce like localisation in other organs. They say such persons have a "vulnerability"; that tuberculosis is "not heritable," but that "the disposition to it is." But we know that lung attacks leading to cheesy infiltrations occur chiefly in delicate and badly nourished persons, whose inflammations tend to an abundant production of cells, and thereby to cheesy metamorphosis, and that cheesy metamorphosis anywhere may lead to tubercle. So much for the nature of the product which blocks the lung, and which is known to end in phthisis. We ought to distinguish four kinds: (1) The inflammatory exudation, which is not tubercle; (2) the miliary tubercle, which is secondary and rare, as the Germans say, but primary and common according to Laennec; (3) the cheesy transformation, which is common to all; and (4) the developed connective tissue, which contracts and hardens the lung into a fibroid state.

There is another consideration to which I must draw your attention, and that is the localisation of the morbid product in the lung; and it does not appear that this has received sufficient attention. I do not allude to the lobar or lobular arrangement of deposits, nor to the interesting question why the apex of the lung suffers most in phthisis, but rather to that portion of the lung structure which is the seat of the morbid product, be it inflammatory or purely tubercular. I take it that here will be found points of difference in the purely inflammatory as compared with the other forms of structural injury to the lung. Perhaps we may make this more clear by asking why it is that lung mischief is so productive of ultimate injury to the individual, giving rise to fever and wasting and all the pernicious results of phthisis? If it were due merely to the amount of pulmonary space lost, the ordinary croupous pneumonia which blocks with the greatest rapidity a large portion of the lung would give rise to these symptoms. But the phenomena of acute pneumonia are altogether different from those of phthisis. We have a sudden attack, very high temperature, and an exudation of a fibrinous character into the alveoli of the lung, in many

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cases blocking the entire organ—even the opposite lung may be attacked in sequence, and the respiratory space be lost over almost the whole of both sides,—and yet the patient recovers. In practice we say that if the heart be strong enough to drive the blood through the obstructed lung, and does not fail in the effort, the patient may get well. Especially is this the case in that turn or crisis of the disease when the exudation begins to break up and liquefy. The case might almost in practice be called a heart, and not a lung, problem; and those who support the circulating force at the heart will have the greatest number of cures. The lung is not diseased in its structure during such an attack; its terminal cells are filled up, but that is all, and we know that perfect recovery may and does daily take place, the delicate elastic structure of the alveoli being found entirely unimpaired after the exudation has been removed.

Now compare this with the smallest exudation or product of inflammation which has broken down the alveolar walls and infiltrated the peribronchial and interlobular tissues, and we shall see at a glance wherein the difference lies. So long as the alveolar walls are not broken down there commonly is recovery, but infiltrations into the proper lung tissue are not so recovered from. The results in the latter case are not liquefaction and absorption of the exudation, but first mechanical pressure on and strangulation of the nutrient vessels of the lobule, causing the death of the part, so that the infiltrated material is compressed, the alveolus collapses, and those changes are initiated which end in cheesy transformation. How is it that a pneumonia which is not resolved after about two months becomes a phthisis? We believe that it is because in the very earliest phase, that of exudation, the interalveolar tissue has been invaded by the inflammatory product, and that we are not dealing with a portion of lung which has its alveoli filled up with fibrin, but a portion where the alveolar walls have given way and a diffused deposit has solidified the whole lobule and its surroundings. This is not a croupous pneumonia at all, it is an insidious deposit in the lung tissue, and will have a different ending from that of sthenic pneumonia.

As I have commented on the errors of the French school as seen from one point of view, so it must be remarked that the German has fallen into errors easily pointed out. Having the great task of enunciating new and true doctrines regarding the inflammatory nature of many products in the lung hitherto called tubercle, it was not unnatural that they should have been led into the common exaggeration of making all phenomena of phthisis harmonise with the new theory. Thus the common origin in catarrh was implied when the name was adopted; the term was no doubt given just as pneumonia was forced into the service in order to inform the medical mind once for all that the exudation in the lung was of inflammatory origin, and must have originated in the ordinary causes of irritation of the air-passages, of which cold and exposure are the chief agents. But we have seen how unlike a true pneumonia is to the so-called catarrhal variety in its seat, the nature of its products, and in its termination; and so we may say of the term catarrhal, which has misled many a practitioner, and induced a prognosis not verified by the result. Its influence on treatment must also be remembered, and the question will arise whether what is suited to a catarrh is applicable to a phthisis. In adopting this word we appear to have gone back to the old vulgar idea that all consumption came from neglected cold, and that hot and close rooms and means to relieve bronchial irritation are the best remedies to adopt. There is another statement of this school to which I must advert, and it will be remembered that my object is not to advert any doctrines, but, as will be seen later on, to show in a study of the changes of opinion on phthisis how a gradual evolution of the most modern teaching has taken place, and to follow the line of thought in the minds of successive masters. Is hæmoptysis ever a cause of phthisis? Is it ever actually the first in the train of symptoms, the one which initiated the disease? Laennec and Louis lay it down that hæmoptysis indicates that tubercular mischief is already established in the lung. The irritation of the tubercle causes congestion, and hence the hæmorrhage. Niemeyer says that capillary hæmorrhage, bronchial or pulmonary, often induces phthisis even where there was no tubercle, and that in the majority of cases irritation of the lung follows hæmoptysis. The blood which remains and coagulates in the bronchi and alveoli becomes a cause of phthisis. In some rare cases he says hæmoptysis is not a cause, but a consequence, of pneumonic processes which lead to consumption; but the rule is otherwise, and hæmoptysis is most ordinarily a cause of the disease which is to break up the lung. Thus, as regards the earliest stages of phthisis, we have two sets of conflicting opinions. As regards clinical observation, we see a large number of cases initiated by an hæmoptysis. Every practitioner will endorse this observation. The theory of course is that the blood retained in the alveoli, together with pneumonic infiltration, undergoes cheesy change, and this is followed by breaking down of the lung, or by an eruption of miliary tubercle. We cannot forbear from asking the question why the hæmoptysis should occur at all if there be no preceding disorder of the lung. Is it within our clinical experience as a fact? Why should a portion of lung suddenly permit of hæmorrhage? We know that the pulmonary structures are capable of undergoing immense strain from sudden and prolonged exertion, and, further, that when a hæmorrhage occurs from such causes, or from cardiac valvular disorder, that lung disease, and especially phthisis, does not follow. It is true that hæmoptysis is in a vast number of cases the earliest symptom of phthisis to which the attention of the medical attendant is called, but do we not almost always find that for weeks or months previously the patient has been slightly losing flesh, has felt unusual weakness, has had some suspicious febrile symptoms, or has had slight dry cough? Taking the German theory of a pneumonia as the ordinary cause of phthisis, we can see how the influence of hæmoptysis as a primary cause came to be insisted on. If there was anything morbid in the lung before the hæmoptysis, it was most likely to be what Louis and Laennec said it was—tubercle! And it was necessary to combat this, and to account for the hæmoptysis as the first evidence of the congestion and the inflammatory exudation which were to follow. Here, again, pathology was in advance of clinical observation, for the facts of practice do not bear out the theory. People do not get a consumption because they spit blood, but they spit blood because they are consumptive; and insurance offices and those who advise them are right in attributing that meaning to the symptom. But, in truth, the Germans want to prove too much—their statement that inflammatory products often passed for tubercle is abundantly proved without this attempt to account for a symptom which seems to tell against them. Hæmoptysis is commonly due to something already wrong in the lung, be it tubercle or not, and all experience proves it. In those cases where it is not, it is harmless, and probably due to cardiac causes, or general fragility of the whole vascular system. I have myself records of about three hundred cases of hæmoptysis which did not originate nor result in any disease of the lung.

I venture to recall your attention to that remarkable and able debate on the connexion of tubercle with phthisis in 1873, at which, sir, you yourself presided. At that time we had not fairly reached the doctrines of infection, nor had bacilli been discovered in the sputa of phthisis. The medical mind of this country, which had long reposed on the doctrines of Laennec and Bayle, had been roused by the strong assertions of the German school which I have described, and the result was a declaration of faith on the part of some of our ablest inquirers. The solid observing English mind, which is conservative of old opinions while impartially open to every novelty; which is little given to belief in the dogmas of any school as such, but waits for their verification by evidence, was ably represented by the leading speakers on that occasion. As in surgery it used to be said that operations were invented in France but made safe in England, so the lighter and more ephemeral part of German theories are often reduced here to the level of facts which have been proved by investigation, and if found to bear such crucial test are assimilated with medical science, but, if weighed and found wanting, are rejected. I take it that in no country are the names and doctrines of great names so worshipped as in Germany; but I must maintain that no country is so practical as England.

I will venture briefly to recapitulate a summary of the views of the prominent speakers on that occasion, in so far as they were not contradicted. It was recognised, under whatever name—tubercle or otherwise—it might pass, that a product of known anatomical appearances is found in the lung in phthisis; that caseation is not invariably tubercle.

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but often results from inflammatory products; that a new growth takes place in the walls of the alveoli in all cases of phthisis, leading to destruction of their nutrient vessels; that this does not take place in ordinary acute pneumonia; that caseation is not due solely to inspissation of inflammatory products, but to a new growth in the walls of the alveoli, with which destructive changes in the lung are associated almost uniformly; that if this growth dies quickly, a rapid caseous change takes place, but if slowly, a fibroid change, leading to the well-known alterations in the lung structure that bear that name; that all these changes are manifestations of the disease, and that all occur in the most typical form of acute tuberculosis; that tubercle may occur without inflammation of surrounding tissues, or that it may be secondary to inflammation.

Dr. Wilson Fox states that implication of the alveolar wall is the most constant and typical appearance in the process of tuberculisation. As regards the dispute about inflammation and tubercle, he considers that both may arise simultaneously, and that inflammation may give rise to secondary growth in the alveolar walls, which is a main cause of phthisis, and that the causes of tubercle may be the causes of inflammation. As regards the nature of the so-called tubercle, he is borne out by Dr. Burdon Sanderson in considering it to be a lymphatic overgrowth, produced by irritation under special circumstances, anatomical or constitutional; and he believes that adenoid or lymphatic tissue is found in the walls of the air-vesicles, and that as lymphatic irritation may prevail in any part of that system, so it may show itself here. The boundary line between tubercle and inflammation cannot be accurately defined, but there is no doubt that the tubercular growth precedes the caseation. We come now to another element in the case, and that is, that certain constitutional conditions are essential to the production of tubercle. Any irritation of the tissue may, in the presence of local or constitutional predisposition, give rise to secondary growths, diffused or circumscribed, which constitute tubercle, and which may be the source of further infection, and that with or without antecedent caseation, although this stage, and that of softening, appear to be most favourable to the change. The real agent in infection is the small-celled growth in the walls of the alveoli.

Again, attention was called to the fact that irritants introduced under the skin of the rodentia give rise to lymphatic deposits in the lungs, liver, and spleen; even the irritation of a seton has done so. It was considered that overcrowded corpusculation in any organ may give rise to similar processes elsewhere, but Dr. Moxon thought that there was no phthisis without caseation, and that tubercle was another phase of inflammation, which latter can cause caseation, and so enter the system. I believe it may be stated with truth that no speaker upheld that common catarrh can originate caseation, and in this view it was pointed out that the initial stage of phthisis is local and not diffused, as catarrh. Finally, it may be said Dr. Wilson Fox spoke the sentiments of the majority of those present when he said, "Tubercle tends to multiply, but can it be produced in the human subject by indifferent caseous products or by any inflammatory change not associated with a peculiar liability of constitution? I strongly doubt both."

It will be seen, sir, that the tone of this debate was broad as regards the foreign schools, but accepted the data of neither. You will have noticed also that the whole debate turned both on the nature of the product in the lung and the changes which it undergoes, but also very much on the part of the lung which was so injured. If the doctrine is no caseation or no tubercle, then no phthisis, it is also no less strongly that if there be no new cell-formation crushing and destroying the walls of the alveoli, then also there is no phthisis. The recoverable cases are those which after inflammatory or tubercular or catarrhal attacks remain with the alveolar walls intact. Destruction of alveoli is never recovered from, there are collapse and thickening of that part of the lung, but there is no restitution of structure and no vesicular breathing in that part again. Localisation of disease rises into great importance. We used to think that the consumptive died of a constitutional irritative fever, but, tracing their symptoms alongside of the physical signs, we now know that their fever and their waste are coincident, and that it is just then that the tissues around the alveoli and in the peribronchial spaces are filled with a new cell-growth, which rapidly proceeds to caseation and softening. We also know that at this very time a mass of detritus of inflammatory or tubercular products is being carried into the blood and lymphatics, and deposited in other parts of the system, and that high fever wastes the patient while other organs or the opposite lung is being infected. Whatever initiates the disease this secondary result seems as manifest as the spreading of a fire in a dwelling, while, like the latter, the mystery remains of the originating causes of the combustion.

ORIGINAL COMMUNICATIONS.

ON PICRIC ACID AS A TEST FOR ALBUMEN AND SUGAR IN THE URINE.(a)

By GEORGE JOHNSON, M.D., F.R.S.
Physician to King's College Hospital and Professor of Clinical Medicine in King's College.

During a period of about two years, I have been in the habit of using picric acid as a test for albumen in the urine. I was induced to employ this test by my son, G. Stillingfleet Johnson, one of the Demonstrators of Chemistry at King's College, who, while working at the compounds of albumen with the mineral acids, the results of which he published in the *Journal of the Chemical Society* (August, 1874), found that picric acid caused coagulation in all the acid compounds of albumen; and he therefore suggested that it might be found a valuable test for albumen in the urine. At that time, we were not aware that it had ever been employed as a test for albumen; and in a communication to the *Lancet* (November 4, 1882) I spoke of it as a new test; but, a few days after the publication of my paper, I chanced to come upon a leading article in the *Medical Times and Gazette* (vol. ii for 1874, page 366) in which picric acid is mentioned as having been recommended as a test for albumen by a French physician—M. Galippe. There is, therefore, no novelty in the suggestion; but, so far as I can learn, the true value of the test has not hitherto been appreciated, and therefore it has not come into general use. The test may be used in the form of a saturated aqueous solution, or in the form of powder or crystals. The aqueous solution is most suitable for home use, while the powder or crystals may conveniently be carried in a urinary pocket test-case.(b) A saturated aqueous solution may be quickly made by adding about fifty times their bulk of boiling distilled or rain-water to the powder or crystals; a portion of the acid will crystallise out on cooling, leaving a transparent yellow supernatant liquid. This solution, being added to an equal volume of albuminous urine in a test-tube, immediately coagulates the albumen. The coagulated picrate of albumen is soluble in alkalies; if, therefore, the urine be highly alkaline, it must be acidulated by a vegetable or a mineral acid before adding the picric acid solution. In my numerous testings for albumen with picric acid, I have not once found it necessary to acidulate the urine. The picric acid solution is itself sufficiently acid to dissolve the phosphatic sediment which results from boiling a neutral or alkaline specimen of urine.

To detect a very minute quantity of albumen, the following method is the best:—Into a test-tube about six inches long the urine is poured to within two inches of the top; then, the tube being held in a slanting position, about an inch of the picric acid solution is gently poured on the surface of the urine, where, in consequence of its low specific gravity (1003), it only partly mixes with the upper layer of the urine; and, as far as the yellow colour of the picric solution extends, there will be more or less turbidity from coagulated albumen, contrasting with the pellucid unstained urine below. If, then, the tube be placed in a stand, the coagulated albumen will gradually subside, and form a delicate horizontal film at the junction of the coloured and the unstained stratum of urine; the yellow liquid above and the uncoloured urine below being quite free from turbidity. If the urine should be turbid with urates, it must be cleared by heat before the addition of the picric acid solution.

As a result of numerous careful observations, I have arrived at the conclusion that picric acid applied in this way is a more delicate, and therefore more trustworthy, test for

(a) Communicated to the Clinical Society, March 9, 1868.
(b) Such a case has been made for me by Hawksley, 357, Oxford-street.

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albumen than nitric acid in cold urine, whether the latter be employed by the method of dropping the acid into the cold urine, or by pouring the urine on the acid previously placed in the tube. The simplest and most satisfactory mode of comparing the two tests, as regards their relative delicacy, is to dilute a specimen of albuminous urine until one or the other test fails to act; and it will be found that the picric acid solution shows the presence of albumen in a specimen diluted considerably beyond the point at which the nitric acid fails to give any indication. The picric acid, too, often causes an immediate albuminous opalescence in specimens in which nitric acid only slowly, and after an interval of some minutes, gives a similar, but sometimes a doubtful indication.

It scarcely need be insisted on that, for example, during convalescence from acute albuminuria, it is of the greatest practical importance to be assured that no trace of albumen remains.

Here it may be well to mention that the albuminous opalescence with picric acid which always occurs immediately, if at all, may readily be distinguished from the coarse granular particles of urate of soda, which, after a delay of some minutes, sometimes result from the acidity of the picric solution. These granular masses of urate, sometimes mixed with crystals of free uric acid, quickly fall to the bottom of the test-tube, and carry with them so much of the picric colouring matter, that, when placed under the microscope, they are so opaque as to appear almost black.

In testing with the powder or crystals, as much as is equal in bulk to a peppercorn may be shaken up in a test-tube, with a column of urine about an inch in height. As the powder dissolves the urine becomes turbid with coagulated albumen. The object is to add as much of the test as the urine will dissolve, and no more. The solution of the picric acid in the urine, and the coagulation of the albumen, are quickened by heating the tube over a spirit-lamp or a candle, or by immersing the tube in hot water.

Another convenient mode of using the powder or crystals is to add fifteen or twenty minims of water to the peppercorn bulk of the acid in a tube, and quicken the solution by the application of heat; an equal bulk of urine is then gradually added to the hot solution, when albumen, if present, is at once detected.

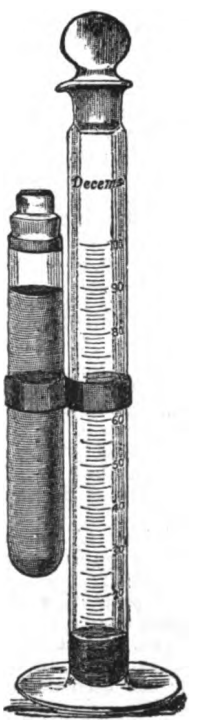
The value of picric acid, as a test for clinical use, is much increased by the fact that, when boiled with a solution of potash, it forms a most delicate test for glucose. As I have stated, in a letter which I addressed to the *Lancet* (November 18, 1882), I stumbled upon this fact by adding some picric acid solution to a boiling specimen of saccharine urine, which had previously been mixed with half its volume of liquor potassæ. I was at that time not aware of the fact that the reaction of picric acid with grape-sugar had been observed by Braun, a German chemist, nearly twenty years ago. I am indebted to Dr. Pavy for a reference to Braun's paper ("Ueber die Umwandlung der Pikrinsäure in Pikramminsäure, und ueber die Nachweisung, der Trauben-Zucker." C. D. Braun. *Zeitschrift für Chemie*, 1865). In this paper it is shown that grape-sugar, when boiled with picric acid and potash, reduces the yellow picric acid to the deep red picramic acid, the depth of colour depending on the amount of sugar present. I am not aware that hitherto any attempt has been made to utilise this as a qualitative clinical test for sugar in the urine, or as a means of accurately estimating the amount of sugar in a saccharine solution. I trust, however, to be able to establish its value for both purposes.

Take a fluid drachm of a solution of grape-sugar, in the proportion of a grain to the fluid ounce; mix it with half a drachm of liquor potassæ (P.B.), and ten minims of a saturated solution of picric acid; and make up the mixture to four drachms with distilled water. The mixture is conveniently made in a boiling-tube, ten inches long and three-fourths of an inch in diameter, which may be marked below at the height of two and four drachms. With a long boiling-tube there is little risk of the liquid boiling over; and the steam, condensing in the upper cool part of the tube, flows back as liquid, so that there is little loss by evaporation. The liquid is now raised to the boiling point, and the boiling is continued for sixty seconds by the watch, so as to insure the complete reaction between the sugar and the picric acid. During the process of boiling the pale yellow colour of the liquid is changed to a beautiful claret red.

The liquid having been cooled by cautiously immersing the tube in cold water, and it having been ascertained that its level is that of the four-drachm mark on the tube, or, if below the mark, it having been brought up to it by the addition of distilled water, the colour is that which results from decomposition of picric acid, by a grain of sugar to the ounce, four times diluted; in other words, it indicates one-fourth of a grain of sugar to the ounce; and this colour is a convenient standard for comparison in making a volumetric analysis. The picramic acid solution, however, on exposure to light, even for a few hours, becomes paler; but the colour may be exactly imitated by a solution of ferric acetate, with a slight excess of acetic acid and an excess of ferric chloride. The iron solution we have found to retain its colour unchanged for a fortnight, even when exposed to a strong light; and we expect that, when light is excluded, it may be kept for an indefinite period; and it is, therefore, a convenient standard for comparison.(c)

If, now, a drachm of a solution of grape-sugar, containing two grains to the ounce, be mixed with the same quantity of liquor potassæ (half a drachm) as before, but with double the amount of picric acid (*i.e.*, twenty minims), and made up to four drachms in the boiling-tube, the result of boiling the mixture, as before, for sixty seconds, will be the production of a much darker colour than when the one-grain solution was acted upon; but if now the dark liquid be diluted with its own volume of water, the colour will be the same as that of the one-grain solution.

The dilution is accurately done in a stoppered tube, twelve inches long and three-quarters of an inch in diameter, graduated into $\frac{1}{10}$ and $\frac{1}{100}$ equal divisions. By the side of this tube, and held in position by an S-shaped band of metal, is a stoppered tube of equal diameter, and about six inches long, containing the standard iron solution.(d)



The picro-saccharimeter, as described in the text. The shading of the side tube indicates the ferric acetate standard. The darker shading at the bottom of the graduated tube shows the saccharine fluid darkened by boiling with picric acid and potash, and occupying ten divisions before dilution.

Sufficient of the dark saccharine liquid to be analysed is poured in to occupy exactly ten divisions of the graduated tube. Distilled water is then added cautiously, until the colour approaches that of the standard. The level of the liquid is then read off and noted. A more exact comparison of the saccharine liquid with the standard is made by pouring into a flat-bottomed colourless tube, about six inches long and an inch in diameter, as much of the standard as will form a column of liquid about an inch in height, and an exactly equal column of the saccharine liquid in a precisely similar tube. The operator then looks down through both tubes at once, one being held in each hand, upon the surface of a white porcelain slab, or a piece of white paper. In this way a slight difference of tint is readily recognised, and if the liquid to be analysed be found to be darker than the standard, it is returned to the graduated tube, and diluted until the two liquids are found to be identical in colour, when the final reading is taken. The saccharine liquid having been diluted four times before it was boiled, a colour equal to that of the quarter-grain

(c) I hope and believe that our friends and fellow-workers, the pharmaceutical chemists, will prepare standard sugar solutions, and also the ferric acetate standard, for those who require them. We have made the ferric acetate by adding ferric chloride to ammonium acetate. It is of primary importance that the standard be correct.

(d) This picro-saccharimeter was made for me by E. Cetti, 86, Brooke-street, Holborn, E.C.

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standard would indicate one grain of sugar per fluid ounce. If further dilution were required—say from ten to twenty divisions—the proportion of sugar would be two grains per ounce, and so on to thirty or forty or upwards, or to intermediate divisions. Thus dilution from ten to thirty-five divisions would indicate 3·5 grains of sugar per ounce.

We have found, by experiment, that ten minims of a cold saturated solution of picric acid are rather more than sufficient for decomposition by one drachm of a solution of grape-sugar in the proportion of one grain to the ounce. A drachm of the solution would, of course, contain one-eighth of a grain of sugar. In making an analysis, the picric acid must be added in proportion to the amount of sugar. If the proportion of sugar be as high as six grains per ounce, a drachm of the picric acid solution will be required. If the proportion of sugar be higher than this, the saccharine fluid should be diluted with distilled water in a definite proportion before commencing the analysis, and the product of the analysis of the diluted fluid is then to be multiplied by the degree of dilution—two, five, or ten, as the case may be—to which the original liquid has been subjected.

Distilled water, or clear rain-water, should be used for diluting. Hard water, containing salts of lime, is rendered turbid by the carbonate of lime precipitated by mixture with caustic potash, and any turbidity in the liquid interferes with the estimation of the depth of colour. In testing undiluted urine, a slight turbidity often results from separation of phosphates by the potash. This turbidity may be removed by allowing the phosphates to form a sediment, or more speedily by filtration. When a highly saccharine liquid is diluted five or ten times before mixture with the testing materials, no phosphatic turbidity occurs. In making a volumetric analysis, care must, of course, be taken that the measurements and dilutions are accurately made.

The preliminary dilution of a strongly saccharine specimen may be made in the graduated tube; or, into a flask graduated to contain fifty cubic centimetres, five or ten cubic centimetres of the saccharine liquid may be delivered from a graduated pipette; then, the flask being filled up to the graduation with distilled water, the dilution will be ten times with five cubic centimetres, and five times with ten cubic centimetres of the liquid to be analysed.

Another important point is that, while the amount of potash remains the same, the picric acid must be in proportion to the amount of sugar in solution. It has already been mentioned that ten minims of the picric acid solution are more than equal to one-eighth of a grain of glucose, which is the amount contained in one drachm of a solution, in the proportion of a grain to a fluid ounce. A slight or even a considerable excess of picric acid does not appreciably affect the colour of the picramic acid, while a deficiency would, of course, lead to an under-estimate of the amount of sugar.

If an analysis with thirty minims of picric acid solution indicate, say, from three to four grains of sugar, it is probable that some sugar has been left undecomposed, and a second analysis, with a larger proportion of picric acid, might therefore give a higher and more correct result. If, on the other hand, a second analysis, with a larger proportion of picric acid, give an identical result, we may feel certain that the whole of the sugar has been decomposed, and the amount indicated by the resulting picramic colouration. In any case, when the amount of sugar indicated is less than would suffice to react upon the amount of picric acid employed, the result may be relied upon as correct.

The presence of albumen, even in large amount, has but little influence on the picric acid test for sugar. In illustration of this, the following experiments will suffice. A specimen of urine, normal as regards the amount of saccharine or saccharoid material, but containing a large amount of albumen, was boiled with picric acid and potash with sufficient water to dilute the urine by its own volume of liquid. A second portion was treated in the same way after the separation of the albumen by boiling and filtration, and the first specimen gave a darker tint than the second to a degree that might be considered to indicate one-tenth of a grain of sugar per ounce. Another portion of the urine was decolourised by repeated filtering through charcoal; and, of this, one specimen was tested while it retained its albumen, another after the separation of the albumen—the result being that both yielded identical tints of colour, and this was very slightly paler than that of the specimen which was tested after having been deprived its albumen without previous decolourisation by charco The explanation is, that pure albumen has no reducing i fluence on picric acid when boiled with dilute potash, su as is used in testing for sugar; but with seralbumen, with white of egg, there is associated a colouring mat which is partly separated by filtering off the coagula albumen, and entirely removed by repeated filtering throu charcoal. The colouring matter in question has a reduci influence on picric acid, although the colouring matter normal urine has been found to have none. The coagula albumen collected on the filter, after being thoroug washed, gives no red reaction when boiled with picric a and potash diluted in the same proportion as that emplo in testing for sugar. This has been proved by repea experiments.(e)

The accuracy of the picric acid method of volume sugar analysis has been fully and fairly tested. Our has been to compare the results of this process with th obtained by Dr. Pavy's beautiful and accurate ammo cupric method. We have analysed the same specim many of them albuminous as well as saccharine, by the processes, my son employing Dr. Pavy's method in laboratory at King's College, and I the picric acid pro at home; and our results are found to be practically ident the differences being only such as are due to unavoid slight errors in conducting an experiment. Both meth in fact, are based upon the same chemical principle—nam that glucose, when heated with potash in the presence o oxidising agent, has a tendency to rob it of its oxygen. the one process the reducing action of the sugar is exe upon an oxide of copper; in the other, upon picric acid definite weight of sugar reduces, in the one case, a pro tional amount of cupric oxide, and in the other an equ lent proportion of picric acid, with resulting picramic and a corresponding measurable intensity of colour.

The proportion of sugar in the specimens analysed varied from one grain to fifty grains per fluid ounce. following may be taken as examples of practically iden results:—

	Ammonio-Cupric Method.		Picric Acid Method.
1.	13·5 grs. per fluid oz.	...	13·5 grs. per fluid oz
2.	33 ,, ,,	...	32 ,, ,,
3.	31·2 ,, ,,	...	30·5 ,, ,,
4.	36·4 ,, ,,	...	36 ,, ,,
5.	10·3 ,, ,,	...	9 5 ,, ,,
6.	1·28 ,, ,,	...	1 ,, ,,
7.	11·5 ,, ,,	...	11 ,, ,,
8.	36·4 ,, ,,	...	36 ,, ,,
9.	2·57 ,, ,,	...	2·5 ,, ,,
10.	3·1 ,, ,,	...	2·9 ,, ,,
11.	7·27 ,, ,,	...	7 ,, ,,
12.	16·8 ,, ,,	...	16 ,, ,,
13.	48·5 ,, ,,	...	47·5 ,, ,,
14.	27·7 ,, ,,	...	27 ,, ,,
15.	48·4 ,, ,,	...	48 ,, ,,
16.	17·47 ,, ,,	...	17 ,, ,,
17.	49·6 ,, ,,	...	49 ,, ,,
18.	9·3 ,, ,,	...	8·5 ,, ,,
19.	9·9 ,, ,,	...	10 ,, ,,
20.	6·05 ,, ,,	...	6 ,, ,,

It will be seen that, in the majority of cases, the amm cupric process gives results slightly in excess of the acid method. This excess is due to some non-sacch ingredients in the urine, which reduce cupric oxide, b picric acid.

During the last three months, I have tested wit picric acid and potash a large number of specime normal urine (about 300), with the almost uniform re a depth of colour indicating the proportion of 0·6 gr sugar in the fluid ounce, the indications usually va between the limits 0·5 and 0·7 in the fluid ounce. In siderable number of cases my son has tested the specimens by the ammonio-cupric method with the indi

(e) The chemical result of boiling albumen with potash, and th tion of the formation of an alkaline sulphide, was discussed length in the columns of the *Lancet* during the months of Decem January last. For the final communication from my son, in w demonstrates that the apparently contradictory results obtained b rent observers are explained by the varying proportions of the potash employed, the *Lancet* could not find space, but it is publi the *Chemical News*, February 28, 1868, page 87.

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usually of from 0·7 grain to 0·9 grain in the fluid ounce, *i.e.*, an excess of that obtained by picric acid of from 0·1 to 0·3 grain in the fluid ounce.

The following have been the proportions of the various liquids: a drachm of urine, half a drachm of liquor potassæ, ten minims of picric acid solution, made up to two drachms with distilled water. The mixture is kept boiling for a minute, and, when cooled, is compared with the standard. The urine having been diluted by its own volume, a depth of colour equal to that of the standard would indicate 0·5 grain of sugar: but in nearly every case I have found it so much darker than the standard, as to require further dilution equal to 0·1 grain before the standard colour is reached, thus giving an indication of 0·6 grain.

So constant is this degree of colouration with normal urine that if, instead of diluting up to two drachms, the dilution be carried further by twenty-four minims, the resulting colour might be taken as an approximation to an exact quarter-grain standard, and, in the absence of a more exact standard, might be used for making an analysis. The question arises—Does normal urine contain as much as 0·6 to 0·7 grain of glucose in the fluid ounce? We are not prepared to assert this without further evidence than we have as yet been able to obtain; but, if it be not glucose which gives these almost identical analytical results with the two processes, it must surely be some nearly allied substance.

There are certain facts connected with the behaviour of this reducing agent so constantly found, and in such constant quantities in normal urine, which point to its saccharine nature. 1. Its reducing effect upon both cupric oxide and picric acid is equal to that which would be exhibited by an equal weight of pure glucose. This is remarkable, since any other substance than glucose or an isomeric sugar would probably reduce more or less either of the picric acid or of the cupric oxide. 2. It is completely destroyed by prolonged ebullition with dilute caustic alkalies. On the other hand, we are unable to assert positively that it is glucose, since it is unfermentable by yeast, and the most careful analyses have failed to produce more than those traces of grape-sugar from normal urine which were obtained by Brücke and Bence Jones (one-fiftieth of a grain per fluid ounce). The results of careful analyses of normal urines tend to show that the secretion of the healthy human kidney contains two distinct classes of cupric-oxide-reducing substances, viz. (1), such substances as uric acid, etc., which are not destroyed by boiling with dilute caustic potash; and (2) what may be described as saccharoid bodies, which *are* disintegrated by such treatment. Moreover, it appears that picric acid is reduced only by the second, or saccharoid, group of normal urinary constituents; for the results of analyses by the ammonio-cupric method of healthy urine, which has undergone sufficiently prolonged boiling with dilute potash to completely destroy everything which is capable of reducing picric acid—*i.e.*, everything belonging to group 2, or the saccharoids—invariably show the presence of more or less cupric-oxide-reducing substance which has escaped disintegration by the boiling alkali; and on deducting this reduction from the total cupric oxide reduction effected by the original urine, an indication of (?) glucose is obtained equal to that given by the picric acid method with the original urine.

The results of some such analyses are tabulated below, in which all reduction is expressed in grains of glucose in the fluid ounce.

	I. Total indication by picric acid.	II. Total indication by ammonio-cupric method.	III. Indication by ammonio-cupric method after boiling with potash.	IV. Difference between II. and III. saccharoid substance.
(1.)	0·6 gr. per fl. ℥	0·909 gr. per fl. ℥	0·276 gr. per fl. ℥	0·63 gr. per fl. ℥
(2.)	0·5 " " "	0·607 " " "	0·09 " " "	0·517 " " "
(3.)	0·35 " " "	0·546 " " "	0·145 " " "	0·401 " " "
(4.)	0·8 " " "	1·245 " " "	0·437 " " "	0·808 " " "

All reductions expressed as grains of glucose per fluid ounce.

These results are explained by the fact that those ingredients of healthy urine which reduce cupric oxide, and are not destroyed by boiling with potash, such as uric acid and urates, have been found to exert no reducing action upon picric acid.

There are at least two undoubted sugars, viz., sorbite and eucalin, which reduce cupric oxide from potassio-cupric tartrate, and are destroyed by boiling with dilute potash, but do not undergo the vinous fermentation under the influence of yeast; and both these sugars are isomeric with glucose. Hence, though the evidence of the identity of the saccharoid ingredient of normal human urine with glucose is incomplete, it is at least probable from its behaviour and reactions that it may be a true sugar.

I trust that the method of saccharimetry which I have described will enable every practitioner who has the will to estimate with ease and accuracy the amount of sugar in any specimen of urine.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MANCHESTER ROYAL INFIRMARY.

TWO CASES OF FRACTURE OF THE BASE OF THE SKULL—RECOVERY.

(Under the care of Mr. JONES.)

[From notes by Mr. LUNT, Dresser.]

Case 1.—John M., aged thirty-nine, was admitted on September 10, 1882.

Unfortunately very little reliable information could be obtained respecting the accident. It is supposed that while under the influence of drink he fell backwards down some steps, his head striking the ground violently. He was picked up and brought to the Infirmary.

Condition on Admission.—Patient is pale and insensible. Blood is escaping from the left ear and the nostrils. He vomited blood before admission. Although seemingly unconscious, when shouted at he can answer questions, but manifests much irritability and has very little idea what he is saying. Pulse slow, full, and strong. Pupils equal and not dilated. Breathing inclined to be stertorous. Surface of body cold. No external signs of injury. About six hours after admission, clear fluid was noticed exuding from the left ear.

September 11.—Symptoms of cerebral irritation very pronounced; discharge of fluid from ear profuse. Temperature 100·8° Fahr. Ice-bag ordered to the head. Diet to consist of milk. Urine has to be drawn off by the catheter.

12th.—Signs of returning consciousness; questions are answered in a fairly intelligent manner. Catheter again resorted to; during its use patient became very restless and irritable, and succeeded in pulling it out. Afterwards he passed some urine voluntarily, although previously he had not attempted to do so. Chloral ordered as a draught.

13th.—He passed a restless night. Calomel (five grains) given last night, and an enema administered this morning. After this he was more quiet. Urine passed voluntarily. Fluid still exuding freely from the ear. Is quite deaf on the left side; no facial paralysis.

14th.—Last evening patient was delirious, and kept putting his hands to his head and complained of pain. About 11 a.m. he had a fit. He was found lying on his back with the head thrown backwards, breathing deeply and quickly and foaming at the mouth.

15th.—He still remains comatose. Fluid continues to escape. Temperature 98·2°.

18th.—Discharge of fluid ceased.

From this date patient gradually and steadily improved. He daily became more and more conscious, but for a time exhibited some considerable amount of restlessness towards night. With the view of procuring sleep chloral had to be administered, and it was found that whenever it was omitted a restless night would follow.

On October 3 a note was made that the patient seemed to have fully recovered his mental powers, judging from his capability of carrying on a rational conversation; and on the 25th he appeared to be perfectly rational, and most anxious to leave the Infirmary in order to resume work.

Through the kindness of my friend Dr. Pierce I am able to publish the result of an aural examination of this patient. It is dated February 15, 1883:—Watch, left ear 3 in.; tuning-

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fork on vertex, nose, teeth, right and left temple, heard most distinctly on right side; at left meatus heard very imperfectly. High and low notes of Galton's whistle heard in right ear well. Cannot feel sure that he hears with the left at all. Tinnitus aurium,—constant "roaring and boiling" in the left ear since the accident. Has had frequent attacks of labyrinthine vertigo, with tendency to fall backwards and to the left. This symptom has been diminishing of late. Eustachian tube pervious. Membrana tympani moderately translucent. Light-spot small, bright, and defined. Manubrium of malleus very broad, flat, and of a white colour, with enlarged umbo. Nowhere could any cicatrix or indication of a rupture of the membrane be made out. Dr. Pierce remarks that in this case the left auditory nerve was almost completely paralysed by concussion. If a rupture of the membrane did occur, it was probably a linear one close to, and parallel with, the anterior edge of the manubrium, and had perfectly healed.

Remarks.—The symptoms present in this case led me to conclude that the base of the skull was fractured. A severe injury to the head, immediately followed by copious hæmorrhage from the ear, and soon afterwards by a free escape of fluid having the physical and chemical characters of cerebro-spinal fluid, will surely warrant us in coming to this conclusion. When admitted, the patient was suffering from severe concussion, and the reaction which soon set in threatened to pass beyond the normal limits. The elevation of temperature, however, did not continue for more than a day. On the fourth day the symptoms appeared to indicate commencing intracranial inflammation, but the absence of fever and other signs negatived this probability. At no period was there any evidence of the functions of the facial or any other cranial nerve (portio dura of seventh alone excepted) being interfered with. On several occasions since his discharge he has presented himself for inspection, and appears to be restored to an ordinary state of health, and now he is able to resume full work as a joiner.

Case 2.—John G., aged fifty, admitted on October 7, 1882.

Family and previous history good. The character of the injury is involved in considerable uncertainty. It is surmised that he fell down two flights of stairs, and alighted on the side of his head. He was slightly inebriated at the time.

Condition on admission was that of profound coma. It was quite impossible to rouse him. Surface of body was cold, and the face pale, pupils equal but widely dilated, breathing stertorous. No paralysis could be detected. A lacerated wound two inches long, situated over the anterior inferior angle of the right parietal bone, extended through the scalp to the pericranium. No fracture could be made out. Slight hæmorrhage from right auditory meatus. Soon after admission patient vomited blood, while the bleeding from the ear increased.

October 8.—Patient began to exhibit symptoms of cerebral irritation. He assumed a flexed position, and now and again moved restlessly, especially if spoken to in a loud voice. He could not be made to answer questions. The right auditory meatus was found plugged with a whitish substance, which on closer examination was discovered to be brain-matter. Mr. Priestly (formerly Assistant Professor of Physiology in the Owens College) submitted it to a microscopical examination, and confirmed our suspicions.

9th.—Patient still more irritable. He has not yet spoken. Slight discharge of cerebro-spinal fluid followed the removal of the portion of brain-substance. Patient passes urine involuntarily.

10th.—He maintains the flexed position, but the signs of cerebral irritation are subsiding.

14th.—No evidence of paralysis of the extremities. Last evening the pulse became very feeble, and he appeared so collapsed that it was deemed necessary to administer brandy, and to apply hot bottles to the feet. This morning patient is stronger, and will answer questions in a muttering, unintelligible manner. Deafness on right side detected; also paralysis of the external rectus muscle of right eye. No facial palsy.

21st.—Urine and fæces passed voluntarily. Irritability disappearing. Patient has great difficulty and hesitation in forming sentences.

November 5.—Is becoming more rational every day. Memory is seriously impaired. Has no recollection of the accident nor of any of the events of the last few weeks.

13th. Deafness not so marked. Can repeat what is said to him when the left ear is closed. Appetite good. Temperature normal. Pulse 10.

The patient has developed a remarkable loquaciousness, which is in striking contrast to his former taciturn and irritable condition. The functions of the brain are being restored slowly and gradually.

Dr. Pierce, who was kind enough to examine this patient, has placed the result of his examination at my disposal. I gladly embrace this opportunity of putting it on record:—Examination of right ear made February 14, 1883. Watch ⅝ in. Tuning-fork (C), on vertex, nose, teeth, right and left temple, heard most distinctly in the right ear; at right meatus (quarter of an inch distant), heard half a tone lower than at left meatus. Galton's whistle heard fairly well by the right ear for high and low notes. No tinnitus aurium. No labyrinthine vertigo or headache. Right Eustachian tube fairly pervious, but no movement of membrana tympani could be detected on Valsalvian inflation. After removal of some cerumen, the entire membrana tympani seemed considerably congested, much collapsed. Manubrium of malleus distinct and vascular. No cone of light. Occupying the greater part of the posterior inferior and portion of anterior inferior quadrant was an imperfectly cicatrised perforation, through which air passed; only a very minute opening existed. Dr. Pierce observes that this case is very remarkable. Although there is evidence of some slight obstruction or consolidation in the middle ear resulting from the great disorganisation produced by the fall, the amount of hearing left is little short of normal. The absence of tinnitus aurium and vertigo is most unusual in such cases. The complete closure of the perforation may be expected if the ear is well preserved from cold.

Remarks.—The escape of cerebral substance by the auditory meatus is an event which is as remarkable as it is rare, and constitutes a symptom which is undeniably diagnostic of fracture of the base of the skull. At first the man presented undoubted symptoms of compression, and it was impossible to elicit any response even to loud shouting. Gradually reaction set in; but after some days had elapsed there appeared signs of syncope, which threatened to destroy life, and it was considered absolutely necessary to administer a stimulant, in order to tide the patient over a very critical period. Under ordinary circumstances, in head injuries this practice is not only unnecessary, but positively injurious. The patient may possibly owe his life to a slow recovery from the shock of the injury, and that the tardy reaction may have prevented intracranial hæmorrhage and inflammation. Throughout the progress of the case there was a remarkable absence of fever, indeed the temperature was frequently subnormal. The severe shake which the brain sustained has left traces that will probably remain for some time. The mental faculties—especially memory—did show undoubted evidence of deterioration. Lately, however, considerable and steady improvement appears to have taken place. At one time paralysis of the facial was suspected, but, on examination, no difficulty in closing the eyelids or in whistling could be detected. The rapid recovery of the power of hearing with the damaged ear must be considered as a very interesting and important feature.

THE BACILLUS TUBERCULOSIS.—Drs. Gradle and Woltmann thus terminate a paper on "The Diagnosis of Consumption by means of the Microscope," read at the Chicago Medical Society (*Phil. Med. News*, February 17), from a general review of the facts hitherto made known, and their own investigations:—"The inevitable conclusions from our own work, as well as that of other observers, are that—*Every case of pulmonary tuberculosis can be diagnosed by means of microscopic examination of the sputum, even before the clinical examination reveals it with certainty;* and that *When repeated proper examination of the sputum fails to show the bacillus tuberculosis, pulmonary tuberculosis does not exist.* To speak with certainty in any case requires, of course, that the observer should have familiarised himself with the methods and possess the proper appliances. Our success has been so invariable, that we feel confident enough to challenge the Society to produce a case of tuberculosis in which we cannot demonstrate the bacilli."

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Medical Times and Gazette.

SATURDAY, MARCH 24, 1883.

THE GOVERNMENT MEDICAL BILL.

Taking up again our analysis of the Government Medical Act Amendment Bill at the point at which we were obliged to stop last week—namely, at Clause 29, part iii., which treats of the management of the Medical Register,—the Bill prescribes, among other things, that the Register shall be divided into three parts or lists: one containing the names of all "home practitioners," that is to say, of all medical practitioners on the Register when the Act comes into operation, and of all who after that time become entitled to registration by virtue of having passed a final examination under the Act; a second for colonial; and a third for foreign practitioners. Each list is to contain two columns—one for the "qualifying titles," and the other for the "higher medical titles." On and after "the appointed day" for the Act to come into force, at present defined as January 1, 1885, the only "medical qualifying title" for a home practitioner who registers for the first time will be "Licentiate of the Medical Council in Medicine, Surgery, and Midwifery"; and for a practitioner whose first registration had taken place before that day, "any title indicating or implying that a person has obtained a diploma, whereby before the appointed day he became qualified to be registered as a medical practitioner; also any other title which before the said appointed day he had a right to have entered on the Register as a medical title." Non-registered practitioners will do well to make special note of this provision. "Medical higher title" means any title indicating or implying the grant of a diploma, which may appear to the Medical Council to have been granted, *after examination*, in respect of a substantially higher degree of knowledge than that required for a qualifying diploma under the Act; or a diploma which has been granted as a testimonial of special distinction, and appears to the Medical Council to deserve recognition as a higher medical diploma. These last words may be supposed to refer to such titles as the Fellowship of the Royal College of Physicians of London, and to medical degrees conferred *causâ honoris*. The clause regarding erasure from the Medical Register proposes to enact that when the Medical Council are of opinion that the erasure of the name of a person from the Register will be too severe a punishment for the offence of which he may have been found guilty, they may, instead of directing his name to be erased, declare that he be suspended, and thereupon direct the word "suspended" to be entered opposite his name in the Register. No limit for the period of suspension is named. A person so suspended will not be deemed to be a registered practitioner so long as the suspension lasts. No person is to be suspended, or his name erased, on account of his adopting, or refraining from adopting, the practice of any particular theory of medicine or surgery; or on account of any conviction for a political offence out of Her Majesty's dominions; or on account of conviction for an offence which, though within the provisions of the section, does not, either from the trivial nature of the offence, or from the circumstances under which it was committed, or from the time that has elapsed since it was committed, disqualify a person, in the opinion of the Medical Council, for practising medicine and surgery. And any person aggrieved by any action of the Medical Council under this section may appeal summarily to the High Court of Justice, which Court may confirm, reverse, or modify the decision of the Council. Clause 35 of the Bill empowers all recognised medical authorities in the United Kingdom to grant medical diplomas to persons of both sexes; by Clause 36 they may, if they think it expedient so to do, admit without further examination any person, who has passed a final examination in pursuance of the Act, to their lowest qualification; and Clause 37 gives power to any medical authority or medical school to make any such changes in its constitution or practice as may be necessary to enable it to conform to any of the provisions of the Act, or of any rules made in pursuance of the Act.

Part iv. of the Bill deals with expenses and medical funds. Each Medical Board is to form a fund; all sums received by each Board being carried to the account of its fund. These funds are to be for the payment of—(1) the expenses of the examinations in that part of the kingdom to which each Board belongs; (2) the reasonable expenses of the members in attending the Board, and the payment of a reasonable remuneration or compensation for attendance; and (3) expenses for offices and rooms, and any expenses in respect of elections, visitations, or otherwise properly incurred in the performance of the duties of the Board. The Board are to account for their receipts and expenditure to the Medical Council, and any surplus funds they may possess are to be paid to the Medical Council. The Medical Council fund is to be applied in payment—first, of the reasonable expenses and remuneration of the members of the Council; second, of expenses of officers, rooms, etc.; third, of expenses properly incurred by the Medical Boards in or about the election of the direct representatives to be returned to the Council by the registered practitioners; fourth, of the expenses of maintaining such medical museums and libraries belonging to any recognised medical authority as may hitherto have been ordinarily maintained for general public purposes by any such authority out of fees paid by applicants for its qualifications, and may be of such importance to the promotion of knowledge in medicine or surgery as to deserve to be maintained out of the funds of the Medical Council; and, finally, any surplus still available "shall be applied for the benefit of the medical profession, or in such manner as the Medical Council may, with the sanction of the Privy Council, determine." What may be meant by the term "for the benefit of the medical profession" is not even suggested, unless—and we are not at all sure that this is not the case—the term

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only refers to the donations towards the maintenance of the before-spoken-of medical museums and libraries. The Branch Councils of the General Medical Council will cease to exist as soon as the Medical Boards come into office, and the funds of the Branch Council of each part of the kingdom will vest in the corresponding Medical Board. In like manner, when the Medical Council comes into office, the General Council will cease, and all its funds and property will vest in the new Council.

Part vi. contains general provisions as to Medical Boards, Medical Council, and Privy Council. It provides for the appointment of officers by, and the legal status of, the Boards and the Medical Council; and for the approval and confirmation of schemes by the Medical Council and the Privy Council. It ordains that all powers by the Privy Council may be exercised by any two or more of the members of that Council, instead of by any three or more as provided by the Medical Act of 1858, and it does not require that the Vice-President of the Committee of that Council shall be one of them. It enacts that no colonial legislature shall make any regulation for disenabling any medical practitioner registered under the Act from practising in the colony; as to recovery of penalties; as to evidence; and as to election offences; and some miscellaneous provisions as to services by post and as to publication of proceedings.

Part vii. deals with the "transition from old to new law"; it provides for the time of election of the Medical Boards, and of the nomination and election of the Medical Council. The Medical Boards are to be elected in January, and are to meet for the first time during the first fortnight in February, 1884; and the first meeting of the Medical Council is to take place during the first fortnight in April of the same year. The appointment of the Crown nominees on the Medical Council is to be notified to the returning officer, on the first occasion, on some day in February, 1884, and on some day in the same month in every succeeding fifth year; and the election of members elected by the Medical Boards on some day not later than March 17. The election of the members by the registered medical practitioners is to be completed not later than March 21 the same year, and is to be managed by the Medical Boards, and conducted by voting papers. Each Medical Board is, on or before May 1, 1884, to submit to the Medical Council a scheme or schemes: (1) for the final examination of medical students in its division; and (2) for the education of students within its division, provision being made for the admission to the first final examination of medical students undergoing their course of education at the time when the scheme or schemes came into force. The first final examination under the Act is to take place on some day in 1885, not later than March

Part viii. concerns the Pharmacopœia, which is to be published from time to time by, and to vest in, the New Medical Council; contains saving clauses, one of which permits any foreigner possessing a degree or diploma in medicine from any foreign university, and entitled to practise medicine, surgery, and midwifery in his own county, to act as resident medical officer of any hospital established exclusively for foreigners, though he be registered as a foreign practitioner under the Act, but does not permit him to engage in any medical practice except as such resident medical officer; a second, provides that the Act shall neither increase nor diminish the privileges in respect of his practice of any person who, on the day preceding the appointed day, is a *registered* medical practitioner; and another clause provides that any person who at the time of the repeal of any enactment repealed by the Act was, in pursuance of such enactment, legally entitled to practise medicine, etc., in any colony or part of Her Majesty's dominions other than the United Kingdom, shall after the date of such repeal continue to be so entitled. This part contains also a clause as to the Dentists Act, providing that any power given by that Act to the General Council may be exercised by the Medical Council; and Clause 72 gives the "definitions" of various expressions used in the Act. Clause 74 repeals the Acts mentioned in Schedule 3 of the new Act, and makes the Act apply to the Isle of Man and the Channel Islands. The first schedule to the Act provides certain regulations in respect of the proceedings of Medical Boards, and of committees of Medical Boards; and the second schedule, like regulations for the Medical Council and its Committee, descending, as concerns both bodies, to such minutiæ as fixing the length of time that may elapse at any meeting of a Board, of the Council, or of any committee before a chairman is elected, in case of the absence of president and vice-president, or of chairman and vice-chairman. While, in the body of the Bill, matters that may occasion not a little difficulty, and some of which are of great importance, are left entirely to the wisdom of these bodies that have to be most carefully guided by the Legislature in the management of their meetings. The conduct of examinations previous to the final one may be still entrusted to the existing Medical Council, or may be undertaken by the Medical Boards. It would have been far wiser and more just to have left these examinations positively in the hands of the existing authorities so long as their examinations satisfied the Medical Boards and the Medical Council.

SCIENTIFIC WORK IN LUNATIC ASYLUMS.—II.

The remedy for the stationary condition of the science of morbid psychology is, as is usually the case, much less easy to point out than the defect. While the faults of the system are obvious, it by no means follows that they can be rooted out without at the same time removing much that is beneficial. For the benefit of suffering humanity, for the interest of science, for the credit of the asylum physicians themselves, it is of the utmost importance that they should be relieved of much, if not all, of their administrative work, and allowed the leisure and opportunity to devote themselves wholly to the treatment of their patients; but the objections to this reform are weighty, and the obstacles formidable. In the first place it is to be remembered that the chief means of treating insanity is by employment; and that consequently the time, the place, and the manner in which a patient is to be employed must be absolutely at the discretion of the physician. Yet it seems very difficult to put the work under the charge of one authority, and the workmen under the charge of another. If the physician prescribes what class of work this man and that man are to do, it seems an obvious consequence that he should prescribe what is the work that most requires to be done. Nevertheless, these are distinct questions, and while the one is a matter for the superintendent, the other should be left to the steward or bailiff. Again, it cannot be denied that, since every circumstance in the surroundings of a patient has some influence, and many of them an important influence, upon his mental health, changes in the construction and administration of an asylum should not be made without the knowledge and consent of the superintendent; but beyond a consultative and veto power his functions should not go. He should be neither required nor permitted to exercise the minute personal supervision of a clerk of the works. The most important obstacle to such a reform as is here proposed would, we fear, be raised by the superintendents themselves. Not only is the sense of power to most men very sweet; not only is the work of

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administering a great institution far more fascinating and congenial to most minds than the abstruse and often barren task of investigating obscure cases of mental disease; but when a thing has gone wrong, and is not put right as quickly as it ought to be, the temptation to an active man is almost irresistibly strong to take the matter in hand and personally superintend the rectification. Yet it is manifest that to rectify a matter of secondary importance at the cost of neglecting a matter of primary importance is wrong in principle; and the point on which we insist is that the investigation and treatment of insanity are, to the physician, incomparably the most important and primary duties, and that the administration of the asylum is subsidiary to this end, and should be left to subordinate officers. Another grave difficulty in the way of the reform that we advocate is, that in small asylums, in which, of course, the salaries rule low, there is no officer, except the superintendent himself, of sufficient authority or intelligence to carry on the higher class of administrative work; and for this difficulty there appears to be no solution. But, on the other hand, in small establishments the superintendent is more likely to have spare time over and above that required by his personal care of his patients, so that in this case the reform is perhaps less imperative. It is in large asylums that the emancipation of the superintendent from administrative work is most needed, and it is in them that it can be most easily effected. It is quite true that where the change that we advocate has been actually carried out—in the asylums of Middlesex and those under the Asylums Board—there has not been an increase of scientific work over that done in other asylums; and this may be brought forward as an argument for the retention of the *status quo*. But, apart from the fact that in these asylums the distribution of responsibility, although different from that prevailing elsewhere, is not the most favourable for efficient working, we have to take into consideration the enormous number of patients retained in them, and the inadequate numbers of the medical staff. It was a maxim of Rarey, the horse-tamer, that if a high-spirited horse be harnessed to a weight which yields never so little to his efforts, he will break his heart rather than give in; but if he be harnessed to a wall or a post, which his utmost efforts fail to stir by a hair's breadth, he gives up the struggle at once and for all. The medical officers of these huge establishments are much in the position of the latter case. They have the hopeless consciousness that no effort, no industry of theirs can ever enable them to investigate exhaustively the cases of all their patients; and they wisely confine their endeavours within the limits of what is practicable. We are thus led to another most important aspect of the subject—the absolute necessity of increasing the medical staff of asylums if an adequate benefit to society and to science is to result from the study of insanity. We have to remember that insanity differs from every other diseased condition in the fact that it can be studied only in asylums. In all other diseases the experience of private practice is always available to check and supplement the knowledge derived from the study of disease in hospitals; but in the case of insanity the officers of asylums are the only people to whom we can look for an increase of our knowledge of the subject. To them we look with anxious expectancy, but with an ever-growing feeling of disappointment. That the defect lies not in the individuals, but in the system, we stedfastly believe, and we trust that one portion of the revolution in the management of asylums that we may expect will be effected by the coming county boards will be the restriction of medical officers of asylums to their proper functions, and a consequent increase in their opportunities, desire, and ability to advance our knowledge of the nature and treatment of the different forms of insanity.

THE WEEK.

TOPICS OF THE DAY.

Two deputations recently waited upon Sir Charles Dilke, one from medical officers of health and others, under the auspices of the Social Science Association, and the other from the Vigilance Association, introduced by Mr. Hopwood, M.P. The object of the former of these was to urge that the Government should give its support to Mr. Hastings's Bill to render the notification of infectious disease general, whilst the latter had attended to protest against Government interference in the matter. At the outset, the President of the Local Government Board informed the deputation introduced by Sir Trevor Lawrence, M.P., that there was no necessity for them to go into general questions as to the necessity and advantages of compulsory notification, since, on that point, there was no difference of opinion between him and them; he would prefer that they should address themselves to the question of the advantage to be gained by the extension of compulsory powers universally over the country. Sir Rutherford Alcock explained the views of the deputation upon that point, and alluded to the report of the Select Committee, which showed that in twenty-three urban centres the principle of the proposed Bill had been at work with marked advantage. He further instanced the case of Edinburgh, where compulsory notification had been found to work with such advantage that even its opponents had been forced to the conclusion that the objections formerly urged against it were groundless. in reply, Sir Charles Dilke, whilst admitting the advantages to be derived from Mr. Hastings's Bill, acknowledged that the Government were not quite ready to adopt it in its present form, for fear that, in going in advance of public opinion, such a step might produce reaction. He was of opinion that the time had not yet come to give universally the compulsory powers proposed in this Bill by absolute legislation; at the same time he would advocate the plan of giving to local authorities, who might apply, the means of dealing with infectious diseases at once, without the necessity of applying for a local Act, and this the Government was disposed to do, either by means of a general Act which they could bring into force themselves, or else by giving them power to make by-laws for that purpose. In answer to a question as to whether the Local Government Board proposed to introduce any Bill on the question, the President said the prospects of legislation this session were not promising. In receiving the second deputation, though Mrs. Miller, who accompanied it, informed him that, as one who had studied medicine herself, she was in a position to assert that the medical profession knew nothing about the cause of epidemics and the real nature of infection, Sir Charles Dilke could only be brought to observe that at present the Local Government Board had done nothing more than promote measures whereby the local representatives of the people might take their own course in regard to these matters.

Another important decision has been given at the Marylebone Police-court, in reference to a dispute as to the amount to be charged by a water company for a supply of water to a house at Haverstock Hill. The case was fully argued about a fortnight ago, and the magistrate (Mr. De Rutzen), who had taken time to consider the question, now said that it appeared to him that the New River Company had in the first place charged a percentage upon the annual value of the premises taken as a whole, and then, in addition, other fixed and special rates in accordance with the Waterworks Clauses Act. Under the circumstances, therefore, the Company had been paid twice over, and, in his opinion, such a state of things was never contemplated by the Act. He should fix the value of the tenement, in this case, in two

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ways: first, as a whole, £160, which was the rent paid; and, secondly, the value of the garden and stables, which had been put down at £40 a year. This would give £120 for the dwelling-house, upon which amount the 4 per cent. allowed by the Act would be calculated. Mr. Grain, on behalf of the New River Company, asked for a case for a superior court, which Mr. De Rutzen at once granted.

Professor Abel last week delivered a lecture at the Royal United Service Institution on "Explosives"; and in the course of it he mentioned that he had been employed in investigating the disastrous occurrence at the Government offices in Whitehall. Nitro-glycerine, he observed, had become one of the most important explosives: in the form of dynamite it was perhaps the most formidable, as well as the most valuable, of explosive agents. Nitro-glycerine mixed with a kind of earth found on the Continent resembled dry putty. In the open air it burned harmlessly, and there then appeared very little of its mischievous nature about it. The method of amalgamating nitro-glycerine with earth assumed various forms, and many fanciful names were given to it. Referring to the value of explosives, there was always, he said, the drawback with regard to the facility with which they could be applied, and the comparatively slight knowledge requisite to apply the scientific results of the experiments. Not only in the recent attempt, but in many others, great mischief had been done by unprincipled people, producing deplorable results.

The Wednesbury authorities recently put forward to the Local Government Board an application, praying that an inquiry might be instituted as to the advisability of establishing a Drainage Union for the Black Country, said to be necessary in consequence of the pollution of the river Tame. The Board's inspector has now concluded his investigation, and his report will shortly be presented. The Tipton authorities opposed the application, on the ground that a united scheme would cost their ratepayers £100,000, and would end in the district being ruined. They were in favour of having a separate system of precipitation, similar to that adopted in Lancashire and elsewhere, which they believed would be much less costly.

An interesting debate was recently held at the rooms of the Medical Union Society, Adelphi-terrace, on the "Preliminary Training of Medical Students." The discussion was opened by Dr. A. E. Sansom. The chair was taken by Mr. W. Morrant Baker. The following motions were, at the end of the proceedings, put to the meeting and carried:—"1. That it is desirable that the standard of preliminary education required of medical students should be equal at least to that necessary for the obtaining of the B.A. degree of the older universities of the United Kingdom. 2. That it is desirable that an examination in elementary science be passed before entrance at a medical school."

At the usual meeting of the Metropolitan Board of Works, held last week, with Colonel Sir J. McGarel Hogg, M.P., in the chair, the Works and General Purposes Committee presented a report submitting a statement of the improvements which had been effected by the Board in the metropolis since January 1, 1856. Mr. Selway, in moving the adoption of the report, said it seemed to the Committee very desirable that a general statement of what had been done since the organisation of the Board in 1856 should be made, in view of pending legislation. During the time the Board had been in existence it had laid down eighty miles of sewers. The embankments on both sides of the river had been formed. The Board had also spent ten millions on sewers and new streets, and in addition had contributed no less a sum than £600,000 to improvements made by vestries and district boards. There had also been committed to their care a number of bridges, which they had thrown open free, and some of which they had reconstructed. The Board had, moreover, secured 1578 acres of open spaces, which were devoted to the public for ever. As regarded permanent works, the Board had expended twenty millions of money: they had spent £2,310,000 in sewerage works, and they had constructed twelve million square yards of paving works at a cost of five and a half millions sterling. Having detailed some other works done by the Board, he moved the adoption of the report, which was unanimously agreed to.

A case of considerable interest and importance under the Rivers' Pollution Prevention Act was heard last week at Farnham, before Mr. Vernon Lushington, Q.C., the county court judge of the district. The action was at the suit of Mr. Bateman, the late High Sheriff of Surrey, against the Farnham Local Board of Health, to restrain the defendants from allowing sewage drainage of the town to be passed into the river Wey, a well-known natural stream which waters the district for many miles. The river flows through Mr. Bateman's grounds at Moor Park, and in consequence of the difficulties attending the disposal of the drainage of Farnham in any other way than by allowing it to fall into the stream, the nuisance has been allowed to continue until, it is alleged, a grave evil has arisen, which can only be dealt with under the provisions of the Act cited. Professor Frankland, the Government analyst, was called to prove that the introduction of sewage into rivers was a very serious matter, the infecting properties of disease not passing away nor being destroyed throughout the entire flow of the streams into which sewage falls. After a great deal of further evidence had been adduced the inquiry was ultimately adjourned.

It is announced that the Duke of Westminster and Sir Charles Trevelyan have each given a donation of £200 to the Preliminary Expenses Fund of the Metropolitan Provident Medical Association, in addition to their payments of £1000 for shares in the Metropolitan Provident Dispensaries Company. The Clothworkers' Company have also subscribed £200 to the same fund. It appears that the province of the medical association in question is to organise the dispensaries, while the Company provides money for buildings and outfits.

The Royal Commission on Metropolitan Sewage Discharge has held several meetings since we last reported. On each occasion further evidence was given on the part of the Corporation of the City of London, but according to the latest accounts this branch of the subject had not been concluded, and the inquiry bids fair to extend over an unlimited period.

THE ROYAL COLLEGE OF PHYSICIANS.

The chief business before the meeting of the Royal College of Physicians of London, held on the 19th inst., was the election of a President. In a very large meeting, Sir William Jenner, K.C.B., was re-elected, by a practically unanimous vote, to the office. Before the election took place, Sir William Jenner, as is the custom with retiring Presidents, addressed the College on the events of the preceding collegiate year. The address, a most able and full one, was listened to with great interest, and the President was requested by the College to allow it to be printed. The use of the College Library was granted to the Medico-Psychological Association for their annual meeting on July 27 next. A committee was appointed to watch the progress of the Government Medical Act Amendment Bill, to take such steps as they may think necessary, and to report from time to time to the College. A report was received from the Council, the most interesting part of which was that with reference to the question "of explaining the reasons for

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nominating members for election to the Fellowship," the Council begged leave to report that they were of opinion that it is not necessary to modify the existing practice, as the claims of every member of the College are always carefully considered in detail before any selection is made. The report was adopted.

OPTIC NEURITIS IN ACUTE ANÆMIA FROM LOSS OF BLOOD.

HORSTMANN (*Centralblatt für Klin. Med.*, No. 3) states that disturbances of sight may occur immediately after a rapid loss of blood, and then are of very short duration, there being no ophthalmoscopic changes. Or the ocular mischief may not be manifest for from three to fourteen days after the hæmorrhage; in these cases there is optic neuritis, possibly accompanied by other lesions of the fundus oculi, and the tendency is towards permanent amaurosis. He narrates the case of a woman aged twenty-eight, who, at the fourth month of her third pregnancy, lost about two litres of blood per vaginam. Partial blindness set in on the fourth day after this, and rapidly increased. After eight days there was well-marked optic neuritis, with linear radiating extravasations of blood in the retina. Signs of atrophy of the optic disc, with defective vision and narrowing of the field of vision, were noted five months and a half later. We may remind our readers that optic neuritis has been observed in chlorosis—*i.e.*, chronic anæmia,—but as an altogether exceptional occurrence. (See Gowers, "Medical Ophthalmoscopy.")

THE GROCERS' COMPANY, AND ORIGINAL RESEARCH IN SANITARY SCIENCE.

THE Court of the Grocers' Company have for a considerable time had under consideration the question of the encouragement of original research in sanitary science; and they have determined to encourage the study of it by founding exhibitions or otherwise. The Court asked and obtained the advice of Mr. Simon, Professor Tyndall, Dr. Burdon Sanderson, and Dr. George Buchanan, and with their valuable co-operation have decided upon and announced a munificent scheme for the encouragement—they do not use the term endowment—of research of an original character in sanitary science. This scheme we will place fully before the profession next week; but at present we are compelled by pressure for space to state only two or three main points of the scheme. In the administration of it, so far as concerns scientific interests, the Court of the Company intend to act through or with the advice of, a standing scientific committee, and Mr. Simon, Professor Tyndall, and Drs. Burdon Sanderson and George Buchanan have consented to form the first such committee. The scheme consists of two forms of endowment: the one, meant as maintenance for work in progress, in fields of research to be chosen by the worker himself; the other, meant as reward for actual discovery, in fields of research to be specified from time to time by the Company. With the former intention, the Company establishes three research scholarships, each of £250 a year; with the latter intention, they appoint a discovery prize of £1000, to be given once in every four years. The research scholarships are intended as stipends for persons engaged in making exact researches into the causes of important diseases, and into the means by which the respective causes may be prevented or obviated. The Court of the Company propose to appoint to two of the scholarships in May, 1883, and to a third in May, 1884; after which the vacancies which occur will be filled in each succeeding May. Subject to the conditions of tenure, each appointment will be for one year; and the holder will be eligible for re-appointment. Candidates must be British subjects, and, when competing for a first appointment, must be under the age of thirty-five. The quadrennial discovery prize is intended to reward original investigations which shall have resulted in important additions to exact knowledge in particular (previously defined) sections of sanitary subject-matter. The Court will, once in four years, propose some subject for investigation; and a period of at least three and a half years will on each occasion be allowed for the investigation of the subject that has been proposed. The subject for the first discovery prize will be announced in May, 1883, and the period for investigation will extend to the last day of December, 1886. The Court will announce the award in May, 1887; when also (as at present advised) they will propose a further subject for investigation. The discovery prize will be open to universal competition, British and foreign.

THE PARKES MUSEUM.

THE rearrangement of the Museum is somewhat slowly approaching completion. The migration of the Museum to its new premises in Margaret-street has been taken advantage of to submit the whole collection to a careful examination; and we believe that the increased efficiency and completeness thus obtained will more than compensate for the delay. Special care and attention have been given to the library, and it is hoped that within a short time it may become a representative collection of works on sanitary science. At the meeting of the Council on the 12th inst., a communication was read from Mr. Ernest Hart, who has offered to present to the Museum a valuable collection of health reports from nearly all parts of the country, which he has formed during the last seven years; and the offer, which included a promise to bind and arrange the reports, was cordially accepted; the collection will form the beginning of a library of reference invaluable in its way, and such as, it is believed, is not available elsewhere for the use of administrators and students of sanitary science. It is hoped that the Council may be able to add year by year, as they are published, the reports of the medical officers of health throughout the country, and to this end Mr. Ernest Hart has promised his co-operation. At the same meeting valuable gifts of books, maps, and plans were received from the United States Government; Dr. J. Tatham, of Salford; Dr. John James; Dr. G. V. Poore; and Messrs. John Taylor and Riddett, of Cannes. The Museum also became the possessor, through the kindness of the Hon. Edward Erskine, C.B., formerly Ambassador at Athens and Stockholm, of a number of pamphlets, drawings, and photographs sent by Dr. Geisse, of Ems. Gifts of books on sanitary science, particularly works, pamphlets, plans, and maps bearing on the subjects of water-supply in both its geological and engineering aspects, on epidemiology, on vital statistics, and on health-resorts, will be gratefully received and acknowledged by the Honorary Secretary, or by the Secretary at the Museum, 74A, Margaret-street, Regent-street. Mr. Edwin Chadwick, C.B., has shown his interest in the work of the Museum by offering to present a medal. There is a large and well-lighted reading-room, to which members will have access, and in which periodicals and works of reference will be kept.

PULMONARY SYPHILIS.

M. BRISSAUD has recently (*Le Progrès Médical*, No. 3, 1883) summed up our knowledge of this subject in a clear and concise manner. We may say at once that he deals only with acquired syphilis, and not with inherited. As in the case of the liver and other viscera, syphilis may give rise to two different lesions—one a fibroid change, mostly superficial; in fact, involving the pleura as much as the lung tissue proper; the other a gummatous change, almost always

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more or less deep-seated, and often surrounding the large bronchi. These gummata are usually few in number, of firm consistence, a yellowish colour, variable in size, somewhat drier than most morbid products. They are usually surrounded by a certain amount of fibroid change. The glands about the bronchi at the root of the lung become enlarged, caseate, and sometimes ulcerate into the bronchi. M. Brissaud is inclined to believe that this degeneration of the glands is, in the majority of instances, the primary lesion rather than a specific inflammation of the lung, and he points out that the disease is most common in the immediate neighbourhood of the root of the lung. As regards diagnosis, the chief difficulty, of course, is to distinguish between a syphilitic and a tubercular lesion. They are equally destructive; they give rise to analogous symptoms, either inflammatory or congestive. But they differ in the part affected, and this is the most important diagnostic point. It has often been said that hæmoptysis is less frequent and less copious in syphilitic than in tubercular lung affections; but this is not a sign upon which any reliance can be placed. A last point, and a very important one, is that when a person has died of a syphilitic affection of the lungs it is almost certain that other evidence of syphilis will be found either in the kidneys, the bones, or the skin. M. Brissaud thinks that the reason these affections are not better known is because they yield so readily to the proper treatment.

BROADMOOR CRIMINAL LUNATIC ASYLUM, 1881.

The publication of the Report of the Broadmoor Criminal Lunatic Asylum for the year 1881 has been delayed for several months by the deplorable attack made upon Dr. Orange by one of his patients; and we welcome its tardy appearance the more heartily since it indicates a recovery which, we trust, is complete, and upon which we offer our sincere congratulations. The Report of the Criminal Lunatic Asylum differs in many important respects from that of kindred institutions; and in none more than in the multiplication and elaborate completeness of the statistical tables, which are no fewer than forty-eight in number, the usual number being twelve. Most of the additional tables are necessitated by the combination of the statistics of crime with those of lunacy; but some—such as Table 37, which gives a brief epitome of the history, of the state during residence, and of the post-mortem appearances found in every patient who has died during the year—require no data beyond those available in every lunatic asylum, and are well worthy of adoption by other institutions. Other tables—such as No. 35, which gives the "number of cases and the principal diseases among the persons in the Asylum service *and members of their families*"—are, we are bound to say, of no general interest, and might well be omitted. From the mass of statistics presented in the Report there are, of course, many important inferences to be drawn. A single example will be enough to show their value. It appears that of the 490 patients remaining under treatment at the date of the Report, 90 were found after conviction to be insane. Of these 90, 13 had been convicted of murder, and 77 were undergoing penal servitude for other offences. Now the total number of murderers found insane is 220, of whom only 13, or not quite 6 per cent., were so found after conviction. But the total number of patients who have committed other offences, including manslaughter, is 270, of whom 77, or more than 26 per cent., were found insane after conviction. From which it appears that either a large percentage of the murderers who are hanged are insane—a supposition which, considering the character of our criminal proceedings, cannot be entertained for a moment,—or that the infliction of penal servitude has a very powerful direct effect in producing insanity. A special and very praiseworthy feature in the management of Broadmoor Asylum is the very high average of the length of service of the attendants. No fewer than forty count over ten years' service, and nineteen have served the Asylum for more than fifteen years. The wages are, as they should be, very liberal, but even with this aid it must have required exceptionally good management to secure so satisfactory a record.

THE PARIS WEEKLY RETURN.

The number of deaths for the tenth week of 1883, terminating March 8, was 1140, and of these there were from typhoid fever 29, small-pox 10, measles 9, scarlatina 5, pertussis 7, diphtheria and croup 46, erysipelas 8, and puerperal infections 4. There were also 56 deaths from acute and tubercular meningitis, 245 from phthisis, 49 from acute bronchitis, 95 from pneumonia, 88 from infantile athrepsia (22 of the infants having been wholly or partially suckled), and 23 violent deaths. The number of deaths returned this week is sensibly lower than the mean of the last four weeks, 1186. With the exception of measles (the number of deaths from which have diminished from 23 last week to 9) the mortality from epidemic diseases is nearly stationary. The satisfactory sanitary condition which prevails is also shown in the diminution of the admissions for typhoid from 76 to 58, for small-pox from 34 to 24, and for diphtheria from 36 to 33. The number of cases of measles under treatment is, however, high, notwithstanding the diminished mortality from the disease. The number of deaths from phthisis (245) is higher than that of any week since that of February 16, 1882. The births for the week were 1322.

THE METROPOLITAN ASYLUMS BOARD MEETING.

A deputation from the inhabitants and householders of Clapton Park attended the last fortnightly meeting of the Metropolitan Asylums Board to present a memorial in opposition to the proposal, which has been under the consideration of the Managers, to establish an ambulance station adjoining the Eastern District Hospital. The objection was based on the grounds that it would seriously depreciate the value of property in the neighbourhood, and would injuriously affect the health of the inhabitants. People were already taking alarm and removing from the neighbourhood. The memorial was ordered to be referred to the Homerton Committee for consideration and report. A report was next brought up by Sir E. H. Currie from the General Purposes Committee, upon the scheme for the transfer of small-pox patients from their homes to the proposed floating hospital on the Thames by means of an ambulance steamer. The Committee recommended that an ambulance paddle-steamer of 100 tons burden should be constructed, at a cost not exceeding £4500, subject to the sanction of the Local Government Board. In moving the adoption of the report, Sir E. H. Currie stated that this was practically the first outcome of the letter received at the last meeting from the Local Government Board. As regarded the north side of the river, the Managers had little doubt that they would be able to obtain a wharf; in case of any difficulty being experienced on the south side, it would be necessary to obtain aid in the shape of Parliamentary powers of compulsion. The report of the Committee was adopted. The returns presented from the fever hospitals showed that 383 patients remained under treatment, of whom 264 were suffering from scarlet fever, 3 from typhus, and 112 from enteric fever. There were 530 empty beds, and the number of patients was 5 less than at the conclusion of the previous fortnight. The small-pox returns showed that 79 patients were under treatment, or a decrease of 9 as compared with the last returns rendered, whilst the number of beds available was 143.

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THE METROPOLITAN WATER-SUPPLY FOR THE MONTH OF JANUARY, 1883.

THE report of the Water Examiners on the quality of the water supplied by the metropolitan companies for public use during the month of January last is not quite so favourable as that for the preceding month. In dealing with the sources of the supplies, Colonel Bolton remarks that the state of the water in the Thames at Hampton, Molesey, and Sunbury was bad in quality during the whole of the month of January. The river was again in a state of flood during the whole of the month, and was much polluted by the effluent waters bringing down from the land large quantities of marl and clay, as well as decayed vegetation and other impurities, which stained the water and rendered it exceedingly turbid. The impurities in suspension were to a great extent removed by filtration, but those in solution passed through the filter-beds, causing the filtered water to be stained a peaty-brown colour. The intakes were closed as much as possible, so as to avoid taking in water during the floods, and the Chelsea Company were able to close their intake on seventeen days during the month. Whilst these floods prevail, water companies unprovided with sufficient storage reservoirs are compelled to take in dirty water. The water in the river Lea was also in a bad condition during the whole of the month. In his report on the quality of the water after filtration, Dr. Frankland observes that what was supplied by the West Middlesex, Southwark, Grand Junction, and Lambeth Companies was of somewhat inferior quality to that of the previous month. The Chelsea Company's water, on the other hand, showed a slight improvement, being the best of the Thames waters, whereas in December it ranked last. With the exception of the Southwark and West Middlesex Companies' supplies, which were slightly turbid, all the Thames water was efficiently filtered before delivery; but the Southwark Company's water contained moving organisms. The water drawn from the Lea by the New River and East London Companies, Dr. Frankland found to be of better quality than in the preceding month; both waters were delivered in an efficiently filtered condition.

OFFICIAL CARELESSNESS IN PREVENTING THE SPREAD OF SCARLET FEVER.

IN his monthly report on the health of Kensington for December last, Dr. T. Orme Dudfield, in commenting on the prevalence of scarlet fever, remarks that further instances have to be recorded of the imprudence—whether resulting from carelessness or ignorance—of parents, who do not scruple to expose their sick, or rather convalescing, children in public, to their own and the general danger. The most conspicuous case was that of a man (whose wife was said to work at a laundry) who allowed his child, while "peeling," to go to a place of worship, and took her out and about before their single room had been disinfected. This man, Dr. Dudfield adds, lived in the house of a letter-carrier, who failed to report the illness to his superiors, as required by the regulations laid down by the Postmaster-General. The fact was, however, reported at the local post-office, and it was understood that the man would be suspended from duty pending the child's recovery and the disinfection of the house; but this step was never taken. The next instance is even more surprising. In this case a constable in the A division of police continued on duty all through the illness from fever of two of his children, and contrary to the police regulations. It is stated that he had the authority of his divisional surgeon for so doing, that gentleman not having recognised scarlet fever, which may have been in an unrecognisable phase at the date of his single visit, which was paid, however, on the constable's report of the illness to his superior officer, in accordance with regulations, and by direction of a private medical practitioner, who judiciously instructed him to report the illness at Dr. Dudfield's office also. There was no question as to the nature of the disease, the process of "peeling" having gone on as usual, but the constable refused to allow the children to be removed to hospital. In this case Dr. Dudfield communicated with the divisional surgeon on the subject, but received no explanation. The matter is worthy of serious consideration when, as in each of these cases, a Government department refused to co-operate with the medical officer of health for the district.

A BRIEF SUMMARY OF THE VITAL STATISTICS OF THE YEAR 1882.

THE quarterly return of the Registrar-General to December last, in addition to the usual information given, contains a brief summary of the vital statistics of 1882, derived from the returns furnished by the local registrars to the central office. It is stated that during the four quarters of 1882, 888,940 births and 516,783 deaths were registered in England and Wales. The *natural* increase of population, therefore, during the period, by excess of births over deaths, was 372,157, against 353,019 and 391,707 in 1880 and 1881. The birth-rate in 1882 was equal to 33·7, and the death-rate to 19·6 per 1000 persons estimated to be living in the middle of the year. The birth-rate showed a further slight decline from the steadily decreasing rates in the five preceding years, and was lower than the rate recorded in any year since 1858, when it was also 33·7. The death-rate showed an increase of only 0·7 upon the unprecedentedly low low rate in 1881, but was, with that single exception, lower than the rate in any year since civil registration was established in 1837. The mean death-rate of the first two years of the current decade, 1881-90, was 19·3 per 1000, and 2·1 below the mean rate in the preceding ten years 1871-80, implying that more than 100,000 persons survived the last two years, whose deaths would have been recorded had the average rate of mortality in the preceding decade been maintained. The total deaths during the past year included 125,157 of infants under one year of age, and 129,454 of persons aged upwards of sixty years. The rate of infant mortality, measured by the proportion of deaths under one year to births registered, was equal to 141 per 1000, against 135, 153, and 130 in the three preceding years; the average during the ten years 1872-81 having been 146 per 1000. The rate of mortality amongst persons aged upwards of sixty years, during 1882, did not exceed 65·6 per 1000 persons estimated to be living at these ages, showing a further decline from the rates that prevailed in the three preceding years, which were 77·9, 68·5, and 67·2 respectively. The deaths from all causes during the past year included 16,554 from diarrhœa, 14,431 from whooping-cough, 13,477 from scarlet fever, 12,241 from measles, 7971 from "fever," viz., typhus, enteric, and simple or ill-defined, 3756 from diphtheria, and 1304 from small-pox, making a total of 96,734 deaths, for which the principal zymotic diseases were responsible, or equal to a rate of 2·64 per 1000, against 3·30 and 2·24 in the two preceding years. The mean annual death-rate from these principal zymotic diseases, which had been 3·87, 4·11, and 3·36 per 1000 respectively in the three decades, 1851-60, 1861-70, and 1871-80, did not exceed 2·44 in the first two years of the current decade, giving fair grounds for the assumption that sanitary science and teaching are beginning slowly to have their due effect. Compared with the numbers in 1881, however, the fatal cases of diarrhœa, whooping-cough, measles, "fever," and diphtheria were more numerous last year, while those of scarlet fever and small-pox showed a decline. The death-rate from "fever" last year was equal

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to 0·30 per 1000, and showed a slight increase on the exceptionally low rate (0·27) in 1881; the mean fever-rate for 1881 and 1882, however, did not exceed 0·29, whereas in the three most recent decades it was equal to 0·91, 0·89, and 0·49 per 1000 respectively. During last year 27,367 inquest cases were registered, equal to 5·3 per cent. of the total deaths; this proportion, though slightly below that which prevailed in 1881, somewhat exceeded the average percentage in recent years.

WINDOW-GARDENING IN DUBLIN.

On Friday, March 2, the annual distribution of prizes awarded by Lord and Lady Brabazon to the tenants of the Dublin Artisans' Dwellings Company for neatness and cleanliness of rooms and for window-gardening, took place in the Antient Concert Rooms, Dublin; Mr. Richard Martin, D.L., Chairman of the Company, presiding. The report of the judges was submitted by Dr. Grimshaw (Registrar-General), who had taken part in awarding the prizes. It appeared that the judges had paid upwards of 400 visits, and had taken great care and pains in making the awards. When the final decision came to be made the competition was so close that they had to pay repeated visits in several instances, more to look for defects to determine differences than to search for particular merits. In some cases the perfection of cleanliness and tidiness seemed to have been attained. On the whole, although the proportion of competitors was but slightly above that of the year 1881, the competition had been much closer. In addition to the prize-winners, the judges deemed it right to state that a considerable number of the competitors have so closely approached the winning numbers that, with the consent of Lord and Lady Brabazon, they had arranged those tenants in a commended list, in consideration of the admirable efforts which they had made to keep their houses neat and cleanly during the year.

THE NORTH DUBLIN UNION WORKHOUSE.

The Inspector of the Local Government Board for Ireland, Dr. Francis Xavier MacCabe, has reported most unfavourably on the sanitary condition of this institution. In his half-yearly report, dated February 16, 1883, he says that during the past six months nearly every department had been overcrowded. The nominal accommodation, according to his calculation, is about 2079; according to the estimate of the Guardians, it amounts to 2513. On January 25 the inmates numbered 2668. During the six months embraced in the report (July 1 to December 31, 1882) the average daily number was 2484. He observes that in the present overcrowded state of the workhouse the introduction of a single case of typhus to any of the wards in the main buildings might be attended with disastrous consequences, and as an illustration of the constant presence of this danger, he mentions that on one of the days of his recent inspection he noticed in the observation ward a patient unable to leave his bed, who had been transferred from the Hardwicke Hospital convalescent after fever. The Guardians would act wisely if they refused to receive such convalescents from any quarter. If such patients are to be retained at the Hardwicke, it would be better that the Guardians should pay for their admission to Cork-street Fever Hospital, from which institution patients are not discharged until they are thoroughly well. The Inspector then proceeds to point out, in detail, imperfections and deficiencies of various kinds; the boys' school building is, however, reported as being in excellent order. Finally, the report states that, as might be expected from the general overcrowding, the sanitary condition of the workhouse is not quite satisfactory. The infants in the nursery wards appeared to look more delicate than on the occasion of former inspections. During the six months under review in this report, nineteen cases of fever were transferred from the workhouse to hospitals for the reception of infectious diseases. All these cases had been more than fourteen days in the workhouse before they manifested symptoms of fever. There were also twenty-six cases removed which had been less than fourteen days in the workhouse. There were forty-three cases of ophthalmia amongst the school children. On January 26 there were only three cases of this disease under treatment. There were forty-seven births in the workhouse during the six months; and within the six months there were five deaths amongst these infants. The average daily number resident in the workhouse during the six months amounted to 2484, and the total number of deaths in the same period was 306. To Dr. MacCabe's report additional interest and importance attach at present, when typhus fever is showing a marked epidemic tendency in Dublin. Into Cork-street Fever Hospital alone seventy-one patients suffering under the disease were admitted in February.

On Friday, last week, the Shuttleworth Scholarship (Gonville and Caius College), of the value of £60, tenable for three years, and open to the competition of all medical students of the University (Cambridge), of not less than eight years' standing, was awarded to William Hay Caldwell, B.A., Scholar of Gonville and Caius College.

The Earl of Zetland has given £500 to the Edinburgh Association for the University Education of Women to found a bursary for the benefit of its students. The bursary is to be known as "The Earl of Zetland Bursary."

The Duchess of Teck has signified her intention of becoming a patroness of the forthcoming Exhibition of Sanitary Domestic Appliances and Hygienic Dress, to be opened at Humphrey's Hall, Knightsbridge, under the auspices of the National Health Society.

The Duke and Duchess of Edinburgh have intimated their intention of opening the bazaar to be held at Highgate, on April 19, 20, and 21, in aid of the Children's Convalescent Home, All Saints', Highgate.

The Russian press notices a new step taken by General Tchernaieff, at Tashkend, in establishing a hospital for Mussulman women, presided over entirely by Russian female doctors. This, it is said, is the first time that Russian doctors of the fair sex have been admitted to separate and independent practice.

The Autumnal Congress of the Sanitary Institute of Great Britain will be held this year in Glasgow, from September 26 to 29. The Exhibition of Sanitary Apparatus and Appliances in connexion with the Congress will remain open until October 20.

We understand that the vacancy caused by the resignation of Dr. Braxton Hicks, Obstetric Physician to Guy's Hospital, has been filled by the appointment of Dr. Galabin, who is to be succeeded as Assistant Obstetric Physician by Dr. Horrocks.

Dr. P. MacBride, Surgeon to the Edinburgh Ear Dispensary, and Lecturer on Diseases of the Ear in the Edinburgh School of Medicine, has been appointed to the post of Aurist and Laryngologist to the Royal Infirmary.

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MEDICAL MATTERS IN PARLIAMENT.

HOUSE OF LORDS—THURSDAY, MARCH 15.

Medical Act Amendment Bill.—Lord Cranbrook, observing that this Bill stood on the paper for a second reading that evening, appealed to the Lord Privy Seal to postpone the reading until after Easter, as the measure affected many public bodies who had not had time to consider its provisions. Lord Carlingford, in reply, said that he proposed to put the Bill down for the first Thursday after the Easter recess.

Sale of Liquors on Sunday (Ireland) Bill.—Lord Carlingford, in moving the second reading of this Bill, said the object of it was to perpetuate the Irish Sunday Closing Act of 1878, which would expire this year, and to make it apply to the five towns then exempted from its provisions. Great pains had been taken by Government to ascertain the real state of public opinion about the measure in the towns formerly excluded, and it seemed absolutely certain that there was an enormous preponderance of opinion in favour of the Bill. After some discussion, the Bill was read a second time.

HOUSE OF COMMONS.

The Post Office Department.—In reply to Mr. A. O'Connor, who asked whether it was true that the Post Office Department was greatly overcrowded, and that financial considerations excluded proper regard for the health of the *employés*, Mr. Fawcett assured him that the Post Office authorities were most anxious, as far as possible, to prevent the staff from being inconvenienced by overcrowding; but that the provision of building was one of the chief difficulties in administering a department the business of which was so rapidly increasing as that of the Post Office. Some new buildings had, however, been recently taken, and enlargements were being carried out in the existing premises. As to the amount of overtime, it was difficult to ascertain the number of hours of extra duty worked, because overtime was generally paid for, not by the hour, but by the amount of work done; no clerks had been required to work the number of hours that had been mentioned in the question. No clerks were employed in the basement of the Savings Bank, but the sorting of papers and bookbinding were carried on there. Inconvenience had been suffered from the necessity of using a large amount of gas, and the substitution of the electric light for gas was under consideration.

FRIDAY, MARCH 16.

Wakes in Cases of Death from Infectious Diseases.—In reply to a question put by Mr. W. Corbet on this subject, Mr. Trevelyan said: Section 149 of the Public Health (Ireland) Act, 1878, gives powers to the Local Government Board to make regulations for the prevention of the spread of infectious diseases, and for the speedy interment of the dead, only in the case of the existence or apprehension of any formidable epidemic or outbreak of such a disease. Its provisions are not applicable in a case like that referred to. The case has been especially inquired into by a medical inspector of the Local Government Board, and his report shows that the propagation of the disease—typhus fever—appears to have been mainly due to the concealment of the disease by the families just attacked. There is no evidence to show that any cases were attributable to the wake.

Murder by a Lunatic in Dundrum Asylum.—Mr. W. Corbet inquired whether the attention of the Chief Secretary for Ireland had been called to the murder of a lunatic in the Central Criminal Asylum at Dundrum by a fellow-patient, and whether he would lay the report of the inquest and the finding of the jury upon the table of the House.—In reply, Mr. Trevelyan said that the matter was under official investigation, and he could not yet say whether he should be prepared to lay the papers before the House.

MONDAY, MARCH 19.

Inquest at the Dundrum Asylum.—In reply to Mr. Corbet, Mr. Trevelyan said: I am informed that it is true that the coroner threatened to lock up the jury unless they agreed to a verdict, and that he afterwards said that, being neighbours, he would set them free. The coroner is not an officer of the Executive Government, but there is no objection to the depositions at the inquest and the finding of the jury being laid on the table of the House if the hon. member wishes to move for them.

Protection of Juvenile Morals.—Mr. Ecroyd asked the Home Secretary whether Government had it in view to strengthen and make more effective the powers provided by law for preventing the corruption of young persons, and their introduction to an immoral course of life.—Sir William Harcourt replied that it is the intention of the Government to introduce in the House of Lords a Bill founded on the report of that House last session.

Drunkenness in Ireland.—Mr. Callan asked the Chief Secretary to the Lord Lieutenant of Ireland whether it was a fact that those counties in which it was stated by Her Majesty's judges of assize that drunkenness had enormously increased were subject to the existing Sunday Closing Act; and that, while in the exempted portion of the city of Limerick the convictions for drunkenness showed a decrease, there was a considerable increase of drunkenness in the rural non-exempted portion of the said city.—Sir W. Lawson asked, at the same time, whether there had been a continuous decrease in the arrests for drunkenness all over Ireland since the year 1877, the year immediately preceding the passing of the Sunday Closing Act; whether the Irish criminal and judicial returns showed that the arrests for drunkenness in 1877 numbered 110,903; for 1881, 78,573, or a reduction of 32,330 cases; whether in the four counties of Clare, Limerick, Tipperary, and Cavan the decrease, comparing those two years, amounted to close upon 50 per cent.; and, if so, was not the increase referred to by the judges, in those four counties on the returns of the previous half-year, and not on the returns for 1877?—Mr. Trevelyan replied: I have seen the newspaper reports referred to, and have no reason to doubt their accuracy, or the correctness of the statements made by the judges, though I have not had opportunity to verify them. In regard to the hon. member's question, the decrease has not been quite continuous. It was so in the years 1878, 1879, and 1880, but the numbers rose somewhat in 1881. The figures for last year are not yet available. The numbers of persons proceeded against for drunkenness in 1877 and 1881 are correctly quoted. The decrease in the latter year was 32,330. Comparing 1877 with 1881, in the case of the counties Clare, Limerick, Tipperary, and Cavan, the decrease in the latter year amounts to about 42 per cent. The increase referred to by the judges in the four counties named was on the return for the corresponding period of the previous year, and not on the returns for 1877.

ON ANÆMIA IN YOUNG CHILDREN.

By DR. ARCHAMBAULT.

(*Concluded from page 306.*)

THE causes of anæmia in the child are difficult enough to indicate. First, we must divide it into *essential anæmia*—that is, anæmia unconnected with any other pre-existing disease—and *secondary anæmia*, which is connected with a disease in course of evolution, or which supervenes on a pathological condition, and which is met with during convalescence. But what we have here principally in view is essential anæmia; and in seeking for its causes we must place heredity in the first line, for there are families in which children are, so to say, born anæmic. Thus, I know a family at the present time in which there are four children, all four very fine children, and yet they are all very anæmic. They are the issue of parents who at first sight seem irreproachable; but the father is very fair, having a very white skin, a true skin of a woman, although he is of herculean stature and of a fine appearance. The portrait of the mother, at the age of eight or ten years, exhibits her as the exact image of her children, and she is now a very fine young woman, but she is chlorotic, and can never bear any fatigue. I insist on such facts as these, for the medicine of children should especially consist in their bringing up. Under other circumstances the father or mother, or both of them, are the subjects of some diathesis, whether scrofula, tuberculosis, or even syphilis, without this last having always been transmitted to them. They are found to produce children whose constitution will, at a later period, serve as a *substratum* for a scrofulous or tubercular affection. These children will already be so well under the power of this diathesis that, if they become the subjects of some disease

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of the skin, it will often be sufficient for the cure of this to treat the accompanying anæmia. But there are cases that cannot be thus explained, in which the anæmia depends on general causes. For example, residence in Paris or some other great city, especially in manufacturing towns, where consequently there is overcrowding, and children are compelled to breathe more or less vitiated air. Other causes of essential anæmia are bad alimentation and defective regimen. As to the anæmia of convalescence, we may especially indicate that which supervenes on rheumatism as being the most serious and the longest in being cured, as a consequence of the influence of this disease in the deglobulisation of the blood.

Treatment.—When the anæmia of children is slight, it is of little importance, and will most generally be cured by having recourse only to hygienic management. But when, on the contrary, it is very pronounced, it is of importance that it should be combated directly and promptly by reason of the languid condition of all the functions which accompanies it, giving rise to bad digestion, cutaneous eruptions, enlarged glands, slow and painful dentition, with nervous accidents, etc. Moreover, calorification is very inefficient in these cases, and there is liability to contract some of the affections produced during chills, such as intestinal or bronchial catarrh, against which various therapeutical agents may be in vain employed, while the anæmia remains untreated. The best therapeutics is always based upon etiology, and as we have already stated that it is in the large towns we meet with the greatest number of cases of anæmia, the first thing to be done is to transport the child to the country. Frequently, under this change, though unaccompanied by any treatment, from the sole influence of breathing good air, the child recovers its strength and tone, eats with an appetite, and soon undergoes such a transformation as not to be recognisable—so true is it that man lives still more upon oxygen than upon bread. When the position of the child does not allow of his being removed to the country, let him be taken into the open air at least two or three times a day, and that alone will work some amelioration. As the abode of the child may also be a cause of anæmia, we should insist that a sufficient cubic space of air be provided, and that light shall have abundant access to it; for it is with a child as with a plant—it must have sun. A suitable but not excessive temperature should be maintained, reaching from 12° to 15° C. as a maximum; and the relatives should be cautioned against false ideas as to currents of air, good ventilation of the apartment being kept up. Suitable clothing is of great importance, and the child should often be taken in the arms and exercised. Frictions with cold water (*i.e.*, at 14° or 15° C.), executed rapidly, often render great service, when the child has passed the age of two or three months, by facilitating the capillary circulation and determining a useful reaction. It is the same with baths of tepid or almost cold water. Then as to feeding: if we take two infants, each having a good nurse, but one of them brought up in the country and the other in a town, we shall find the former, all things being alike, will be blooming and prosperous, while the latter, though not unwell, will not have the same appearance, owing to the difference of the medium in which it has been brought up. But when the period for weaning arrives the contrary is observed, for in the country infants are submitted to a detestable regimen, in the shape of alimentation analogous to that of their parents, so that they are found to gradually decline and become anæmic. In towns, on the contrary, when we have to do with well-to-do families, weaning is conducted in a much more intelligent manner, the adaptation of the food to the age of the child being more rational. Unfortunately, among the working classes we meet with conditions analogous to those prevailing among the peasants; worse still, indeed, inasmuch as the poor little creatures have not even the open air of the country to aid them to struggle in part against the dangers of bad feeding. It is for this anæmia that I give to these infants, after the twelvemonth, either the juice of meat or meat itself, prepared in the form of pulp, at the rate of thirty or forty grammes per diem. I do not give it raw, but cooked and grated, pounded in a mortar with a few drops of water, and passed through a sieve. A spoonful of this is mixed with the child's soup or broth; and at the same time I prescribe a certain quantity of brandy, say two or three teaspoonfuls per diem for a child a year old. Such are the means by which—adding to them the medicinal agents necessitated by the condition of the child—I in general succeed in correcting the anæmia satisfactorily.

REVIEWS AND NOTICES OF BOOKS.

A Treatise on Diseases of the Eye. By Henry D. Noyes, A.M., M.D. London: Sampson Low, Marston, Searle, and Rivington. Pp. 360.

This forms one of a series known as "Low's Library of Standard Medical Authors." The first few pages are devoted to the general anatomy and physiology of the eye, where a brief explanation is given of the use of test-types and the perimeter, and of the method of examining the colour-sense. The chapter which follows, on the methodical examination of the eye, seems to us to be very good,—it includes a careful account of how to use the ophthalmoscope, which the beginner would certainly find useful; but, after all, the best way to learn to use the ophthalmoscope is to practise with it, and no amount of description in a book can make up for the want of this. Accommodation, presbyopia, and the errors of refraction are the subjects next passed in review. Whilst on the subject of hypermetropia we cannot help thinking that the author should have made some allusion to strabismus, and to the way in which the sight of one eye may become lost in course of time from disuse. Later on in the book, when speaking of convergent strabismus, he has shown the frequency of hypermetropia (or hyperopia as he seems to prefer to call it) as a cause, but it seems to us that, in speaking of the symptoms to which hypermetropia gives rise, internal strabismus should have some mention. He does allude incidentally to the fact that the internal recti become hypertrophied; but that is, to our mind, hardly sufficient; and in regard to strabismus we would say that there is still a good deal to be made out as to the causes of the affection in young children and infants: in such cases, when we interrogate the mother as to the cause of the squint, we are told either that the child was born with a cast in its eye, or that the child was quite well until it took whooping-cough, and that turned its eye in; in the majority of cases we get one of these two answers, and find that the child is hypermetropic. How are we to account for cause and effect in such cases? We look in vain for any information in the present volume. It was not without much regret that in reference to diseases of the conjunctiva we found mention of "croupous or diphtheritic conjunctivitis." The use of this word "croupous" in such a sense is most unfortunate. We had hoped that we had seen the last of the word altogether; we have succeeded in cutting off its connexion with pneumonia. The use of the word "diphtheritic" is sufficiently objectionable—"membranous" would, to our mind, be far preferable as not presupposing any theory; but to find "croupous" given as synonymous with "diphtheritic" is, to say the least of it, rather trying. In speaking of glaucoma, Dr. Noyes briefly recapitulates the views of the most recent writers in this country and on the Continent, and expresses the belief, without in any way being positive, that increased tension is the most important factor, and thinks that this may be due to the narrowed "circumlental space" of Priestley Smith, or to the swollen ciliary processes of Weber. The increase of tension takes place behind the lens, and probably in great measure is the cause of the excavation of the nerve. In regard to the treatment of glaucoma, he places by far the most confidence in iridectomy, his own experience of sclerotomy having apparently not been very encouraging.

The etiology of optic neuritis gives Dr. Noyes another opportunity of showing that he is quite familiar with the most recent work in this country, and he sums up a careful review of the various opinions held by saying, "It would appear that cerebral œdema may fairly be regarded as a link in the chain of causation, and this theory certainly is more intelligible than the vaso-motor theory. It does not exclude the concurrence of direct transmission of fluid by the sheath-cavity, for this does occur; but it connects the lymphatics of the optic trunk with those of the brain, and founds an explanation upon recognised anatomical data. Whatever can excite cerebral œdema, general or local, may cause papillitis; and if this should not occur the optic lesion would be wanting." We much doubt whether

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the author quotes Horner quite correctly when he makes him say that paralysis of the cervical sympathetic nerve in the neck is followed by protrusion of the eye; we have always thought that a slight retraction of the eye was the result, and certainly in the very few instances of this lesion that have come under our observation such has been the case. In conclusion, we would say that although we have found fault with the author on a few minor points, yet the book is, in our opinion, a very complete and reliable treatise on diseases of the eye. We may add that it is plentifully illustrated with woodcuts.

The Ophthalmic Review. Vol. I., 1882. London: J. and A. Churchill.

This is the first attempt in this country to establish a journal devoted solely to the interests of ophthalmic medicine and surgery. That it has survived its first year is a proof that there was room for such a periodical, and we have no doubt that a successful and useful career is in store for it. It is not possible for us to do more than just to name some of the more important papers that have appeared in its pages, amongst which we find one "On Retinitis Pigmentosa and Heredity," by Mr. Jonathan Hutchinson, and "Practical Remarks on Cataract," by the late Mr. George Critchett. There are several papers by Mr. Priestley Smith on the use of Atropine and Eserine in Glaucoma, on Retinitis Pigmentosa, and on Glaucoma due to various causes; also one by Mr. Eales "On Embolism of the Central Artery of the Retina"; and papers relating to the use of Iodoform in Ophthalmic Surgery by Dr. Grossmann, Mr. Priestley Smith, Dr. G. A. Maconochie, and M. Dujardin. These articles, as well as many others that might be mentioned, are, as the names of the authors would guarantee, of the highest order of merit. A feature that greatly enhances the value of the work is that at the end of each number a sort of index is given of the recent literature that has appeared either in this country or abroad having any bearing on eye diseases. This will be a great boon to those who are trying to find out what is being done or has lately been done on any particular subject.

As a proof of the general favour which this journal has already met with, we may mention that quite lately we failed to obtain one of the earlier numbers at the publishers, owing to its being out of print.

We congratulate the editors, Dr. Grossmann and Mr. Priestley Smith, on the valuable material they have published in the *Ophthalmic Review*, and regard its success as fully assured.

GENERAL CORRESPONDENCE.

SHIP SURGEONS.

LETTER FROM DR. J. A. IRWIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—From a recently published Parliamentary Report may be ascertained the following facts:—During the six months ending June 30, 1882, 108 steamships (of which 104 were British) carried emigrants from Great Britain to the United States and Canada. These vessels were, upon different voyages, under the *full* "medical charge" of no less than 141 different medical officers, showing that 33 changes took place within this period. Of these 141 gentlemen, 8 possessed no qualification which would entitle them to practise in the United Kingdom, and 35 others held but one diploma, 29 as surgeons only, 3 as physicians only, and 3 as apothecaries only: 46 are reported as being but twenty-five years of age or under, and 19 as being but twenty-three years of age or under; of these 11 held but one diploma: 60 would have been ineligible through lack of the minimum professional qualification for the most junior medical appointments in the Royal naval, military, Poor-law, asylum, or prison services; and of the entire 141 medical officers who were thus entrusted with the care of so many thousand valuable lives, under circumstances of exceptional difficulty, *only 27 possessing any qualification as physician and surgeon had reached their thirtieth year.* These facts need no comment. Certainly they are a strong justification of my repeated complaint that "medical officers in the Atlantic emigration services are appointed without due regard to age, professional qualification, experience, etc."; and of your own very apt comments upon the same subject.

I am, &c.,
J. A. IRWIN, M.A. Cantab., M.D. Dub., M.R.C.S. Eng.,
Late Hon. Physician to the
Manchester Southern Hospital.

Adelphi Hotel, Liverpool, March 19.

REPORTS OF SOCIETIES.

THE OPHTHALMOLOGICAL SOCIETY.

THURSDAY, MARCH 8.

FREDERICK MASON, Esq., Vice-President, in the Chair.

THE CHAIRMAN announced that the June meeting would be devoted to the discussion of a special subject to be introduced by Dr. Gowers, the title being "The Relation of Eye Diseases to the Spinal Cord."

THE OPHTHALMOSCOPIC APPEARANCES AT PERIODS LONG SUBSEQUENT TO EMBOLISM OF THE CENTRAL ARTERY.

Mr. JAMES E. ADAMS showed drawings of the fundus oculi from a milliner, aged sixty-one, who suddenly lost the sight of the right eye on July 5, 1871; and of the left in a precisely similar manner on August 24, 1881. The arteries in each eye contained scarcely any blood, and many of them were quite thread-like; the veins here and there showed old inflammatory changes, and one large trunk in the left eye was "beaded." There were also well-marked traces of old neuro-retinitis, and the macula were occupied by well-defined patches of choroido-retinitis. The changes were more advanced in the right eye.

Mr. NETTLESHIP asked if Mr. Adams considered that the patches of choroidal change shown in the drawings were the result of active choroiditis, or merely the consequence of some disturbance of the choroidal pigment.

Mr. ADAMS thought that the changes were at first purely retinal, the result of the exudation around the macula: he had perhaps used the term choroido-retinitis rather more vaguely than he should have done.

ON THE CONNEXION BETWEEN DISEASE OF THE EYE AND AFFECTIONS OF THE SEXUAL ORGANS IN FEMALES.

An elaborate paper on this subject was read by Dr. C. E. FITZGERALD, M.D., of Dublin. The author, after alluding to Dr. Mooren's paper on Disturbances of Vision and Uterine Diseases, said that, though the existence of a connexion between diseases of the eye and affections of the genital organs in females would probably be admitted by most people, yet the literature on the subject was extremely scanty. Professor Förster's article in the handbook of Gräfe and Sæmisch had placed the matter on a surer basis, but nevertheless it was unsatisfactory. He then related a case in which a violent neuro-retinitis occurred some time after a sudden cessation of the menses. The vision improved under treatment, and with the reappearance of the menses. In a case of disseminated choroiditis with floating opacities in the vitreous, multiple fibroid tumours of the uterus were found; and it was suggested that possibly these tumours affected the circulation, so as to react injuriously on the delicate vascular tissue of the eye. Dr. Mooren had drawn attention to the subject of masturbation in proof that an irritation of the vagina might have an influence in producing retinal hyperæsthesia or accommodative asthenopia. Dr. FitzGerald thought that the habit was practised by females much more frequently than was generally supposed, and mentioned three cases in which he believed it had acted most injuriously upon the eyes. He considered the subject one of grave importance; and that, however unpleasant it might be, it ought to be thoroughly investigated.

Mr. JONATHAN HUTCHINSON said that the subject was usually avoided, he believed, mainly on account of its vagueness, and of the difficulty in getting reliable statistics on the question. Some years ago he had given a lecture upon this very subject, *i.e.*, upon the eye affections associated with masturbation, but in respect of both sexes, and this lecture had been published in the *Ophthalmic Hospital Reports.* He had always been fully alive to the importance of the subject; but he felt bound to admit that he had seen very few cases in which definite serious eye-mischief could be

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fairly traced to masturbation. Muscæ, of course, it was well known were frequently due to this cause; but he had no evidence that choroiditis disseminata could be so caused. He had seen softening of the vitreous in members of both sexes who had confessed that they were addicted to the habit. He would also observe that he had seen a great many cases of severe general affection, without any eye lesion, dependent upon this practice. As regarded the association of eye affections with diseases of the uterus, he thought that our knowledge was still more vague, and he had no definite facts to contribute on that point. The subject which had been brought forward that evening was an extremely important one, and, so far from its being passed over, it was the duty of the profession to discuss it. In conclusion, he referred to a very marked case of muscæ which he had published in the lecture already referred to, due solely to sexual excesses in very early life.

Mr. Spencer Watson alluded to the occurrence of eye-changes coincidently with the cessation of the catamenia. Under such circumstances in cases of old choroiditis, hæmorrhages were liable to occur; and he referred to the case of a woman whom he had brought before the Society where a high arterial tension had coincided with the change of life.

Mr. A. H. Benson asked whether masturbation could be described as a disease of the nervous system, and suggested that many of the eye symptoms that had been referred to were probably due to the disease which caused the masturbation. It would be interesting to examine the eyes of monkeys in relation to this question.

Dr. Buzzard said that though he was quite familiar with general affections of the nervous system due to masturbation, he had no special knowledge of any affections of sight in connexion with it.

Mr. Frederick Mason did not remember to have seen any affection of the eyes as apart from a general state due to this practice.

Dr. FitzGerald, in reply, quite agreed with Mr. Benson that masturbation was very often due to lesion of the central nervous system, but it was also frequently found apart from this. He believed that the majority of cases of asthenopia in young women which were not benefited by glasses were due to this cause.

Pulsating Exophthalmos.

Mr. W. Adams Frost exhibited a living specimen of pulsating exophthalmos affecting both orbits. The patient was a man, aged thirty-eight, who, when ten years old, was run over, and had symptoms of fracture of the middle fossa of the skull. Since the accident a pulsating swelling had existed above the left eye, and he had heard a drumming noise in his head. Until within the last few years the left eye was very prominent. When exhibited, however, the eye had ceased to be prominent, and he suffered no inconvenience. The eye was rotated inwards, and beneath the eyebrow was an oval swelling the size of a filbert; in the angle between the nose and the orbit there was a flatter and more diffuse swelling. Above the right eye was a small soft pulsating swelling. There was pulsation in both swellings, and a thrill in the nasal portion. A loud bruit was audible over the left orbit. Pressure on the left carotid arrests pulsation in both orbits. Mr. Frost was of opinion that the symptoms were due to a fracture of the base crossing the left internal carotid artery, and establishing a communication between it and the sinus, which had led to varicose distension of the orbital veins, and that this varicose condition had extended by the transverse sinus to the veins of the opposite orbit. He reviewed the evidence afforded by the necropsies of nineteen cases which were on record, and pointed out that, in the majority of these, an arterio-venous communication was present, and that in nearly all the cases the pulsating swelling was formed by the distended orbital veins. The frequency with which symptoms of fracture of the skull were present in similar cases was also referred to.

Mr. Higgens thought that a communication between the artery and vein was all that was necessary to produce the occurrence, and alluded to the case of a young man who, shortly after a blow at the inner canthus, had a pulsating swelling there, and suffered from noises in his head. The diagnosis of a communication between the supra-orbital artery and vein was made, and the patient was cured after the swelling had been cut down upon and all the vessels ligatured.

Mr. A. P. Gould referred to a case at present in the Middlesex Hospital under the care of Mr. Hulke. The patient was a man, aged twenty-eight, who had protrusion and pulsation of the right eye with a well-marked thrill. The common carotid artery had been ligatured six weeks ago, with a good result at first, but now the swelling was returning, and galvano-puncture would probably be tried. He referred to a specimen in the museum of the Middlesex Hospital, where during life there had been pulsating exophthalmos which was unexplained by the post-mortem appearances.

Mr. Adams Frost, in reply, said that Mr. Higgens's case closely resembled one that had been published by Mr. Lawson, but his own case differed from these inasmuch as both eyes were affected.

Sarcomatous Tumour of Iris.

Dr. Little described a case of this rare disease. The subject was a young and healthy woman, aged twenty, and was first seen on June 20, 1880. Sixteen months previously her left eye became suddenly blind while in the act of stooping, and remained so for a week. On recovering sight she for the first time observed a spot on the coloured part of the same eye. Her family history was good. The tumour was situated on the lower and outer quadrant of the iris, extending from the pupillary margin to the periphery of the iris; it was the size of a small pea, of a pale brownish colour, with a few fine vessels on its surface and numerous red points. The eye in every other respect was healthy and free from irritation, and the vision was normal. On November 20, 1880, the tumour had slightly increased in size, and it was decided to remove it. The patient was put under ether, and a linear incision was made with a Gräfe's knife, close to the corneo-scleral junction; the tumour and corresponding piece of iris were removed without difficulty; there was no bleeding into the anterior chamber. In the course of three weeks the eye had fully recovered, and the vision was equal to $\frac{20}{30}$. It is now more than two years since the operation was performed; and up to three months ago there was no evidence of recurrence, and the vision was normal. The specimen was handed to Dr. Dreschfeld, Professor of Pathology, Owens College, for microscopical examination. The mass consisted almost entirely of round cells, containing a large round nucleus, filling up nearly the whole of the cell, and showing in its centre one or more highly refractive nucleoli. There were also a few spindle-shaped cells with nuclei; only a few cells contained brown-pigment; the bloodvessels were all of the embryonic type. The microscopic examination thus showed the tumour to be a pigmented round-celled sarcoma. A similar case had been recorded by Dr. Kipp in the *American Journal of Ophthalmology* for 1876; and three others by Dr. Knapp, in the same journal for 1879.

Diphtheritic Paralysis.

Mr. A. H. Benson read a paper on paralysis of some of the ocular muscles after diphtheria, and gave some particulars of a case which had recently been under his care. The patient was a girl aged eleven years. The primary throat-affection was cured in four weeks. The ciliary muscles were affected in the fifth week, and continued so for about seven weeks. The soft palate was affected in the sixth week, and remained so for about two weeks. The hearing was affected in the sixth week, and remained so for about one week. The levatores palpebrarum were affected in the ninth week, and continued so for about one week. The recti externi muscles were affected in the ninth week, two days after the levatores palpebrarum, and remained so for about three weeks. Convergent strabismus and diplopia were present during the tenth week, and lasted for about four days. The weakness of the lower extremities began in the tenth week, and lasted for about three weeks. Numbness and tingling in the feet began about the tenth week, and lasted for about the same time as the weakness—three weeks. He regarded paralysis of the ciliary muscle, without alteration of the condition of the iris, as the most frequent implication of the intrinsic muscles of the eye. The question as to the seat and nature of the lesion causing the paralysis was discussed. The seat of the lesion was, he believed, in the brain and spinal cord, and he combated Dr. Hughlings-Jackson's sympathetic theory, on the grounds that disease of the lenticular ganglion would be accompanied by some change in the action of the pupil. The portion of the nervous system, lesion in which would cause isolated bilateral

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ysis of accommodation, was, he thought, Hensen and ker's centre for accommodation in the hinder part of loor of the third ventricle. The deafness, on which Jackson laid stress as confirmatory of his theory of e of the optic ganglion, was, Mr. Benson thought, likely to be the result of the palate paresis, with which accompanied, than of interference with the nervous y to the tensor tympani muscle. Paresis of both res palpebrarum and of both external recti muscles, as the frequent occurrence of paralysis in distant parts body, and perverted sensation, all disproved the sym- tic hypothesis. Dr. Ferrier had found that at the base e first frontal, and extending partly into the second l convolution, there was, in the monkey, an area, irri- of which caused elevation of the eyelids. Disease of ntre would account for the ptosis, which was bilateral. the nature of the lesion, but little was known. Post- m examinations had shown in many cases numerous rrhages into the nervous centres, and in some cases a n condition of the large motor cells in the anterior of the cord. Such changes, though they might occur l cases, seemed unlikely to be the cause of paralysis so e and harmless as diphtheritic paralysis usually was. uthor thought that hæmorrhages, larger or smaller, ous or few, as the case might be, were a more probable Hæmorrhages had in several cases been found in eritic paralysis. Hæmorrhages might be of any size, he symptoms would be severe in proportion to the and position of the extravasations. Small hæmor- might be absorbed with great rapidity, and have but if any, ill result; larger hæmorrhages would account e hemiplegic and other grave forms which were met t times.

Card Specimens.

following drawings were show by Mr. Arthur Benson: Retino-Ciliary Artery, *i.e.*, a branch from the central of the retina, which apparently went to join the ciliary s by doubling back and penetrating the disc near its . 2. A Recent Spontaneous Detachment of the Retina, g a rent in its structure. 3. Retinitis from Cerebral e, simulating retinitis albuminurica. 4. Retinitis inurica (typical). 5. A peculiar condition of the ns, with Disease in the Macula and Metamorphopsia. que Nerve-Fibres (typical case), with some disease the macula.

location of Lens, of Twelve Years' Standing.

Samuel West exhibited a woman, who, twelve years , had "knocked her eye against the corner of a table." at once became gravely affected. The right pupil was l to the extremest degree, and presented a notch on per part, corresponding with a linear scar in the ic and cornea. The lens lay free in the vitreous, and with the eye; the retina, optic disc, and choroid were ied.

E CLINICAL SOCIETY OF LONDON.

Friday, March 9.

Andrew Clark, M.D., President, in the Chair.

ture of the Radius and Dislocation Forward the Ulna at the Wrist, in which the Lower of the Latter Bone was Removed to effect uction.

Rickman J. Godlee read the following case:—The t, aged twenty, was jumping a high jump at a gym- n, when his feet slipped forwards on a badly secured nd the whole weight of his body fell suddenly on his , which were placed behind him. The left radius was red at the junction of the middle and lower thirds, acture being compound; the lower end of the ulna was ced forwards, and projected in front of the carpus th the skin. All attempts at reduction both with and t an anæsthetic proved unsuccessful. An incision was over the lower end of the ulna, and a hook passed the tendon of the flexor carpi ulnaris, which had d behind the bone, but the bones could not be replaced first the styloid process and then the lower end of the had been sawn off. The wound was treated anti- ally, and healed without any inflammatory disturbance. In ten days it was placed in a plaster-of-Paris apparatus, and in about six weeks passive movement was commenced. The limb is now almost as useful as the other, and can be employed for gymnastic exercise as well as for the ordinary uses of life, but pronation is not quite so free as before. (The patient was shown.)

Mr. Clement Lucas said that he had had to treat a some- what similar case in a feeble old lady who fell on her hands and fractured the lower part of each radius near the wrist. On the right side there was a simple Colles's fracture; on the left the lower fragment of the radius protruded through the skin between the supinator longus and the flexor carpi radialis; the ulna projected between the flexor carpi ulnaris and the flexor sublimis digitorum. There was no difficulty in effecting reduction, but erysipelas set in on the wounded side. Free incisions were made to let out the pus, but without avail, and the patient succumbed forty-eight hours after amputation of the forearm. In this case the lower frag- ment of the radius was anterior to the upper, and pricked the skin. Six years ago he removed a myeloid tumour of the lower half of the ulna, taking away that portion of the bone without opening the wrist-joint. The recovery was uninterrupted and complete, no abduction of the hand being left. This was probably due to the anatomical principle that the muscles on the radial side more than counter- balanced the loss of the ulnar support, which notion was borne out by the occurrence of abduction in cases of con- genital absence of the radius, and to a slight extent in cases of Colles's fracture. He thought excision of the lower end of the ulna was a perfect operation; the movements remained so good afterwards.

Mr. Christopher Heath had seen Mr. Godlee's case during treatment, and thought the result was excellent. He mentioned a case in his own practice of disease of the ulna, for which he removed the lower part of the bone. The patient made a good recovery. The wrist-joint was not opened, for the bone was removed without destroying the triangular fibro-cartilage. He considered this operation was a great advance in modern surgery, and one which was much to be encouraged.

Mr. Godlee, in reply, said that the explanation of the want of abduction in his and like cases might be found in the fact that the carpus articulated much more with the radius than with the ulna.

Acute Necrosis of the Right Orbital Plate of the Frontal Bone.

Dr. Pearson read, for Dr. Broadbent and himself, notes of a case of acute necrosis of the right orbital plate of the frontal bone in a girl aged nine years and eight months. Four days after exposure to cold on a foggy November afternoon, symptoms of stiff neck and relaxed throat, causing restless nights, began, but so gradually that medical attend- ance was not called in till the fourth day. When first seen, the noticeable point in the case was that the child put both hands to her head to lift it when asked to sit up in bed. On the fifth day of the disease there was marked improve- ment, after a saline aperient, and four-grain doses of salicylate of soda every four hours. In the morning the right upper eyelid had got puffy, but the swelling went down again. There were slight droppings of blood from the nose three several times during the day. On the sixth day, after a restless night, with some wandering, followed by a morning sleep of two hours and a half, the child woke up sufficiently well to listen to fairy tales, and talk about them. She felt the neck so much better that she volunteered to get out of bed alone to show her throat, but still holding one hand lightly to the head. There was some sensitiveness to light, and the right eyelid was again puffed. The same evening great restlessness set in, the child throwing the legs and arms about and calling out. The tumefaction of the right eyebrow had now markedly increased, and there was strong delirium. The temperature at 11.30 p.m. was 103·3°, pulse 140, respirations 38. Bromide of potassium was added to the salicylate mixture, and, after a sleep of an hour and twenty minutes, the pulse was 120, and temperature 101·6°. On the seventh day the right eyebrow was quite tense and glazed and livid with tumefaction, and delirium continued At 10 a.m. the temperature was 104°. Two leeches were applied to the right temple, and three grains of calomel were given, to be followed by a saline purge. Towards evening the strength perceptibly diminished. Just after

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midnight the pulse was 138; respirations 52; temperature 105·7°. At 4.30 a.m., temperature 106·4°; 6.30 a.m., 107·7°; at 9.45 a.m., 107·9°; and death took place at 10.45 on the morning of the eighth day from the commencement of symptoms. At the post-mortem examination, five hours after death, on removing the scalp, the frontal portion of the longitudinal sinus at once showed itself overcharged, staining the periosteum externally. On lifting the brain, the dura mater covering the petrous portion of the right temporal bone was found smeared with thick yellow lymph. The same sort of lymph smeared the pons and the parts comprised in the circle of Willis. The right temporo-sphenoidal lobe of the brain was protuberant, due to serous infiltration from obstruction to the venous return. The right optic nerve and the fat surrounding it were stained with the same clinging lymph. The periosteum of the right orbital plate of the frontal bone was stained with inflammation, and destroyed in patches.

The PRESIDENT asked whether any signs of disease of the nasal cavities were present.

Dr. PEARSON replied that there had been only a slight attack of epistaxis.

Mr. PEARCE GOULD wished to know if pulsation had been noticed in the orbit, because thrombosis of the cavernous sinus had been said to be one of the causes of protrusion of the eyeball, with pulsation simulating tumour of the orbit.

Mr. BLACK inquired whether fluctuation had been detected. If so, an incision to let out pus might possibly have allowed of a renewal of the circulation.

Dr. MAHOMED questioned as to the existence of a blush or redness in the earlier stage of the swelling, which was the case in a recent instance under his care, and which exhibited, at the post-mortem examination, multiple abscesses in the brain, in addition to the necrosis.

Dr. BROADBENT replied that there was no pulsation and no fluctuation. The swelling of the lid was quite soft. Both sides of the orbital plate were diseased, but the cerebral side was the more affected, so that the dura mater was penetrated in several points. This was not the case with the periosteum of the orbit. No doubt some of the swelling was due to inflammation and infiltration with serum of the orbital tissue, and a mistake had been made in supposing that inflammatory conditions of the orbit were excluded.

Dr. PEARSON replied that there was no sign of erysipelas.

PICRIC ACID AS A TEST FOR ALBUMEN AND SUGAR IN THE URINE.

Dr. GEORGE JOHNSON read a paper on the above subject, which is given in full elsewhere in the present issue.

The PRESIDENT said that the best thanks of the Society were due to Dr. Johnson for his interesting, instructive, and important communication. The method was especially valuable, as it tended to shorten the duration of clinical examination without producing any material sacrifice in the accuracy of the result.

Dr. SOUTHEY spoke in praise of the able and exhaustive communication made by Dr. Johnson. Owing to the exceedingly valuable tests which we now had for albumen and the sugar in the urine, it became daily more and more probable that the occurrence of minute quantities of either ingredient was physiological. Wegner's investigations went to show that urine of high specific gravity contained traces of albumen proportionate to the degree of the density.

Dr. MAHOMED questioned very much whether there was any advantage in having such delicate means of detecting albumen in the urine, because if a minute quantity were of natural occurrence there could be no value in detecting it.

Mr. MCHARDY could not agree with the remarks of the last speaker, and instanced examples in which highly albuminous urines were overlooked owing to the imperfection of the heat and nitric acid tests. He narrated the outline of a case of "albuminuric retinitis" in which the albumen could not be demonstrated by the ordinary tests, yet existence of granular disease of the kidneys was shown by the tense arteries and other signs. A pretty experiment could be seen by having alternate layers of nitric acid, urine, and saturated solution of picric acid in a test-tube—the urine to be slightly albuminous. The opacity at the line of junction of the urine and picric acid was much more marked than that at the line between the nitric acid and the urine. He had also known instances in which a quantitative estimation of sugar had been made with accuracy with the picric acid method. M. Raymond had shown how the presence of creatin and other nitrogenous derivatives baulked the test for sugar in normal urine.

Dr. JOHNSON, in reply, said that although we daily find large quantities of albumen in the urine unassociated with symptoms of disordered health, he believed the smallest trace of albumen to be a pathological condition, requiring careful treatment. With regard to Dr. Mahomed's preference for rough tests for albumen, he would remind the Society that Dr. Mahomed had published histories of numerous cases of fatal granular degeneration of the kidney unassociated with albuminuria. Dr. Johnson had very rarely met with such cases, and he accounted for the discrepancy by Dr. Mahomed having relied upon untrustworthy tests for minute traces of albumen.

LIVING SPECIMENS.

Dr. STEPHEN MACKENZIE—A Case of Subcutaneous Nodules with a distinct history of Syphilis, but without definite signs of Rheumatism.

Dr. DYCE DUCKWORTH—A Case of Rheumatismal Subcutaneous Nodules, and a Case of remarkable Hardness of the Ears.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

Dr. WILLIAM MOORE, President, in the Chair.

FRIDAY, FEBRUARY 16.

THE PRESIDENT OF THE ACADEMY.

Dr. BANKS (President of the Academy), who, owing to domestic bereavement, had been unable to attend any of the earlier meetings, expressed his gratification at having been elected President, and said that to be well thought of by one's fellows, especially by one's brethren in the profession, was a matter of the greatest satisfaction. He had no words to express adequately his acknowledgments. Indeed, he might say in the words of the poet—

> "What can idle words avail,
> Unless the heart can speak!"

SUDDEN CHANGE IN THE COLOUR OF THE HAIR AND SKIN.

Dr. H. J. SMYLY read a paper on sudden change in the colour of the hair of an infant. The child was perfectly healthy to all appearance until he was four months old. He was then attacked with acute inflammation, followed by suppuration, in the left temporal bone, the symptoms being pain, heat, and swelling about the temporal region, with high fever and profuse perspiration; paralysis of the left side of the face (with lagophthalmos) and of the soft palate. One morning in November last the hair on the right side of the head was discovered to have undergone a remarkable change from its original mouse-coloured hue to a reddish-yellow. The right eyebrow was similarly affected, and the skin of these parts, as well as that of the right hand, was icteric. The pillow also was saturated with a reddish-yellow perspiration. The abscess, which had formed very slowly, pointed behind the ear, and was evacuated by a free incision. Although the child subsequently became hemiplegic, it made a fairly good recovery. The suggestion offered as to the possible cause in this remarkable change of the colour of the hair was that the perspiration, which was of a peculiar colour, and probably of abnormal chemical constitution, not only destroyed the original pigment, but also dyed the hair a reddish-yellow colour.

Dr. BANKS referred to a case which had come under his notice—that of a young woman. Half of the lashes of one of her eyes became snow-white, which she attributed to the annoyance suffered from the persistent gaze of a "wall-eyed" admirer who had white lashes on the defective eye.

Dr. WALTER SMITH related the case of a boy in whom the skin of the lobes of both ears and that of the back of the neck was of a sulphur yellow, the downy hairs being of a bright yellow, while the hair of the head was brown. The yellow colouring could be readily removed by a moistened cloth, but no washing could decolourise the skin, nor did ether or chloroform produced any effect. He exhibited specimens of the hair. He also referred to a case of red discolouration recorded by Wilson. After relating the case described by Darwin—in which the hair of a criminal brought out for

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execution turned white in the presence of the spectators—he said he could not agree with Dr. Smyly in ascribing bleaching properties to the perspiration, but did not give any explanation in lieu of it.

Dr. CHARLES F. MOORE, Mr. LENTAIGNE, the PRESIDENT, and Dr. GRIMSHAW also joined in the discussion.

LOCOMOTOR ATAXY.

Dr. H. C. TWEEDY read a paper on two cases of locomotor ataxy, and exhibited the patients. The first case was that of a pensioner, aged sixty-four, who was admitted into Steevens's Hospital in 1871, presenting most of the symptoms of the affection—the peculiar gait, the absence of co-ordination, and the neuralgic pains characteristic of the earlier stages of the disease. He was persistently treated with nitrate of silver in doses of one-third of a grain three times daily, and continued the use of the drug at intervals for nearly twelve years, during which time he was again in the hospital during the years 1873-6-82. The ataxic symptoms had completely disappeared, but, from the length of time the silver had been taken, the patient had become argyrised. Attention was invited to the peculiar leaden discolouration of the skin from this cause, and the opinion of the members was requested as to whether the symptoms clearly indicated a case of tabes dorsalis, or one of those rare cases in which the progress of the disease had been arrested, and cure had followed, whether spontaneously or as the result of the remedy employed. The second case was that of an engine-driver, aged forty-two, in whom the disease was only of six months' standing. This patient also exhibited most of the phenomena of the earlier stage of the disease—the peculiar gait, partial asynergia, and fulgurant pains along the course of certain nerves; but, in addition, there were consecutive attacks of a cutaneous eruption resembling erythema, entirely confined to the left side of the body, and unaccompanied by any of the usually attendant neuralgic pains. There was also a patch of an eruption, resembling psoriasis, on the back of the left wrist; no similar patch co-existing at the opposite side. Attention was drawn to the fact of eruptions, usually bilateral, appearing only on one side of the body, the connexion between these and similar eruptions occurring as trophic lesions in tabes dorsalis, but accompanied invariably by lancinating pain along the course of the nerves over which the eruptions were found.

Dr. BANKS, having seen a great many cases of locomotor ataxy, was of opinion that in a considerable number the disease stood still, and in others appeared to be removed. He had used nitrate of silver with great advantage, and did not participate in the terror some had of its effects in producing discolouration of the skin. He had once seen it occur in a case of epilepsy. He believed in the existence of a syphilitic taint in a large proportion of cases.

Dr. NIXON agreed with Dr. Banks as to the frequency of arrest and even occasional cure of the disease, especially in cases in which syphilis existed. He considered the skin affections in one of Dr. Tweedy's cases as coincidences, and preferred referring them to a syphilitic origin.

Mr. LENTAIGNE mentioned a case in which Langenbuch stretched the sciatic nerve, and the symptoms disappeared. A subsequent autopsy showed the spinal cord to be perfectly healthy.

The PRESIDENT related a case of syphilitic origin which recovered under the use of iodide of potassium.

Dr. HENRY KENNEDY and Dr. W. G. SMITH also took part in the discussion.

Dr. TWEEDY, in replying, said that in the case which had recovered the man had no syphilitic history. Neither patient had been addicted to intemperance.

ULCERATION AND PERFORATION OF THE INTESTINES.

Mr. LENTAIGNE read a paper on a case of ulceration and perforation of the intestine, which was remarkable on account of the great obscurity of the symptoms. It was that of a man aged thirty, who had been admitted into the Jervis-street Hospital on December 6 last, complaining of cough and debility, and who died there on December 19, from peritonitis consequent on perforation of the intestine. After his admission he had been carefully examined by Dr. MacSwiney, physician on duty, but no evidence of organic disease could be found. Both pulse and temperature were perfectly normal, and the lungs apparently sound. After a few days the man asked leave to go home, feeling perfectly well; but on December 11, on leaving the water-closet, he was suddenly attacked with all the symptoms of acute intestinal obstruction. These continued unabated until the 14th, when his bowels were freely moved by enemata, after which he had four free motions, passing large quantities of liquid yellowish-brown fæces. Next day he seemed better, the pain having ceased, and the vomiting only occurring after long intervals. The ejected matters consisted of recently administered food. On the following day all the severe symptoms returned, and the man died on the 19th, eight days after the appearance of the symptoms of obstruction. At the post-mortem examination, besides the usual signs of recent general peritonitis, there was found a large collection of purulent putrid matter occupying that part of the peritoneal cavity which lay in the right inguinal region, the right half of the hypogastric region, and the cavity of the true pelvis. It was apparently localised by the matting of the intestines. On removing the viscera, the ileum was found to be ulcerated in its lower part, and perforation had taken place through the floor of one of the ulcers. It was situated in one of the coils forming the boundary of the pus-containing cavity, and was apparently sealed up by adhesive inflammation of the peritoneal coat. The spleen and mesenteric glands were enlarged. The lungs were apparently healthy. There was no ulceration anywhere else but in the lowest thirty inches of the ileum. He believed the case to be either one of veiled typhoid fever, or of ulceration as the result of a previous attack of typhoid; and he drew attention to the great tenderness and pain over the thyroid foramen and for a few inches below Poupart's ligament on the inner aspect of the thigh—a condition which, when coupled with the symptoms of intestinal obstruction, might easily lead to a mistaken diagnosis of obturator hernia, due to pressure or inflammation of the obturator nerves before their exit from the thyroid foramen.

Dr. MACSWINEY said that when the patient in the early stages of his illness was under his care he did not present any symptoms of typhoid fever.

Dr. C. J. NIXON insisted on the importance of splenic enlargement in the diagnosis of typhoid fever.

Dr. J. W. MOORE said that constipation in these cases was a most unfavourable symptom. Perforation was sometimes produced by over-distension of the intestines consequent on the formation of gases by the decomposing retained fæcal matter. The patient, he considered, had passed through typhoid fever before his admission to hospital.

Mr. LENTAIGNE, in replying, agreed with Dr. J. W. Moore that the case was one in which the typhoid fever had been passed through, and that the perforation was the resul of necrosis, a sequela of the fever.

The Section adjourned.

FRIDAY, JANUARY 2.

OBSTETRICAL SECTION.

Dr. DENHAM, President of the Section, in the Chair.

Dr. W. J. SMYLY reported a case in which the induction of abortion at the fifth month was necessitated by hæmorrhage. Labour was promoted by the introduction of a sponge-tent, and accelerated by Barnes's dilators. The ovum presented enormously hypertrophied decidua, the result probably of the endometritis. A large quantity of firm laminated clots preceded and followed the expulsion of the ovum. The patient died of septico-pyæmia on the thirty-second day after delivery.

Dr. MACAN said that in cases of molar pregnancy or of a certainly dead embryo the term "procuring abortion" was scarcely a right one. Strictly speaking, the phrase was only applicable where a diagnosis was made and the fœtus was living.

Dr. NEVILLE agreed with Dr. Macan. Whenever hæmorrhage threatened the mother's life in early pregnancy the steps necessary to stop the bleeding were also those which would accelerate abortion.

Dr. MACSWINEY thought that in Dr. Smyly's patient conservative measures had been too long persisted in.

Dr. A. HENRY said that in this class of cases expulsion of the ovum should be expedited.

Dr. SMYLY, in reply, said that the case cited in his paper

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was not one of a molar pregnancy. Decomposition having only commenced in the fœtus, it could have been dead but two or three days.

MEDICAL NEWS.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 15:—

Smith, John Charles, Gillingham-street, Pimlico, S.W.
Williamson, Herbert Holdrich, Mildmay-park, N.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

OGLE, C. J., M.R.C.S., etc.—Administrator of Anæsthetics to the Metropolitan Free Hospital.

ORFORD, JOHN, M.R.C.S., L.R.C.P. Lond., L.S.A.—Senior House-Surgeon to the Metropolitan Free Hospital, *vice* W. Alpin, M.B.C.S., L.R.C.P., resigned on account of ill-health.

POWER, C. J., M.R.C.S., L.R.C.P. Lond., M.B. Cantab.—Assistant House-Surgeon to the Metropolitan Free Hospital, *vice* S. Butterworth, M.R.C.S. Eng., M.R.C.P. Edin., whose term of office has expired.

BIRTHS.

COMYN.—On March 15, at 6, Yorke-crescent, Woolwich, the wife of Dr. J. Sansfield Comyn, Deputy Surgeon-General, of a daughter.

DAY.—On February 26, at Pernambuco, Brazils, the wife of William A. Day, M.R.C.S., of a son.

GOLDSMITH.—On March 15, at Wandsworth, the wife of Surgeon S. J. Goldsmith, Bombay Medical Service, of a son.

HOAR.—On March 13, at Maidstone, the wife of Charles R. Hoar, M.D., of a daughter.

NOAD.—On March 17, at Lower Norwood, S.E., the wife of Henry Carden Noad, L.R.C.P., M.R.C.S., of a daughter.

SAVAGE.—On March 16, the wife of Dr. George H. Savage, of Bethlem Royal Hospital, of a son.

THOMSON.—On March 16, at Frome, Somerset, the wife of G. Crawford Thomson, M.B., M.R.C.S., of a daughter.

DEATHS.

ARNOTT, JAMES, M.D., at 8, St. Stephen's-crescent, Westbourne-park, W., on March 4, aged 86.

HOBBS, FRANCES H., wife of William Hobbs, Surgeon R.N., at 6, Windsor-terrace, Douglas, Isle of Man, on March 9.

HOLMAN, ANDREW, Surgeon, late of John-street, America-square, at 66, Caversham-road, Kentish Town, on March 14, aged 86.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Assistant-Physician. (*For particulars see Advertisement.*)

CHARING CROSS HOSPITAL.—Assistant Physician and Assistant Physician Accoucheur. (*For particulars see Advertisement.*)

CHICHESTER INFIRMARY.—House-Surgeon and Secretary. Salary £100 per annum, with board, washing, and lodging. Candidates must possess both a medical and a surgical qualification obtained in the United Kingdom, and be duly registered. Applications, with testimonials, to be sent to the Secretary, on or before April 7. The election will take place on April 19.

JOINT COUNTIES ASYLUM, CARMARTHEN.—Junior Assistant Medical Officer. Salary £1 0 per annum, with furnished apartments, board, and washing. Applications, with testimonials, to be sent to the Medical Superintendent, on or before March 30.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary £70 per annum, with residence and maintenance in the Hospital. Candidates must possess a medical and surgical qualification from one or more British colleges or institutions recognised under the Medical Act. The election will take place on April 6, at 12 noon, when selected candidates, to whom notice will be sent, are to be in attendance. Applications and copies of testimonials to be addressed to the Chairman of the Committee, not later than March 31.

NOTTINGHAM DISPENSARY.—Resident Surgeon. Salary £200 per annum, with furnished apartments, coal, and gas provided in the institution. Candidates must be on the Medical Register as having obtained two qualifications (one to practise medicine and the other surgery) in the United Kingdom, and unmarried. The successful candidates must pledge himself to remain in office for the term of three years. Applications, stating age, with testimonials, to be sent to the Committee at the Dispensary before March 24. The election takes place on April 2.

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, WELBECK-STREET, W.—Assistant-Physician. (*For particulars see Advertisement.*)

PNEUMO-URIA.—In the *Phil. Med. News* for December 16, Dr. Keyes publishes a paper, which he read at the New York Surgical Society, giving an account of two cases of pneumo-uria—so-called by Raciborski, who met with a case. It consists apparently in the secretion of air from the walls of the bladder, or at least, that is what is conjectured by the author of the paper in the absence of all other appreciable sources of its production in the cases he relates.

ROYAL INSTITUTION.—The following are the arrangements for the lectures after Easter:—Professor J. G. McKendrick, ten lectures on "Physiological Discovery"; Dr. Waldstein, four lectures on "The Art of Pheidias"; Professor Tyndall, three lectures on "Count Rumford, Originator of the Royal Institution"; Mr. R. J. Poole, three lectures on "Recent Discoveries in (1) Egypt, (2) Chaldæa and Assyria, (3) Cyprus and Asia Minor"; Mr. A. Geikie, six lectures on "Geographical Evolution"; and Professor C. E. Turner, four lectures, "Historical Sketches of Russian Social Life." The discourses on the Friday evenings will probably be given by Mr. A. Geikie, Dr. Waldstein, Professor B. Balfour, Mr. C. W. Siemens, Mr. R. A. Scott, and Professors Huxley, Turner, Flower, Pollock, and Dewar.

THE Library of the Royal Medical and Chirurgical Society will be closed from Good Friday to Easter Monday (inclusive).

ACTION OF DIGITALIN ON THE HEART.—Drs. Donaldson and Warfield, as the result of experiments on the slider terrapin (*Pseudemys rugosa*, Shaw), conclude, according to the "Johns Hopkins University Circular"—1. When the heart is doing normal work, digitalis decreases that work. 2. There is a rough relationship between the size of the dose and the extent of the decrease. 3. With small doses the pulse-rate is at first increased. 4. The diminution of the heart's work is much more dependent on the strength of the dose at any given time than on the total amount of the drug administered. A large amount in several hours has much less effect than a smaller amount given in a few minutes. Therefore the theory that digitalin has a cumulative action lacks experimental confirmation.—*New York Med. Journal*, March 3.

APPOINTMENTS FOR THE WEEK.

March 24. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

26. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

27. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. Herbert Page, "On Subperiosteal Hæmorrhage, probably Scorbutic, of Three Long Bones in a Rickety Infant." Dr. T. Barlow, "On Cases of so-called Acute Rickets in Children—Combination of Rickets and Scurvy."

28. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

HUNTERIAN SOCIETY (London Institution), 8 p.m. Mr. Rivington, "On a Case of Removal of Loose Cartilage from the Knee-Joint." Mr. Charters J. Symonds—1. "On the Use of Martin's Bandage in the Treatment of Synovitis;" 2. "On a Case of Peculiar Eruption on Sole of Foot, probably due to Congenital Syphilis." Dr. Port, "On a Case of Mediastinal Tumour."

29. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

30. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

CLINICAL SOCIETY OF LONDON, 8½ p.m. Mr. R. W. Parker, "On a Case of Contused Wound of the Thigh and Leg; Gangrene of the Limb; Death." Mr. Spencer Watson, "On a Case of Tetanus." Mr. Howard Marsh, "On Tetanus following Laceration of the Toes, and persisting Forty Days; Recovery after Syme's Amputation." Mr. Barwell, "On the Removal of Large Portions of the Upper Lip without Deformity of the Face." Mr. H. Marsh will exhibit a case of Osteitis Deformans.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, March 17, 1883.

BIRTHS.

Births of Boys, 1468; Girls, 1303; Total, 2771.
Corrected weekly average in the 10 years 1873-82, 2633·3.

DEATHS.

	Males.	Females.	Total.
during the week	974	880	1854
y average of the ten years 1873-82, ected to increased population ...	911·9	867·6	1779·5
of people aged 80 and upwards ...	...	...	87

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
...	669633	...	3	3	...	3	...	6	...	3
...	905947	1	6	3	3	7	...	3	...	...
...	282236	...	3	1	2	1	...	1	...	5
...	697738	...	25	7	4	7	...	2	...	5
...	1265927	...	9	6	9	15	...	8	1	5
...	3816483	1	51	20	18	33	...	20	1	18

METEOROLOGY.

om Observations at the Greenwich Observatory.

ight of barometer	29·585 in.
nperature	34·7°
point of thermometer	49·4°
oint of thermometer	23·9°
w-point temperature	26·0°
irection of wind	N.N.W. & W.S.W.
mount of rain in the week	0·09 in.

and DEATHS Registered and METEOROLOGY during the ending Saturday, March 17, in the following large Towns:—

	Estimated Population to middle of the year 1883.	Births Registered during the week ending Mar. 17.	Deaths Registered during the week ending Mar. 17.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
... ...	3955814	2771	1854	24·5	49·4	23·9	34·7	1·50	0·09	0·23
... ...	111262	67	41	19·2	45·0	23·0	34·3	1·28	0·10	0·25
th ...	131478	87	47	18·7	...	...	...	...	...	...
... ...	89612	69	52	30·3	...	...	...	...	...	...
... ...	74977	62	44	30·6	49·2	25·0	35·4	1·89	0·41	1·04
... ...	212779	143	98	24·0	47·1	25·5	35·2	1·78	0·11	0·28
mpton .	77557	53	33	22·2	41·4	22·5	30·4	−0·90	0·26	0·66
am ...	414846	288	204	25·7	...	...	...	...	...	...
... ..	129483	108	61	24·6	42·5	23·5	33·1	0·62	0·09	0·23
m ...	199349	181	137	35·9	48·3	20·1	30·4	−0·90	0·26	0·66
... ...	85574	70	31	18·9	...	...	...	...	...	...
d ...	88700	53	41	24·1	...	...	...	...	...	...
... ...	566753	385	373	34·3	42·7	25·0	34·7	1·50	0·27	0·69
... ...	107862	64	56	27·1	40·2	25·1	32·3	0·17	0·35	0·89
r ...	339252	236	227	34·9	...	...	...	...	...	...
... ...	190465	144	69	18·9	...	...	...	...	...	...
... ...	119071	93	69	30·2	...	...	...	...	...	...
... ...	108460	84	53	25·5	...	...	...	...	...	...
... ...	98564	71	70	37·1	...	...	...	...	...	...
ld ...	84701	37	32	19·7	...	...	...	...	...	...
... ...	75591	49	36	24·8	...	...	...	...	...	...
... ...	204807	136	86	21·9	41·0	24·8	32·3	0·17	0·08	0·20
... ...	321611	226	157	25·5	43·0	27·0	34·0	1·11	0·06	0·15
... ...	295497	202	154	27·2	42·0	23·0	33·0	0·56	0·00	0·00
... ...	176296	105	96	28·4	...	...	...	...	...	...
1 ...	121117	82	60	25·9	41·0	25·0	32·6	0·34	0·40	1·02
... ...	149464	108	81	28·3	...	...	...	...	...	..
... ...	90033	65	38	22·0	...	...	...	...	...	...
wns ...	5620975	6039	4300	26·0	49·4	20·1	33·3	0·73	0·19	0·48
... ...	235946	116	104	23·0	44·0	24·5	34·7	1·50	0·12	0·30
... ...	515589	400	333	33·7	45·0	22·0	34·1	1·17	0·00	0·00
... ...	349·85	169	237	35·4	45·9	26·5	36·1	2·28	0·18	0·48

Royal Observatory, Greenwich, the mean reading rometer last week was 29·54 in. The highest read- 29·85 in. on Tuesday morning, and the lowest on Saturday afternoon.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

"Ovariotomy Statistics," Birmingham.—We must be excused from inserting any more letters on these statistics. There has already been more than enough written about the matter.

Temperance Appellations.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—No doubt *aqueduct* is the more usual spelling, but aquæduct may be found, for instance, in the translation of Pliny's Letters by Melmoth—a good writer. In Ash's Dictionary the word occurs with *æ*, to which the author adds, "the correct spelling." In Rees's Cyclopædia the word is spelt with the diphthong throughout a long article.

My objection to "aquabib" was grounded on the fact that in forming compound words from Latin we do not use the nominative case of nouns.

March 17. I am, &c., D.

[I should like to know how he spells viaduct.—Printer's Devil.]

Medical Act Amendment Bill.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As this Bill, to speak plainly, is nothing other than a mild form of disfranchising the existing medical corporations, I trust that the Government will, in fairness, make some provision for the officers of the licensing bodies which have so long done valuable service. It is moonshine to say that the Colleges shall continue to grant their respective diplomas. It is but one man in a hundred who will care to go up for these extra diplomas. It would be preferable that these corporations should at once close their doors than die a lingering death by starvation.

I am, &c., Confido.

"Body Snatchers."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Looking over my interesting collection of autographs, I came across the following "little bill," sent, I think, to Mr. Bransby Cooper. It will show medical students of the present day how much better off they are nowadays:—

"The following are extracts from my books, Sir. The highest price I paid for a subject from October, 1825, to 1831-32, when the Anatomy Bill came into operation, was fourteen guineas.

"June 1, 1826.—Paid Holliss and Vaughan, for getting a subject from Beccles in Suffolk—a man that Sir Astley Cooper tied the iliac artery on twenty-one years ago. Coach for two there and back, £3 12s.; guards and coachmen, 6s.; expenses for two days, £1 14s. 6d.; carriage of subject and porter, 12s. 6d.; subject, £7 7s.; total, £13 12s. N.B.—A surgeon residing at or near there had watched the case for years, and immediately his death took place wrote to Sir Astley, who sent for or came to me to spare no expense, but at the same time to make an arrangement with the above men to obtain it at the least expense I possibly could. The surgeon gave them every facility to obtain it.

"One preparation in the Museum, the Treasurer's books.

"May 10, 1827.—Paid Mr. Blewett, for Mr. Cooper. Vaughan, Holliss, and Llewellyn (Nottingham), for Mr. Rogers. Mr. Rattenboro, £17 17s. 10½d. Paid Holliss, Vaughan, and Llewellyn *finishing money*, £6 6s.

"January 29, 1828.—Paid Mr. Cock, to pay to Mr. South, half the expenses for bailing Vaughan from Yarmouth, and going down. £14 7s.

"1829.—May 6: Paid Vaughan's wife 6s. Paid Vaughan for twenty-six weeks' confinement at 10s. per week, £13. June 18: Paid Murphy, Wildes, and Naples *finishing money*, by order of Mr. Cooper, £6 6s. November 9: Two males and two females (Murphy), at £12 12s. each, £50 8s. November 25: Page, etc., for one male and one female, £25 4s. Ditto, one opened female, abdomen only, £8 18s. 6d.; total, £34 2s. 6d. November 30: Returned to Vestry Clerk of Newington, by order of the Treasurer, one male and two females, purchased of Page, etc., on the 25th, who had broken open the deadhouse to obtain them.

"N.B.—Sir Astley great friend to Naples, wants young subjects from two to eight or ten. Coach Sunday mornings service (perhaps to observe fresh interments in the burial ground)."

I am, &c.,

Your Old Correspondent.

C. J. Egan, Esq., King William's Town, South Africa.—Letter and enclosure received.

Warned, but not Deterred.—Acting up to their previously intimated intentions of dealing severely with butchers and others trafficking in meat unfit for food, the magistrates of Brighton last week refused to recognise any extenuating circumstances, and sentenced a butcher, who had been in business for many years in the town, to a month's imprisonment, without the option of a fine, for exposing for sale the meat of a diseased heifer.

Victoria University: Medical Degrees.—"We are informed," says the *Manchester Times*, "that the signature of the Crown has been affixed to a supplementary charter empowering this institution to confer degrees in medicine."

The "Mother's Friend."—At an inquest at Hanley, touching the death of a child five weeks old, it transpired that from its birth the child had been very restless, and the day after its birth the midwife bought a pennyworth of "Mother's Friend," eight or ten drops of which she gave the infant daily. The child was seized with convulsions, and when seen by a medical man was found to be suffering from narcotic poisoning. The "Mother's Friend," which contained opium, was, it was stated, very largely used in the district. The inquest was adjourned that an analysis of the mixture might be made.

The Growth of London.—A return just issued by the Metropolitan Board of Works supplies information on this subject. In 1856 there were only 925½ miles of streets in the metropolis. In 1881 that number had increased to 1607¾ miles.

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Alleged Nuisance: Tipping Rubbish.—"The Guardians of Bath *v.* Baxter," lately heard in the Chancery Division, sought by a motion to restrain the tipping of rubbish on a field in the outskirts of Bath so as to cause a nuisance. The plaintiffs asked for an order to be extended to a place called Sinnett's-yard, not within the terms of the notice of motion, on the ground that, at the time the notice of motion was given, the defendant, in obedience to a magistrate's orders, had ceased to place rubbish in Sinnett's-yard, but had since acted in disobedience of the magistrate's order. Counsel, on behalf of the defendant, stated that he was ready to submit to an injunction as to the field only. The Court granted the larger injunction.

A Public Boon.—The Birmingham Town Council has approved of the reductions in the water-rates which were recommended by the Water Committee. They amount in all to £16,000, and apply to houses from 3s. per week rent to £50 per annum.

Urban and Rural Sanitary Improvements.—The Local Board of Mold have adopted plans for the sewerage of the district.——The Brighton Board of Guardians have approved of plans for a new infirmary and vagrant ward to be added to the workhouse buildings.——A Local Government Board inspector has held an inquiry at Clacton-on-Sea with reference to an application from the Tendring Rural Sanitary Authority for sanction to borrow £3000 to complete the system of drainage now being carried out. The total cost of the works will be about £7000.——The Water Company of Barnstaple are about to extend their scheme and works. ——A general hospital is about to be built at Leigh, Lancaster, adjoining the workhouse.——There being only forty-seven beds in the men's casual ward at the Croydon Workhouse to meet the increasing demand for accommodation for vagrants, plans for extension, by which beds will be provided for 145 men, have been approved. —— An inspector from the Local Government Board has held an inquiry at Willenhall respecting an application by the Local Board for the township to purchase from the Earl of Lichfield over thirty-two acres of land, near the Walsall-road, for the purposes of a sewage farm. There was no opposition to the proposal, and the inspector intimated that he should report in favour of the application.——A complete scheme of sewerage and drainage of the borough of Sheffield is proposed, based upon utilising the present sewers as far as possible. The cost is estimated at £147,500, and the system will be by filtration beds at Blackburn Meadows.——A Local Government Board inquiry has been held at Llandudno into an application by the Board of Commissioners for a loan of £1300 for erecting an infectious hospital outside the town.——Public baths are to be erected at Rotherham, plans for which have been ordered to be prepared by the Town Council.—— The Edinburgh Town Council are considering a scheme for the improvement of the locality in which the old Infirmary grounds are situated; and the Public Health Committee are actively engaged in regard to the proposal to establish a public cemetery.—— The Board of Management of the Bradford Hospital have decided to build a new wing to that institution to accommodate seventy additional patients at a cost of £10,000. — Sewerage works are about to be carried out in the town of Maryport. The cost estimated is £8500. ——The first block of tenements of the Plymouth Workmen's Dwellings Company is completed and occupied, and a second block is nearly finished. The applications for the dwellings far exceeded the supply. ——A dispute has arisen between the Board of Trade and the Corporation of Conway relative to the possession of the foreshore of the Menai Straits lying within the boundary of the borough. Under an ancient charter the Corporation has the exclusive right to it. Recently a system of drainage was prepared, and was sanctioned by the Local Government Board. The Board of Trade thereupon interfered, and demanded an annual acknowledgment for the sewage outlet into the sea. The Corporation declined to recognise the claim, and the Public Works Loan Commissioners refuse to grant a loan until such claim is admitted. But as the Corporation are determined to maintain their rights, the drainage question is at a deadlock. A similar difficulty has occurred at Beaumaris. — From an official return to the Board of Trade of sanitary works in the metropolis, it is seen that the total amount of works executed by the vestries and district boards from January 1, 1856, to March 25, 1881, there have been 919 miles 309 yards of new sewers constructed at a cost of £2,310,890, which with other sanitary works reached a total expenditure of £11,513,565.

An Order for Triennial Elections of Guardians.—The Local Government Board has issued an order directing that the next elections of Poor-law guardians for the parishes of Dudley, Sedgley, Tipton, Rowley, and Dudley Castle Hill, which comprise the Dudley Union, shall be for three years.

Tea in America.—The cup of tea is far from being so popular in the United States as it is in this country. The American consumption annually is 65,000,000 lbs., as against 145,000,000 lbs. in England. The comparative unpopularity of the beverage there is explained by the alleged difficulty for the public to obtain a pure and wholesome article. Previously to 1857 similar complaints prevailed in this country when a Bill passed to prevent the sale of spurious teas. This Act has cleared the market of, at any rate, the greater part and the worst part of the mere rubbish, and the consumption has expanded. Congress has been asked to protect the tea-drinkers of the United States by a law similar to that adopted here for the rejection of adulterated cargoes.

A Member.—No award of the Jacksonian or Collegial Prizes been made by the Council of the College of Surgeons. The s the Jacksonian Prize for the present year is "The Pathology, D and Treatment of Obstruction of the Intestines in its various the Abdominal Cavity." The subject of the Collegial Trienn of 1886 has not yet been published.

The Peabody Fund.—The trustees had expended in land and bu the end of last year £970,500 14s. 1d. Thirty-three blocks a course of erection at Whitecross-street, which will contain 1 and these, it is hoped, will be occupied during the year. Up of last year the trustees had provided for the artisan and classes of London 7829 rooms, exclusive of bath-rooms, laun washhouses. These rooms comprise 3533 separate dwellings by 14,604 persons. The death-rate for the year was 18·42 which is 2·88 per 1000 less than that of London in general. mortality was 137·41 in each 1000 births, or 13·59 per 1000 bel London. These calculations have been checked and confir General Register Office, Somerset House.

Provisional Vaccination Services.—The Local Government Bo formed the Walsall Guardians that, in the opinion of the would be illegal to appoint an additional temporary public vac Darlaston, as had been asked by the local authority of that it was suggested that the guardians and local authorities s on the public the benefits of vaccination and revaccination.

Compulsory Isolation.—The distress amongst the families suff small-pox at Stafford is so great, through their being forbidde their employment by compulsory isolation, that the Mayor h to the public for funds for their support.

A Workhouse Medical Officer and Vaccination Fees.—It was repo Wolverhampton Board of Guardians, a few days since, communication with the Local Government Board respect muneration of the workhouse medical officer for revacci inmates of the house to prevent the spread of the small-p among them, that the central authority had intimated t entitled to a payment of 1s. per case for every revaccination over the legal age of twelve years; but as the law did not the revaccination of children under that age, and seven attended to by the medical officer were of such children, h claim for the remainder of the 114—viz., forty-two. It was a short time previously the medical officer had agreed to a his salary by £3, and that all revaccinations were to be paid fees, but these 114 revaccinations had taken place before t was made. The medical officer was not aware until too late th Government Board would not sanction fees for children u years, and the necessity for revaccinating these was proved that in each case (the youngest being that of a child of the operation was successful—a result which would not ha had the operation been unnecessary. The Guardians, it was s give a gratuity for the work done by the medical officer, agreed to pay 1s. for each case the full amount would be £5 some desultory discussion, the Board resolved, by seven v five, that £5 14s. should be the amount paid.

COMMUNICATIONS have been received from—

THE REGISTRAR OF THE APOTHECARIES' HALL, London; Mr. London; Dr. W. H. HOLSTEIN, Geneva; Mr. C. E. JENNIN Mr. A. MAYO ROBSON, Leeds; Dr. J. G. MCKENDRICK, G J. W. LANGMORE, London; Dr. J. A. IRWIN, Liverpool; COUSINS, Portsmouth; Mr. LAWSON TAIT, Birmingham; Dr Nottingham; Dr. GEORGE JOHNSON, F.R.S., London; Mr. London; THE HONORARY SECRETARY OF THE ROYAL MEDIC RURGICAL SOCIETY OF LONDON; Mr. HENRY BEAUMONT, C JAMES DIXON, Dorking; Dr. S. COUPLAND, London; Dr. MA Messrs. HEWLETT AND SON, London; THE SECRETARY OF TH INSTITUTION OF GREAT BRITAIN, London; Dr. GARROD, L SECRETARY OF UNIVERSITY COLLEGE, London; Dr. R. London; Dr. J. S. BRISTOWE, London; Mr. J. MURPHY, SECRETARY OF THE GROCERS' COMPANY, London.

BOOKS, ETC., RECEIVED—

Annual Report of the Royal Portsmouth, Portsea, and Gosp 1882—A Compend of Obstetrics, by H. L. Landis, A.M., M pend of Human Physiology, by A. P. Brubaker, M.D.—S Causes de Maladies de l'Oreille, par A. Dugau—Passov Norman Kerr, M.D., F.L.S.—Formulaire des Maladies Urinaires, par F. Malley—Dental Anatomy and Surgery Sewill—Die Anämie, von S. Laache—Report of the De Hospital for the Year 1882.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Ci liner Klinische Wochenschrift—Centralblatt für Chirur des Hopitaux—Gazette Médicale—Le Progrès Médical— l'Académie de Médecine—Pharmaceutical Journal—Wiener Wochenschrift—Revue Médicale—Gazette Hebdomadair Boston Medical and Surgical Journal—Louisville Medi Centralblatt für Gynäkologie—Gazzetta degli Ospitali—I Médical—Centralblatt für die Medicinischen Wissenschafte Journal and Hospital Gazette—Centralblatt für Klinisch Chemist and Druggist—Journal of the Vigilance Associatio Médecine—Revue de Chirurgie—British Workman, No. 3 Hope Review, No. 268—Lavoz de Hipocrates—Journal of Dental Association—American Journal of Obstetrics—It March 17—Ilkley Gazette, March 10—Dublin Journal of Me —Physician and Surgeon—Philadelphia Medical News—D dependent and Plymouth and Stonehouse Gazette, March Lancet.

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ORIGINAL LECTURES.

GULSTONIAN LECTURES ON TERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London, February, 1883.

y J. MATTHEWS DUNCAN, M.D., F.R.C.P.L., sician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, etc.

ECTURE II., PART II.—ITS THEORY OR CAUSATION.

ALLY, Shorthouse has pointed out in mares the close nce between sterility, abortion, and that kind of ex-ve fertility which is demonstrated by twinning. I quote examples which he gives in the *Sporting Times* for mber 12, 1874; and, as adding to the force of the evi-e, it is to be remembered that in the mare twinning is a arer event than in woman and the cow: in these it occurs t once in 80 pregnancies; in the mare it is said to be once in 400:—

serrima, barren in 1855, 1858, 1867, 1870, and 1871; lipped foal in 1856, 1859, and 1863; had dead twins in 860 and 1862.

ricature, barren in 1852, 1854, 1855, 1861, 1867, and 871; had twins in 1856 and 1863; slipped foal in 1866.

gerdemain, barren in 1852, 1859, 1864, and 1866; slipped oal in 1849; slipped twins in 1856, 1860, and 1862.

stal, barren in 1858, 1860, and 1865; in 1866 slipped wins.

nder, barren in 1851, 1854, 1864, 1865, and 1866; lipped twins in 1857.

mblerig, barren to two horses in 1867; slipped twins n 1869.

, barren in 1865, 1866, 1867, 1868, 1869, 1870, and 1871; ipped foal in 1860.

1, barren in 1865 and 1868; slipped foal in 1867.

5, barren in 1856, 1858, 1860, 1864, and 1866; slipped als in 1862 and 1868.

7, barren in 1857 and 1860; had twins in 1858.

8, barren in 1867; had twins in 1861.

9, barren in 1858, 1860, 1864, and 1867; had twins in 68.

10, barren in 1858, 1860, and 1864; had twins in 1861.

11, barren in 1856, 1863, and 1864; slipped foals in 59 and 1865.

ow no observations worth quoting as to the special y of male lower animals, and the subject requires further investigation. It is not quite a new subject, s popularly believed that certain stallions are often icious; and accordingly breeders, in their advertise-take care to add to the other qualifications of a named hat he is a "sure getter."

oman sterility varies in amount according to the age rriage. This is shown by the table which I compiled from the data of Edinburgh and Glasgow in 1855. (See Table IX.) It is evident that this table gives only an approach to the truth, for in its second column there is an excess of children over marriages that cannot have been. Incongruity of this kind is not only accounted for, but to be expected, from the manner in which the table is made up. The numbers of marriages in Edinburgh and Glasgow in 1855 at different ages of the wives are compared with the numbers of first living children born in the same year to wives married at the same ages in that year or previously, and the number of sterile wives is got by subtracting the latter figures from the former. The comparison is of the first births of one year with the marriages of the same year, while they were mostly the result of the marriages of the former year, and the table is consequently imperfect. It must be remembered that this table, like the others from the same source, gives the title of first children to the first-born living, excluding the dead from the reckoning, another manifest source of error. But there can be no doubt, I think, of the conclusion as to age which is derivable from it—that women married under twenty years of age have much more sterility than women married from twenty to twenty-four inclusive, and that the sterility of marriages before twenty is less than the sterility of marriages after twenty-four, and that of marriages after twenty-four the sterility increases with the age at marriage. A nearly similar conclusion is derivable from the Statistics of Providence published by Snow.

The relative sterility of women at different ages is in part shown by their slowness to become mothers, or the length of interval between marriage and childbearing; and this is found to tally with the sterility according to age which I have just stated. I give another Edinburgh and Glasgow table embodying the facts bearing on this. (See Table X.) Those married below twenty years of age were longer in married life before becoming mothers than those married between twenty and twenty-four inclusive. These latter showed the highest fecundity and quickness to commence bearing children. Those again married after twenty-four were slower than their predecessors, and the slowness increased with every additional quinquenniad after that of twenty to twenty-four.

In the quinquenniad preceding twenty I can give for each single year the increasing delay of childbearing as age decreased. Table XI., from the Edinburgh and Glasgow data, shows this relative sterility of early ages.

At this point of the inquiry as to the influence of age I interpolate an argument as to the influence of marriage or cohabitation in causing sterility. Although it seems at first sight absurd to rank marriage among the causes of sterility, yet the conclusion that it is so, at least in the very young, appears to be inevitable. For if the women married under twenty are more sterile than those married at twenty to twenty-four, and are also more relatively sterile so far as delay of childbearing shows this quality, then, if the marriages of the very young—that is, of those under twenty—had been delayed till the next quinquenniad, they would in greater numbers have shown fertility, and shown it also more quickly. Now, as the only difference known between those of twenty to twenty-four and those younger is age at marriage, we may reasonably conclude that premature marriage

TABLE IX.—*Showing the Variations of Sterility according to the Age at Marriage.*

f wives at marriage	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50, etc.	Total.
r of wives	700	1835	1120	402	205	110	46	29	4447
ildren	649	1905	809	251	96	10	2	...	3722
wives	51	...	311	151	109	100	44	29	725
age sterile	7·3	...	27·7	37·5	53·2	90·9	95·6	100·0	16·3
tion sterile: 1 in	13·72	...	3·60	2·66	1·88	1·10	1·05	1·00	6·13

BLE X.—*Showing the Initial Fecundity of Women of Different Ages within the First Two Years of Marriage.*

f wives newly married ...	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total.
r of wives newly married ...	700	1835	1120	402	205	110	46	20	6	2	1	4447
r of wives mothers bearing 55, and within two years of iage	306	1661	849	253	84	17	2	...	...	...	...	3172
ion of latter to former is 1 in	2·3	1·1	1·3	1·5	2·4	6·4	23·0	...	...	...	...	1·4
entage	43·71	90·51	75·80	62·93	40·97	15·45	4·35	...	...	...	...	71·33

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was the cause of the sterility. There may be some analogous injurious influence of too long delayed marriage upon the elderly, and the delay of commencing childbearing may point to it; but we cannot say of them, as we do of the youngest married, that if they had still further delayed marriage they would have had more chance of being mothers! Some further reference to this evil influence of marriage, and attempt at explanation, will be found in the discussion on sexual pleasure.

TABLE XI.—*Showing the Initial Fecundity of Women under Twenty Years of Age within the First Two Years of Marriage.*

Ages of wives newly married	16	17	18	19
No. of wives newly married...	43	108	225	314
No. of wives mothers within two years of marriage ...	4	27	98	177
Proportion of latter to former is 1 in	10·7	4·0	2·3	1·8
Proportion after correction for immaturity is 1 in	7·7	3·3	2 1	1·7
Or percentage...	12·90	30·00	46·44	57·84

I might here adduce evidence of the influence of age which is found in the weight and length of the children produced, the length and weight rising with the age of the mother to its climax in the children born to mothers between the ages of twenty and twenty-nine inclusive, and then again falling as the age of the mother increases above twenty-nine. This is a matter tested by too delicate variations of length and weight to be, as yet, quite relied on, and great authorities have indeed contested its truth, Hecker, for instance, alleging that the measurements increase with the age of the mother in a direct sort of proportion. But I have Aristotle on my side. "Premature conjunctions," says he, "produce imperfect offspring, females rather than males, and these feeble in make and short in stature. That this happens in the human race," he adds, "as well as other animals, is visible in the puny inhabitants of countries where early marriages prevail." The general tenour of the evidence is, indeed, very strong, in showing a concurrence of sterility, monstrosity, feebleness, and smallness; and on that account I still hold that diminished length and weight of children accompany the diminished fertility of the premature and post-mature women.

It is matter of regret that we can present no demonstration of the influence of age on fecundity founded on the frequency of abortions and of ill-formed children. But we approach near to such evidence, and may guess what it would yield when we present the facts, scanty though they be, as to rearing of children and as to idiocy. Table XII., derived from the data obtained by the Statistical Society in St. George's-in-the-East, is the only body of facts as to the rearing of children born of mothers of different ages that I know of. It shows a diminished amount of rearing of children of the sterile ages. The sterility or weakness of reproduction by mothers of sixteen to twenty years of age is shown by the failures in rearing, and increased failures in rearing appear again as the sterile ages above twenty-five are entered on, the failures to rear increasing with the age of the mothers, just as sterility increases at the same ages.

TABLE XII.—*Showing the Mortality of Children Born in Marriages formed at Different Ages.*

Years elapsed since birth of first child.	Mortality per cent. of the children born to marriages formed at ages—			
	16-20.	21-25.	26-30.	31-35.
10	36·87	37·09	37·89	35·48
20	47·44	43·10	44·36	16·67
30	53·03	43·89	48·53	64·29
40	63·12	57·14	68·00	50·00

We suppose that, from the time of their birth, the children of these observations were tended with the same care or desire of the mothers to act fairly by them; and that we must look to some cause of the failure to rear in the reproductive arrangements. Now, here we include the nourishment of the child among the reproductive processes, while in our other studies of sterility we stop at its birth, or, if we proceed further, we consider only conditions presumably already established or commenced at the time of birth, such as idiocy. The child is naturally fed upon its mother's milk, and the feeding is an extra-uterine continuation of the previously otherwise conducted nutrition of the fœtus. Nursing is part of the reproductive process. The failure to rear may be a result of imperfection of the fœtus, now a child, or it may be a result of the imperfection of the mother as a nurse. I know no method of disentangling the results of these two causes, but the potency of imperfect nursing is undoubted. It is a universally recognised rule in the selection of wet-nurses that very young or elderly mothers are to be avoided.

Imbeciles and idiots may be so from original or innate causes, sometimes called developmental, or from injury or other accidental causes. The undoubted frequency of accidents at birth or other injuries as causing imbecility and idiocy introduces an element which should be subtracted with a view to the ascertainment of the influence of the mother's age in the production of the mental weakness; but, although in individual cases the two kinds, the developmental and accidental, may with much assurance be distinguished, I know no way of doing so in the statistics to be adduced. Authors on this subject, especially Little, attach great importance to the resuscitation of the stillborn as an accidental cause of idiocy, and it may be so; but I am disposed to attribute the necessity for resuscitation partly to the feebleness of the imbecile child produced. Among Langdon Down's 2000 cases, 400, or 20 per cent., were born in a state of suspended animation, and 40 per cent. of these 400 were first children. At all events, it will not be disputed that the great majority of idiots and imbeciles are so from innate, or developmental, not accidental, causes acting during or after birth.

Among Mitchell's 443 idiots and imbeciles 138 were first-born; among Wilbur's 675 there were 191 first-born; among 100 of Beach's, 20; among 2000 of Down's, 480. Or among 3218, 829, or about 26 per cent., were first-born, and presumptively born of young mothers.

"Among 443 idiots and imbeciles consecutively examined (says Mitchell), I found 138 first-born, or 31·1 per cent.; and 98 last-born, or 20·1 per cent. When it was known, however, that almost every sixth idiot in Scotland was illegitimate (663 idiots and imbeciles giving 108 illegitimate, or 17·1 per cent.), it was thought that an element of disturbance was probably thus introduced into the foregoing figures which might affect their value. The great majority of illegitimate children are known to be first-born and only children; while not a few of them are last-born, though the last of a small number of pregnancies—say of two or three. It was therefore thought desirable that a fresh series of observations should be made, excluding the illegitimate, and dealing only with those born in marriage. It was also thought well to confine these observations to those cases in which not more than one idiot occurred in a family, and in which the idiocy was noticed very soon after birth—that is, in which it was probably congenital. Further, no cases were accepted but those in which the mothers at the time of the inquiry had passed the age of childbearing, though some of them, I think, were widows before that age was reached. All these restrictions made it difficult to obtain a large series of observations, and account for their number not exceeding 85—44 males and 41 females. I sent my results in detail to Dr. Matthews Duncan, who kindly drew up for me the two tables embodying the facts in a way which makes their teaching apparent." (See Table XIII.) "This table is read in this way:—Of all the children born in Edinburgh and Glasgow in 1855, 22·8 per cent. were first pregnancies; while of the 85 idiots, 33 per cent. were first pregnancies, and so on. What the table appears to teach is briefly this—that idiocy is more likely to occur among first and latest (seventh to eleventh) pregnancies than among others. This is substantially the same thing as was taught by the first inquiry, which included 443 cases, and in which all that was asked was whether the patient was first-born or last-born."

Similar evidence is derivable from the data given by Langdon Down, but in regard to them we have not the same assurance of the circumstances of the collections as is given by Mitchell in regard to his. Down's data are given in Table XIV.

Fortunately, Mitchell gives the age of the mother at the

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time of the birth of the idiot, and the result is very striking. Down does not give the age of the mother in his collection, but considering the excess of primiparity and the very large proportional number of pregnancies of high figure among them, we can have no doubt they would yield a like result.

"The same eighty-five cases," continues Mitchell, "are used in Table XV. which were used in Table XIII. This table is read thus:—Of all the children born in Edinburgh and Glasgow in 1855, 22·6 per cent. were born of mothers whose ages were from twenty to twenty-four years, while of the eighty-five idiots 25·8 per cent. were born of mothers of corresponding ages, and so on. What we learn from the table is this: that mothers under twenty-four years of age and above thirty-five are those more specially liable to have idiocy in their children."

TABLE XIII. (*from Arthur Mitchell*).—*Showing the Comparative Frequency of Births of Idiots, and of all Births in First and Subsequent Pregnancies.*

Number of pregnancy.	Percentage of all births.	Percentage of idiot births.
First	22·8	33·0
Second	17·7	18·8
Third	15·5	17·6
Fourth	12·1	2·4
Fifth	9·4	2·4
Sixth	7·4	2·4
Seventh	5·2	7·0
Eighth	3·9	3·5
Ninth	2·6	2·4
Tenth	1·3	7·0
Eleventh	·9	3·5

TABLE XIV. (*from Langdon Down*).—*Showing the Comparative Frequency of Births of Idiots, and of all Births, in First and Subsequent Pregnancies.*

Number of pregnancy.	Percentage of all births.	Percentage of idiot births.
First	22·8	24
Second	17·7	14
Fourth	12·1	9
Fifth	9·4	5
Sixth	7·4	7
Seventh	5·2	10
Eighth	3·9	2
Ninth	2·6	9
Tenth	1·3	2
Eleventh	·9	2
Twelfth	·4	1
Thirteenth	·2	3
Fourteenth	·06	1

TABLE XV. (*from Arthur Mitchell*).—*Showing a Comparative Percentage of the Children Born at Different Ages of Mothers to all Children Born, and of the Idiots Born at Different Ages of Mothers to all Idiots Born.*

Age	20–24	25–29	30–34	35–39	40–44	45–49
Percentage of all children	22·62	39·99	23·61	14·76	5·15	0·58
Percentage of idiots	25·88	25·88	10·58	10·58	23·53	3·53

Several times I have been told by men of experience that an old bitch often ends her career of breeding by a dead and premature pup. Whitehead regards those pregnancies which occur near the termination of the fruitful period in women as being the most commonly unsuccessful; and Arthur Mitchell has connected the occurrence of idiocy in a child to the circumstance of its being the last-born of its mother. "That in the mother," he remarks, "which leads to the miscarriage may lead also to the idiocy, and the only connexion may be one through a common cause. It frequently happens," he adds, "that between the birth of the idiot and that of the child which precedes or follows, an interval occurs which is much longer than usual, or that after the birth of the idiot permanent sterility appears. Again, when the idiot is born eighteen or twenty-four months after the preceding child, but when for six or seven years thereafter no impregnation occurs, he thought there was reason to suspect that the imperfection in reproductive power, which showed itself in the idiot, had merely another and fuller expression in the subsequent barrenness. And so also when permanent sterility follows. In many cases indications of barrenness preceded the birth of the idiot, and became permanent thereafter."

We have alluded to prevalent opinions that the last-born of a woman is specially liable to be a miscarriage, or a weak child, or an idiot, and female rather than male, and have shown that these opinions have considerable support from facts. We have also spoken of the only-child sterility, the mothers being in Ansell's collection at the high mean age of thirty-one. Now, in addition, there is some, though imperfect, evidence that such children, especially if female, are not merely illustrations of one-child fertility or only-child sterility, but are also the last of their race. They represent a family's last effort at continuation of its line. Girls in such a position are often heiresses, though not certainly single children, and this circumstance has enabled Galton to follow up their history and to show their infertility. I know several remarkable cases of single children of this kind—feeble, rich, childless, the last of their race; but a collection of cases forms stronger evidence than any scattered good examples. Speaking of marriages of heiresses as peculiarly unprolific, Galton remarks:—"We might, indeed, have expected that an heiress, who is the sole issue of a marriage, would not be so fertile as a woman who has many brothers and sisters. Comparative infertility (he adds) must be hereditary in the same way as other physical attributes, and I am assured it is so in the case of the domestic animals." . . . . In addition to other strong evidence of the same kind, Galton found, in a partial search through the peerage, a total of fourteen heiress-marriages among seventy peers, resulting, he says, in eight instances of absolute sterility, and in two instances of only one son. "I tried the question from another side," he continues, "by taking the marriages of the last peers and comparing the numbers of the children when the mother was an heiress with those when she was not. I took precautions to exclude from the latter all cases where the mother was a co-heiress, or the father an only son. Also, since heiresses are not so very common, I sometimes went back two or three generations for an instance of an heiress marriage. In this way I took fifty cases of each. I give them below, having first doubled the actual results, in order to turn them into percentages:—

TABLE XVI. (*from Galton*).—*Showing the Infertility of Heiresses.*

Number of sons to each marriage.	One hundred marriages of each description.	
	Number of cases in which the mother was an heiress.	Number of cases in which the mother was not an heiress.
0	22	2
1	16	10
2	22	14
3	22	34
4	10	20
5	6	8
6	2	8
7	0	4
Above	0	0
—	100	100

"I find that among the wives of peers, 100 who are heiresses have 208 sons and 206 daughters; 100 who are not heiresses have 336 sons and 284 daughters. The latter shows how exceedingly precarious must be the line of a descent from an heiress. . . . . One-fifth of the heiresses have no male children at all; a full third have not more than one child; three-fifths have not more than two."

MR. NAIRN, the Commissioner in Lunacy, has recently visited the Walsall Workhouse, and seen the imbeciles and idiots, and has very favourably expressed himself both as to their condition and as to the state of the various wards which he inspected.

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AN INAUGURAL ADDRESS

DELIVERED BEFORE

THE OBSTETRICAL SOCIETY OF LONDON.

March 7, 1883.

By HENRY GERVIS, M.D., F.R.C.P.,

President of the Society.

GENTLEMEN,—When some four-and-twenty years ago, within the first year of our Society's existence, I was admitted to its fellowship, few things could have occurred to me as less likely to happen than that at some future day I should be chosen to its Presidency. And in taking the chair this evening, and returning you my best thanks, I can but say that I am at once very sensible of the honour conferred, and very conscious of my own inadequacy. Indeed, since a few weeks ago, when by your kindness I was elected, the voice of an inward monitor has many times whispered in my ear the question, "Amice quomodo huc intrâsti?" I am reassured, however, by the remembrance that for more than eighteen years I have known nothing but consideration from the Fellows of the Society in the other offices I have had the honour to hold, and that I can confidently rely on the cordial assistance of our experienced Secretaries, of the distinguished men who have preceded me in this chair, and indeed of every Fellow of the Society. We are all fellow-workers for a common object: the success of our Society and the promotion of obstetric science is our common aim. The establishment of our Society in 1858 began, without doubt, a new era for obstetric medicine in this country. It was previously scarcely looked upon as a science, but regarded rather as an art, and as an art even in which but a rough kind of skill was required. Its teachers were passed over in the distribution of professional honours, and its practitioners thought of as of a somewhat inferior rank. Now, thanks largely to the work and enterprise and success of our Association, matters, though still not all we could wish, are distinctly brighter. Much of the work done by Fellows of this Society is recognised on all hands as of high scientific merit as well as of great practical value. One testimony, which struck me at the time as gratifying, recurs to me in connexion with this room. On the occasion of Mr. Wells giving to the Royal Medico-Chirurgical Society the particulars of the 200 cases of ovariotomy which completed his roll of 1000 cases, the then President, Mr. Erichsen, after referring in terms of high eulogy to the great success of Mr. Wells, went on to say, "And surgeons are yet more indebted to obstetricians for other great improvements in operative surgery, for it is to them we owe the great precautions which, independently of antiseptic or Listerian methods, have tended to lower the mortality of ordinary surgical cases." And, as an outcome of our work and its success, I think I may venture to say our professional status is, moderately perhaps, but yet distinctly, improved. A surgeon whose chief eminence is in connexion with gynæcological work is President of his College. An obstetric physician was not long since President of the Royal Medical and Chirurgical Society; and it is rare that the Council of the College of Physicians does not now contain one or more representatives of obstetric medicine. It may not be uninteresting in this connexion to mention a recent decision of the Senate of the University of London. It has been customary for the gold medal given at the M.D. examination to be awarded to the candidate who, in addition to possessing the highest marks in his other subjects, wrote the best commentary on the case in medicine, to the exclusion of those candidates who, however well they did in the rest of the examination, selected for comment the case in obstetric medicine. At a recent meeting of examiners this injustice was referred to by your late President and myself; and I am pleased to say that, on the representations of the Registrar, who himself coincided with our view, the Senate has decided that in future the case in obstetric medicine and the case in medicine shall rank as of equal value in the competition for the medal. At the meeting inaugurating this Society, Dr. Tyler Smith, whose name can never be referred to by us in this room without emotions of sincere and grateful regard, thus expressed himself: "The chief business of an obstetrical society would be to diminish the mortality of childbirth, and the task was one of the highest importance." And at the first annual meeting, a few weeks afterwards, our first President, Dr. Rigby, said: "The great object, and that which will form the great strength and importance of this Society, is the collection of valuable facts on questions of obstetric practice." And I think I may venture to assert that if this evening, at the beginning of the twenty-fifth year of the Society's existence, we take a retrospective glance at its work, we shall find that it has very distinctly furthered these two well-defined aims—the advancement of knowledge, and the abatement of mortality. It would be an onerous task, and perhaps an invidious one, to refer specifically to the many communications which have conduced to these ends. Every session has piled the heap higher, and it forms now a mass of work of which we may be legitimately proud. But it may be permitted to refer for a few minutes to the two great debates of the Society on the subjects of puerperal fever and the use of the forceps, in both of which, and particularly in the former, additions of the greatest moment were made to our knowledge, and so to our power. I think I may fairly assert that up to the period of the debate on puerperal fever the most diverse views as to its etiology were taught, and in its treatment the most varied practice followed. One authority held that any fever occurring in childbed became *ipso facto* puerperal fever, whether that fever were typhus or typhoid or scarlatina. Another, equally distinguished, looked upon scarlatina as of the essence of puerperal fever, or at least as its most frequent and important factor. Another, that the fever was but the result of the local inflammatory changes going on in the pelvis and abdomen. Another, regarding a local incident in its pathology as the disease itself, believed that puerperal fever was primarily and essentially a diphtheria of the vagina and endometrium, spreading thence to the system through the lymphatics, or to the peritoneum along the tubes. And yet another, that puerperal fever was a specific fever developed by the crowding together of puerperal women, and producing a specific poison, which by conveyance could communicate puerperal fever, and puerperal fever only, to other lying-in women. But so marked a change followed the collation of facts and comparison of views which occurred in this debate, that in nearly every text-book which has been issued since the subject of puerperal fever is treated simply, and as if it were a matter of course, under the title puerperal septicæmia. That many problems in connexion with it yet remain to be unfolded is, however, certain; and while the general outline of the picture and many of its details are clearly depicted for us, much in the filling up of the canvas remains for the skilled pencils of Fellows of this Society. One point deserving at least a passing word is this. Just as under the head puerperal fever numerous distinct febrile conditions were formerly grouped together, so probably has been the case also under the designation puerperal septicæmia. This term should obviously be limited to the infection of the system by septic fluids in which micro-organisms capable of self-multiplication are found. This has indeed been insisted upon, from one point of view, by our late President, in the distinction he draws between septicæmia and the condition he terms "sapræmia," in which he believes the poison to be chemical, and not a living ferment. But probably over and beyond this the subject is in need of elucidation. Another point on which I would venture a remark is the connexion between scarlatina and puerperal fever. A former President of our Society, and one whose work is always of the ablest, has shown how frequent that association is. But if, as we believe, puerperal fever proper is puerperal septicæmia, the mere communication of scarlatina cannot induce puerperal fever in a lying-in woman without it in some way initiates septic changes. If a puerperal woman has scarlatina after her labour, and shows no evidences of septic poisoning, no parametritis, no peritonitis, no distant trouble in her lungs or brain, I think we may fairly say she has scarlatina and nothing more. But if, in addition to a scarlatina rash and a scarlatina sore-throat, she has such septic manifestations, we might with equal fairness say she has both—the one complicating the other; and, indirectly it may be, the one accounting for the other. Now, on the one hand, scarlatina in one patient may indirectly be the parent of puerperal fever in another,

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through the medium of the septic discharges which occur from sloughy surfaces in the throat or nose or ear; and, on the other, if the patient herself develope scarlatina symptoms, the occurrence of the exanthem may induce in her acute vaginitis or endometritis, and so originate inflammatory discharges, which, becoming septic, may graft by auto-infection septicæmic symptoms upon those of the primary scarlatina. Were the connexion closer than this, it appears to me it would be scarcely possible for general practice to be carried on. One other point to which attention has not perhaps been generally given, but which seems to me of much interest in connexion both with the etiology and prophylaxis of metria, is the virtual predisposition which exists in the puerperal woman to septic invasions. Her blood being in a watery state, with lessened albumen and increased fibrin; her nervous system worn by the anxieties and discomforts of gestation; her glandular system faulty, and its capacity to eliminate diminished; her general physical strength lowered by the effort involved in the maturing of her offspring, and by the various pathological incidents which accompany pregnancy—incidents, in their bearing on her general health, described with characteristic brilliancy in his Lumleian Lectures by Dr. Barnes—it is matter for little surprise that she resists toxic agents so inefficiently. One may almost say, indeed, that this condition of system presents a special predisposition to the reception and development of infective maladies; and explains also the recognised importance of a woman's health being at its best when she enters upon the ordeal of labour. That the establishment of the present view of puerperal fever has well fulfilled the chief object of this Society as defined by Dr. Rigby—"the lessening of mortality in connexion with childbirth"—is abundantly true. We now know precisely what to do to avert or lessen the risk of communicating contagion; and we also know what to aim after in the treatment we adopt for the developed malady, although we must add that as yet, unfortunately, our prophylaxis is much ahead of our powers in actual treatment. We know with certainty how to lessen the risk of injection, by antiseptic precautions, and the proper management of the third stage of labour; but when infection has occurred we as yet lack that intimate knowledge of the poison which would enable us at once to neutralise or destroy it, and our efforts can only be directed, though often with encouraging success, to the maintenance of strength, the promotion of healthy function, and the control of the several local lesions which arise with the propagation of the poison and the progress of the case. The application of the principles of antisepticism to midwifery, which is at once the note and indication of our advance in prophylactic care, is, without question, the greatest of all the recent advances in our art. And it is equally influential in the domain of operative gynæcology. We undertake our operations now as we enter upon our midwifery attendance, with the assurance that by scrupulous attention to antisepsis we can all but eliminate the most potent element of danger. The importance, again, of the proper management of the third stage of labour is also very largely in virtue of its promotion of antisepsis. The efficient contraction of the uterus, by checking hæmorrhage and expelling clots and decidual fragments, lessens at once both the channels and sources of possible auto-infection. The debate on the use of the forceps covered a less wide field, but its influence was equally for good; and it is now the accepted view of the profession that where the need exists—and it is part of our education and duty to learn and to teach the indications of that need—delay in using the forceps is not less harmful than inefficiency in their application.

But although so much has been done by debate and communications and discussion, much still remains to do. Is it not a reproach to us, for example, that after the frequent consideration of such a subject as uterine flexion we are so little agreed as to its etiology, its pathology, its influence, or its treatment? Can it be with satisfaction that those of us who teach have to tell our classes that, while some authors of distinction hold that flexions are at once the most frequent and important of uterine maladies, others equally able speak of them as though certainly common, of minor significance, nay, as often but "the condition of equilibrium of the woman's pelvic viscera, and a constituent part of her comfort and health"? Surely it should be possible to ascertain the truth in so everyday a question as this! May not this difference of opinion arise from some such error as led to the fabled quarrel about the colour of the shield, and illustrate the truth that both disputants may be right, each from his own point of view; that the shield, in fact, now as then, has both a golden and a silver side; that the one observer has noted chiefly cases of flexion with symptoms, and the other cases without, or in which the symptoms directly following from the flexion were few and unimportant? Or may there not be some ground common to both, and explanatory of the divergence, and this be possibly what I once ventured to suggest in a discussion on the subject in this room, that flexion *per se*, flexion as flexion, was of minor consequence unless associated with obstruction; that it was the virtual obstruction produced by the flexion which led to a certain chain of events—menstrual retention, endometritis, uterine hyperæmia, and its various epiphenomena? Or again, when one observer speaks of obstructive dysmenorrhœa as a definite malady, depending on cervical stenosis, and capable of cure by dilatation or division of the cervix, and another equally eminent denies even the existence of obstructive dysmenorrhœa, and so logically enough repudiates all surgical interference for its cure, there must surely be some explanatien possible of the divergence. Either our definitions must be faulty, or the cases referred to by the several authors are only superficially and not really similar. What, indeed, we appear to be in want of on many points is, if I may venture to use two Greek words, *ἐπίγνωσις* in contradistinction to *γνῶσις* simply; a more precise and definite knowledge in place of a knowledge which is vague, uncertain, and often rather traditional than true. Or possibly our failures arise rather from the lack of that quality which by a distinguished writer has recently been denied to us as a nation—the quality of "lucidity." But whichever of the sister tongues best describes our need, whether it be of accurate knowledge or clear expression, I fear we cannot shut our eyes to its existence, and how best to meet it is a matter for gravest thought. Debate, apparently, does not always succeed; sometimes, indeed, it seems as if it did but accentuate differences. Possibly, the more frequent appointment of committees to receive evidence, sift cases, conduct investigations, and prepare reports for transmission to the Society, might do something, and perhaps much, towards settling some of the points on which these differences of opinion exist—differences of opinion from which, I am afraid, our clients and ourselves must both necessarily suffer. The principle of collective investigation, again, of which much use was made by us in the report drawn up, during Dr. Hewitt's presidency, on the subject of infantile mortality, might be adopted in regard to many subjects with distinct advantage. From such a body of practitioners as constitutes our Society, methodical reports on matters of common interest could, I believe, without difficulty be obtained, and such work would indeed form a fresh link between Fellows living at a distance and the Society of which they form so important a part. And yet one more suggestion would be to avail ourselves from time to time, by such remuneration as our funds permitted, of the services of specially qualified investigators, as we did of Professor Schäfer's work in connexion with the subject of transfusion. It would certainly be a matter of congratulation to us all if by one or other of these methods, or by any other which might occur to any Fellow of this Society, we were able to speak with as much certainty of the significance of flexion and the varieties of dysmenorrhœa as we can of the course of a parametritis or the character and relations of a fibroid. It is more than tempting, gentlemen, on such an occasion as this to refer to many points besides those of practice, in which we are all interested, such as the insufficiency of the time allotted to obstetrical teaching, the inadequate attention given by students generally to the subject of gynæcology, and the still imperfect representation which obstetricians, as such, have in the higher councils of the profession; but time and your patience will scarcely permit. One or two remarks, however, I would just venture to make, as possibly having some common bearing upon each of these questions. One is, that we ourselves may be, after all, somewhat blameworthy in the matter. Until the last fifty years comparatively little of the work done in obstetrics, in this country at least, had been done in the spirit of exact scientific investigation, and our reputation, without doubt, correspondingly suffered. And secondly, I cannot but think that the very modest estimate we have been too generally accustomed to place on the value of our services must have influenced somewhat the

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value accorded them by others. When an educated medical man is content to wait for some consecutive hours by the bedside of a woman in labour, to conduct her delivery, assisting it perhaps instrumentally, and then attend her subsequently for many days, for the inadequate remuneration usually given; and when a consultant, as the phrase goes, is satisfied to ask among well-to-do people but little more than an ordinary consultation fee for the performance of version or craniotomy, or the induction of premature labour, we can scarcely wonder at an impression prevailing that obstetricians of all ranks are something inferior to, say, the oculist who charges one hundred guineas for an iridectomy, or the rectal surgeon who expects fifty for removing a pile or dividing the sphincter. I am clearly of opinion that the fees for midwifery attendance and operations require careful revision in our favour, and that such revision would be alike beneficial to client and practitioner. Of attendance upon midwifery cases among the very poor I am, of course, not speaking. Such, I think, would be best met by the more general employment of educated midwives. And, indeed, among the artisan class those who could not offer a medical man an approximately adequate fee (and there are probably but few who could not do so by a very moderate amount of frugality and thrift), should, I think, have their wives also attended by midwives of the class I am referring to—trained women, such as hold our examination certificates, or have been in the service of the Royal Maternity Charity. There would be, I believe, but little difficulty in the way of medical men whose practice chances to be in the poorer districts organising for themselves, or in association with neighbouring friends, a staff of such midwives to relieve them from much of the tiring routine of ordinary attendance; while, as in the case of the Royal Maternity Charity, they would be instructed to send at once for their chief in all circumstances of difficulty and danger. In the twenty-four years I have been associated with the department of obstetric medicine it has been my lot to make the acquaintance of too many medical practitioners who have prematurely died, and whose health was undoubtedly undermined by their harassing attendance on large numbers of scantily paid cases of midwifery. Some such plan as I have ventured to suggest, and towards the realisation of which our Society, by its examinations of midwives, has given valuable help, could not fail, I think, to at once improve our professional position, lessen the strain on the health of many of our brethren, and rather promote than diminish incomes already too slender. The passing reference I made a few moments ago to surgeons practising specially invites some allusion to the subject of specialism as it affects our department of medicine. It is quite unnecessary for me to go over the ground so well occupied by far abler pens than mine in the controversy which followed the publication of Dr. Reynolds's address on "Specialism"; but there is one observation I should like to make, which appears to me to tell in favour of special practice, and it is this: that I have repeatedly known cases of organic disease or defect (and I feel certain my experience is that of many others)—cases ranging in gravity from cancer of the uterus to congenital stenosis of the cervix—either wholly ignored by the physician in attendance, or treated without local examination, as functional disorders simply, and, as a result, a certain curtailment of life in the one case, and persistent dysmenorrhœa with general ill-health and sterility in the other. One could, indeed, occupy an evening, and perhaps not unprofitably, with the narration of such cases, and they would form an interesting commentary on the assertions of those who disparage the pursuit of special practice. The field of medicine is so large, that I believe it is rather by the development than the diminution of special investigation and practice that the numerous problems still unsolved will be cleared up and fresh advances made. At the same time, I willingly recognise the first importance of a good general knowledge of medicine to all, and that he will probably make the best specialist who starts from the broadest foundation of general attainments. One other reference to the work of the Society I would make before bringing to a conclusion these few remarks. In the closing address of my gifted predecessor he spoke with a justifiable pride of the varied and important contributions which had been sent in during his tenure of office. I am naturally anxious that when I vacate this chair I may have a similar success to detail. But that this may be so, gentlemen, I must ask you all, amid the pressure of a daily work which I know to be great, to yet remember that this Society, whose prosperity is, I am certain, dear to you all, can only fulfil the great aims of its founders, and carry on its useful and honourable work, as you continue to furnish it with the necessary material for discussion and thought. I am induced to say this much, because I am told that just now, though our financial and numerical prosperity is great, there is something of a dearth of those contributions which form the true basis and indication of our success. I appeal, therefore, to our senior Fellows, who have so often instructed us before, to remember us still and give us from time to time the benefit of their matured experience; I appeal to our younger Fellows, not yet so pressed with the avocations of practice, to give us of the results of their energy and genius; and I appeal, indeed, to all to send us some records of their observation and work, so that our Society may continue to flourish, and each feel that in that success and its fruits he has a personal interest and share. So numerous now are the channels by which men may give the world the benefit of their work, that our older societies are apt to be at times forgotten in the work of suburban and provincial and annual meetings, associations and congresses; but the potentiality for good of a society like this—with its regular meetings, where subjects of interest can be adequately discussed; with its annual *Transactions*, forming a permanent record of work and an obstetric literature with which any Fellow may feel proud to have his name associated; and with the social and literary advantages of its reading-room and library—is a force well worthy both of conserving and developing. May I venture, in conclusion, to suggest some few subjects on which, of late at all events, but few contributions have been brought before the Society, and yet about some of which much that is fresh has been learned, though much yet remains to be known. The diseases of the female bladder, for example, form a group of cases, from chronic catarrh to intra-vesical tumours, about which our knowledge is somewhat scanty and our treatment too often unsatisfactory. We have had no discussion, if I remember rightly, about the ablation of the uterus for cancer, and yet it is now an operation which has been largely performed, and by several of our Fellows. The relations of chronic metritis, the areolar hyperplasia of Thomas, the chronic parenchymatous inflammation of Scanzoni, to subinvolution—if, indeed, there be such a malady apart from hyperæmic proliferation of connective tissue—and its treatment both stand much in need of elucidation. The relations of epithelioma to lacerations of the cervix, the starting-point of epithelioma in the nullipara, and the pathogenesis of fibroids, are other points, again, of singular interest, on which we should welcome observations and research. The comparative physiology of menstruation, which is being ably dealt with by Dr. Wiltshire in the lectures he is publishing elsewhere, and which I grudge much to the pages of the *British Medical Journal*, would be a subject of high interest to bring before the Society as a basis for the more exact and scientific study of its pathology. And in the pathology of menstruation, it must be remembered, much more is included than simply the painful performance of the function. The influence on the whole system is considerable, as the eruptions, the neuroses, and the blood impairments which its faulty performance induces sufficiently indicate. Then, again, in the domain of obstetrics, the treatment of extra-uterine fœtation, and the diseases of the ovum and of the fœtus in utero, are subjects of which for long we have heard but little. As an illustration of the rather general unfamiliarity with these matters which prevails, and which discussion here would do much to mend, I may mention that at the late M.B. honours examination at the London University a considerable portion of the picked men who were in for it had never heard of a papyraceous fœtus, even although its synonym of secondary fœtus was given. And one still not very infrequently comes across a lingering belief in hydatids of the uterus as the equivalent of vesicular degeneration of the chorion. In connexion with that examination, also, I am reminded that a careful study of the variations of the fœtal pulse under varying circumstances, during gestation as well as during an ordinary and a prolonged labour, would form a very acceptable monograph to bring before the Society, for most English text-books have but little about it, and that

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little somewhat contradictory. And, lastly, the operations of Porro, Freund, and Thomas, and in gynæcology of Battey (who, I may mention, was a contributor to the very first volume of our *Transactions*, on the operative treatment of vesico-vaginal fistula), must inevitably before long come up for consideration and judgment.

Permit me now, gentlemen, to end as I began, by expressing once more my sincere thanks for the great honour you have conferred upon me, the greatest I can ever attain; and once more also to express my earnest hope that neither the work nor the fame of our Society may suffer any diminution during my tenure of office.

ORIGINAL COMMUNICATIONS.

OZÆNA DUE TO FOREIGN BODIES.

By R. CLEMENT LUCAS, B.S. Lond., F.R.C.S.,
Senior Assistant-Surgeon to Guy's Hospital, and Surgeon to the Evelina Hospital for Sick Children.

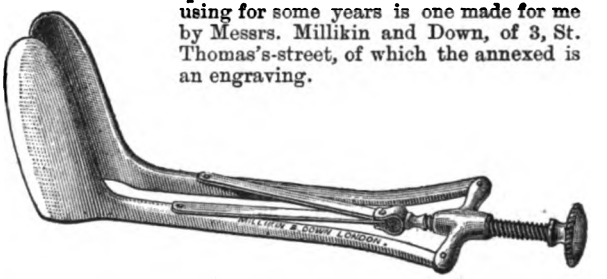
Persistent one-sided ozæna in a healthy child is due to a foreign body in the nasal cavity. This may be regarded as an axiom which, applied in practice, will prevent many errors in diagnosis, and avoid much disappointment in treatment. I have now seen many such cases which have been rapidly cured after the true cause has been discovered, though the offensive discharge had persisted for months, or even years. Two cases that have recently come under my notice suggested these remarks, and will serve to illustrate the value of the axiom above enunciated, as well as the best method of removing the foreign body.

First, let us consider the symptoms as they arise. A child —usually under five years of age—is noticed to have the symptoms of an ordinary cold in the head. He snuffles, snores in his sleep, breathes with his mouth open, and has an increase of nasal secretion. The discharge, instead of gradually subsiding, increases; and his throat is probably examined for enlarged tonsils. After a time the discharge becomes offensive—so offensive, indeed, that it is often unpleasant to be in the same room with the child,—and then ulceration takes place around the margin of the nostril, from which the pus continues to flow. This leads to the nostril being examined, but the mucous membrane is now inflamed and œdematous, and readily bleeds on an attempt being made to introduce a speculum, whilst the child commonly resists with all its might; consequently all that is discovered is an inflamed mucous membrane—a result due, in great measure, to the clumsy nasal specula in ordinary use, which are altogether useless for examining the nasal cavities of children. Astringent or disinfecting lotions are then judiciously injected, and ointments applied to the margin of the nostril. At first some benefit may result from the injections, but the discharge never ceases, and still continues offensive. At another examination the swollen mucous membrane over the lower turbinated bone may be caught sight of, and the diagnosis of polypus be made. Polypus, however, though not unknown in children, is sufficiently uncommon to make such a diagnosis a probably incorrect one. It is now that the value of an axiom or preconceived idea becomes demonstrated, preventing the surgeon from being led into fresh error, and inducing him to make a more thorough examination.

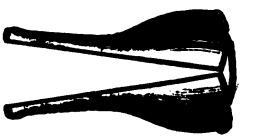
If an ozæna persists for a long time in one nostril, it is due to a local cause. This, if not absolutely true, is sufficiently so to be generally acted upon. Constitutional causes, such as syphilis—inherited or acquired,—strumous ulceration and lupus (which latter is but one form of struma), and eczema, almost always attack both nostrils simultaneously, or, commencing in one, soon spread to the other. Let, therefore, any case of persistent one-sided ozæna in a child be subjected to thorough examination, if necessary under chloroform, and a foreign body will almost certainly be discovered.

Soon after I first became connected with the Evelina Hospital for Children, some ten years ago, a child came under my care who for a year and nine months had suffered from ozæna. She had been treated in a variety of ways, and by several persons, without relief; and I must admit that no credit is due to me in the case, for I fell into the same error, and treated the case with lotions and ointments. But, happily, one day, after much discharge and a good deal of nose-blowing, some dark body was noticed inside the nostril; the body was extracted, and proved to be a boot-button, which had been the sole cause of the trouble. Since then I have always been on my guard in cases of one-sided ozæna, and have extracted many things from the nasal cavities of young children. It is, indeed, astonishing what a variety of small objects children may choose to insert into their ears or nostrils, some of which prove much more difficult to extract than others—peas, beans, buttons, beads, various seeds, shells, pebbles, pieces of rolled paper, walnut-shell, or slate pencil, may come to light as the cause of ozæna.

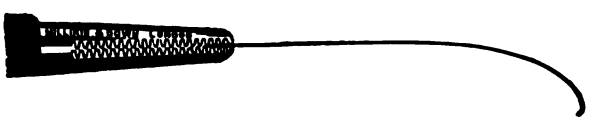
The nasal speculum in ordinary use is a bi-valve dilator, with clumsy lateral handles, which are grasped in the palm of the hand. It is made on the principle of Kramer's ear speculum, which is also an unnecessarily clumsy instrument. Besides their awkward size, these instruments have two great defects: there is nothing to regulate the pressure used in dilating the nostril, and they are not self-retaining. The speculum that I have been in the habit of using for some years is one made for me by Messrs. Millikin and Down, of 3, St. Thomas's-street, of which the annexed is an engraving.



It is made on the principle of Fraenkel's wire dilator, having a screw to regulate the dilatation. It is light and portable, gives a good reflection from its valves, and is self-retaining, thus enabling the operator to do without assistance. It is very efficient for adults and children above five or six. For very young children there is a still more effective instrument, made by the same makers, and originally intended for the ear. It is a bi-valve ear-speculum, which opens and retains itself by means of two small lateral springs. This can be inserted without pain into the nostril of a very young child, and yields a good light.



For an extractor, whether for the ear or nose, from the time that I was a dresser I have never found it necessary to use other than one instrument, which may be made by anyone in a few seconds. The point of a large curved suture-needle is heated to redness in the flame of a spirit-lamp, and then pressed against some hard body, such as the iron of a fire-grate or the marble of a mantelpiece; in this way a very delicate hook is made, which is so fine that it will pass by without disturbing a foreign body, but in being withdrawn will retain a firm hold upon it. Should the needle at disposal be found too short, or to turn round in the operator's fingers, it may be made a more perfect instrument by fixing it in the teeth of a pair of torsion-forceps, as shown below.



This instrument is quite as efficient for removing foreign bodies from the ear as from the nose, and especially so for bodies such as seeds and peas, which syringing often not only fails to remove, but causes to swell, thus making subsequent attempts with the same object more difficult. Having read in our Students' Journal that two children, each with a pea in its ear, had been sent away from the surgery unrelieved after syringing, I, on October 10, 1874, put a note in the *Guy's Hospital Gazette*, directing the dressers' attention to the method of extracting bodies by means of the hooked needle. I find that it was subsequently adopted by the late Mr. Gardiner Brown, who had a small recurved hook placed in a handle, which is now illustrated in Maw's

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Catalogue under his name. The following cases will show the value of the instruments recommended; and, had I retained the records, I might have added many others, although, except for the curious diversity among the bodies removed, they would present little difference.

On October 31, 1882, A. T., aged five, was sent to me for examination by Dr. Talbot King, who suspected a foreign body in the nasal cavity, though he had been unable to catch sight of it. The child had been suffering from an offensive discharge from the nose since July. The friends stated that it was confined to one nostril, which was borne out by the eczematous condition at the edge and on the lip below. On introducing a bi-valve speculum, I was able to see that, in addition to the general swelling of the mucous membrane, the nasal cavity was blocked by some body coated with discharge. This body, touched with a probe, felt soft. On introducing a needle-hook, I detached a small portion of the obstructing mass, which proved, on being washed, to be paper. On a second introduction of the hook, I brought down a large mass of rolled paper in a highly putrid state, which had, no doubt, lain there for upwards of three months.

The second case came among my out-patients on November 30, 1882. H. B., a little boy, aged five years, had been noticed to have a discharge from his left nostril for six or seven months. During the last four or five months the matter discharged had been exceedingly offensive, and some bleeding had occurred on several occasions. The margin of the nostril was inflamed, and the upper lip immediately below was in a state of eczema from the almost continuous discharge. The one-sided condition at once suggested the presence of a foreign body, and I stated to the class that this would prove to be the cause of the ozæna, before attempting an examination. In endeavouring, however, to get a view of the body by means of the ordinary nose-dilator, I failed completely, and only excited some bleeding and pain. The boy was brought up again on December 4, and I a second time attempted an examination with the same instrument, but with a like result. It again excited hæmorrhage, and caused the boy to cry. Being still convinced of the presence of a foreign body, I requested that he should be brought to see me for the third time on December 8, when I had my own instruments. The bi-valve ear-speculum was introduced without causing pain, and I was able to detect some dark body wedged between the inferior turbinated bone and the septum. The hook was then inserted, and caught the foreign body; but this was too large to be withdrawn through the speculum. The speculum and hook were therefore drawn out together, the latter carrying with it the foreign body, which proved to be a somewhat triangular piece of walnut-shell. Its dimensions were half an inch in length, by a quarter in breadth, and about two lines in thickness. On the exterior it was softened and swollen by maceration; but the interior was hard and irregular. The removal of the foreign body was followed by a rapid subsidence of the offensive discharge.

Prolonged Antiseptic Baths.—In a recent *thèse* by Dr. Jannin he gives an account of the antiseptic baths first introduced for the treatment of surgical affections by Prof. Verneuil in 1870. Their application would be difficult for the lower extremities, but they are easily employed for any wound of the hand, arm, or elbow. The antiseptic solution, consisting of from 1 to 2 per cent. of carbolic acid, is employed tepid for about two hours at a time, and repeated two or three times a day—the parts being covered in the intervals with compresses wetted with the water of the bath. The writer concludes from his cases that the bath often renders immense service, and that in circumstances under which unfavourable prognosis has usually been drawn. 2. That its employment in most cases suffices to prevent traumatic fever, and to cause the disappearance of painful symptoms. 3. That when symptoms of septicæmia are present we can often arrest them, and cure the patient, and preserve the functions of the limb. In cases of bites from horses, and in contused wounds accompanied by much detachment and crushing, if the parts can be easily submerged, the prognosis, which is generally so bad, will be greatly improved, the patient in a few days becoming sheltered from accidents which so often prove fatal. In gunshot wounds, also, Prof. Verneuil has obtained several proofs of the great utility of the baths.—*Revue de Thérapeutique*, March 15.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.

SOLID OVARIAN TUMOURS.

(Under the care of Mr. KNOWSLEY THORNTON.)

(*Continued from page 312.*)

Case 6.—Removal of Solid Sarcoma (Round Cell) of Left Ovary. (No. 254 in Ovariotomy Tables—not yet published.) A. M., single, aged twenty-six, was sent to me in October, 1881, by Dr. Cole, of Bath. She was a bright, healthy-looking young woman, not emaciated, but thin; said that she had been till recently very stout.

History.—Father and mother alive and well. Has lost three sisters from acute diseases. Had scarlet fever herself when a child, but has generally had fair health. A cousin was operated upon for abdominal tumour eighteen months back. Can give no farther history of tumour, cancer, or phthisis in the family. About a year ago noticed some increase in girth. In December her attention was again drawn to this, and in April she detected a hard swelling, which has steadily increased in size since. The growth has been very rapid during the last three months. Menstruation, which began at fourteen, and has never been very regular, has almost ceased since the tumour became large, sometimes a "show" for twenty-four hours.

Condition.—The abdomen is occupied by an elastic mass of varying consistence and irregular outline; most prominent in the left side. There is free fluid in the peritoneum Appetite good; bowels regular; pulse 100, soft and regular The cervix uteri is high up, and directed upwards and forwards. The sound passes two inches and a half. The connexion of the tumour with the uterus is evidently very close.

Diagnosis.—Solid tumour of ovary. No evidence as to side.

I performed ovariotomy on October 19, 1881, and removed a tumour of the left ovary, weighing eight pounds. There were also two pints of free fluid in the peritoneum. There were universal soft recent adhesions of intestines, omentum, etc., to the tumour; but they broke down easily, and did not bleed so as to require ligatures. There was a very broad membranous pedicle to the left of the uterus—so short that I was obliged to apply a temporary clamp and cut away the tumour before I could apply the ligatures. (I believe this is always a bad thing to do, unless you can entirely remove the part squeezed in the clamp. It is likely to slough if left, after this tight squeezing, in the distal part of the stump; and if the ligatures have to be applied partly on it, or perhaps altogether to its distal side, loose clots are apt to pass back into the vessels from it.) The pedicle was secured by two transfixions, and a separate ligature round the whole, and it was so short that it was impossible to avoid the squeezed tissue. The outer ligature was almost on the wall of the rectum, and the inner was on the angle of the uterus. There was, in short, a combination of all the conditions which I consider most unfavourable for a ligatured pedicle. First, there was thin tissue infiltrated with sarcoma; then this tissue was necessarily roughly squeezed between the temporary clamp-blades; then the part so squeezed had to be partly left in the distal end of the stump, and partly included in the ligatures; then the pedicle was strained by having to draw the uterus and rectum together and keep them out of position. A small portion of sarcoma was unavoidably left in the proximal side of the stump. Finally, the rectal tissue, if not actually included in the ligatures, was so close that its contents might well be a source of septic danger to this unhealthy pedicle.

The liver and spleen were both large and soft, and there was a solid growth extending from the sacral promontory up for some distance in front of the aorta (diseased glands).

The patient did not do well from the first. Within eight hours she had a temperature of 104·2°, pulse 132, respirations 30; and the temperature went on steadily rising without any break, in spite of sponging, ice-water cap, etc., till the morning after the operation, when it reached 106·0°,

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pulse 150, respirations 30. The arms were then packed, and digitalis was given to steady the pulse. Very little impression was made all day, for at midnight the temperature was still 104·8°, pulse 134, respirations 34. There was no sickness. She took fluid nourishment well. The flatus passed well, and there was no abdominal pain or distension; rectal injections were well retained, and the urine was copious and normal. In the course of the next day the temperature gradually fell to 100·2°, but the pulse remained about 124, respirations 24. The next day it fell to 99·6', pulse 112, respirations 24. Metrostaxis came on. The next (fourth) day there was a slight rise again, pulse 108, and a loose motion was passed. On the fifth day all seemed well, but on the sixth day the metrostaxis ceased, and the temperature and pulse began to rise again. On the seventh day they were up to 103·4° and 120. Abdominal wound healed; careful pelvic examination revealed no cause of fever. On the eighth and ninth days temperature and pulse varied a little, but were mounting. On the evening of the ninth day the patient had a sort of hysterical attack, and the temperature rose to 107·4°, pulse 168, respirations 44. All that night it fluctuated between 106·0° and 107·0°, and in the early morning she was packed in a wet sheet. In four hours it fell to 102·6°, and she shivered, and was unpacked. By nine at night it was again 107·0°, pulse 160, respirations 40. Packed again, in six hours it was 101·0°, pulse 132, respirations 36. Great depression, so she was put into a warm blanket. Some lung congestion followed, but, in spite of this, on the eleventh and twelve days she seemed better; the temperature varied between 99·0° and 101·0°, pulse 120 to 130, respirations 30 to 36. In the early morning of the thirteenth day the temperature began to rise again quickly; at 7.30, when I saw her, it was 108·4°, and it remained steady at this point till she died at 10.30 a.m.

Mr. Doran kindly made a post-mortem examination for me, twenty-eight hours after death, and found a sloughy pedicle lying in a small abscess-cavity which contained about an ounce of creamy pus. The walls of this cavity were formed by adhesions between the uterus, two coils of the ileum, and the rectum. Nothing else was found to account for death, or for the remarkable hyperpyrexia, either in the brain or other important organs, which were all carefully examined.

I have already given sufficient reasons for the sloughing of the pedicle, but I am puzzled to account for the many unusual features of the case. Did the sloughing pedicle obtain from its proximity to the rectum some organism or morbid material which rendered it specially capable of causing high fever; or did the nerve tension of the very important organs forming the walls of this small cavity cause the fever? The usual symptoms of septicæmia were all absent: there was no sickness, no distension, no delirium, no kidney trouble, and no rapid decomposition after death, in spite of the high temperature of the body at death.

I think it is possible that I might have saved her, had I opened the abdomen and removed the sloughing pedicle. I several times discussed the propriety of doing so, but the absence of all signs pointing to pelvic mischief, the rapid ups and downs, and the knowledge that if I did pull her through there was a large malignant mass of glands left behind, always held me back.

The advocates of the drainage-tube may think that its use would have saved her, but I am not clear on this point. It would not have prevented sloughing of the pedicle; rather it would have encouraged it by adding to the irritation about it. It would not have given vent to discharge, for the quantity formed in all would barely have filled the tube. I think the probability is that if I had introduced one I should have withdrawn it on finding that serum did not flow, and that the condition of the patient was unsatisfactory; and I should have been very likely to attribute the unsatisfactory condition of the patient to the presence of the tube. Why it should be so I do not quite understand, but I am sure that cases of solid tumour of ovary, even when free from other complications, do not recover so well as ordinary cases. I suppose the presence of the large mass of semi-malignant disease has already in these cases lowered the general tone of the patient. Three cases that I have operated upon in private would, however, rather contradict this. The first was that of a married lady of twenty-five, with two children. I removed a solid sarcoma of the left ovary weighing four pounds and a half in March, 1880; it was a very formidable operation, and the tumour was like a brain-mass. She recovered, had another little girl in May, 1882, and remains in good health. The second was that of a single lady of twenty-eight, upon whom I operated in December, 1881. She had melanotic sarcomata of both ovaries, fungating and bleeding into the peritoneum, which contained sixteen pints of fluid—nearly all blood. The operation was a difficult one, and yet she made a rapid and easy recovery. She has, however, since died with sarcomata in various parts of the body. The third was that of a single lady of forty-six, in the country. I removed two semi-solid papillomata of the ovaries, and a large solid mass from the omentum, with ten pints of bloody fluid from the peritoneum. She made an excellent and quick recovery, and was in good health for some months, but has also since died of recurrent mischief. These cases I shall give in more detail at some future time, as they are all of unusual interest; I merely allude to them here to show how well some cases, such as I am writing about, will do after severe operation. The first of these was most ill—dangerously so for a few days,—yet she made a quick recovery, has borne a child, and remains in good health.

Case 7.—Removal of Solid Sarcomata of both Ovaries. (No. 270 in Ovariotomy Tables—not yet published.)

J. M., aged forty-five, married twenty-five years, and mother of eight children, the youngest six years old, was admitted under my care at the Samaritan Hospital in December, 1881.

History.—Was attended for uterine hæmorrhages in July, and was told that she had a tumour in the womb. The doctor tried to get it away, but could not succeed. In September water began to gather round the lump. Father died insane, mother of phthisis; of six brothers and sisters has lost one of each by phthisis. Has never been a strong woman, but has had no serious illness. Had three miscarriages before her last child. Her periods had ceased for three months before the hæmorrhage in July.

Condition.—Dry and withered, looking older than age; abdomen tympanitic, and contains a solid lobulated kidney-shaped tumour lying in the left iliac region, with its convexity downwards and outwards, and surrounded by much free fluid. Both legs and parietes at lower part of abdomen œdematous. Left leg largest and very painful. Hard and tense condition of left broad ligament suggested infiltration

Diagnosis.—Sarcoma of ovary. Not a favourable case for operation.

Both the patient and her husband begged so hard for an exploratory operation, after I had given my verdict, that I consented. I operated on December 14, and removed a solid whitish tumour from the left side, having to apply a temporary clamp and tie on the damaged tissue as in Case 6. There was marked infiltration beyond the parts which could be removed. The right ovary was in an early stage of the same disease, and was also removed. The fluid in the peritoneum was semi-purulent—the only time I had ever seen this condition apart from rupture of a cyst. The intestines red and granular.

The patient made a very slow recovery up to the fourteenth day, when she got a chill, had a rigor, and became delirious, with high fever. The temperature remained high for two days, and then fell, and she came to herself, and told me that she had had a kind of sunstroke in the previous summer, and had been liable to these attacks since, especially if suddenly heated or chilled.

She went home on the thirtieth day after operation, having been kept back by attacks of left renal colic, which I believed to be due to further progress of the disease in the left broad ligament obstructing the ureter.

She died some months later, with a large mass of malignant disease in this situation, and after sufferings of so severe a character that I much doubt if the prolongation of life was a kindness to her.

ST. ANDREWS AMBULANCE ASSOCIATION, GLASGOW.—The members held their annual general meeting on Monday last. The Secretary's report states that since July, 1882, the ambulance-waggon had been called out 185 times. There were in all eleven classes held during the year, the pupils numbering 540. The Treasurer's report was most favourable, showing a balance of £79. The report was adopted, and the office-bearers reappointed for another year.

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Medical Times and Gazette.

SATURDAY, MARCH 31, 1883.

WATSON CHEYNE ON TUBERCLE-BACILLI.

The report (an abstract of which appeared in our pages of March 17) of Mr. Watson Cheyne to the Association for the Advancement of Medicine by Research, on the subject of the relation of micro-organisms to tuberculosis may be regarded as the first-fruits of a society instituted but a year ago by the leaders of the profession as an answer to the anti-vivisection movement, and we hope that it is but the forerunner of many equally valuable papers. The choice of tuberculosis as a subject for investigation was only natural, seeing that since Koch's announcement of the discovery of the tubercle-bacillus this topic seems to have occupied the profession to the exclusion of almost every other subject. Mr. Cheyne's first object was to endeavour to meet some apparently formidable difficulties in the way of the doctrine of a specific tubercle-bacillus. Foremost amongst these was the fact that many investigators, both in this country and abroad, upwards of twenty years ago had succeeded in producing artificial tuberculosis in some of the lower animals by injection of pus, caseous material, and some other products; and from that time until a year ago it was commonly taught that a general tuberculosis only required for its starting-point some softening caseous material or pus. Mr. Cheyne has repeated these and similar experiments with all due precautions, and has failed to produce tuberculosis in a single instance. As he points out, the success in the original in vestigations was probably due to the want of sufficient precaution in disinfecting the instruments used.

The next objection to the new doctrine that he had to meet was of much more recent date. Professor Toussaint has lately announced that micrococci are the cause of the disease, and not bacilli. Accordingly, Mr. Cheyne obtained from Professor Toussaint two tubes of serum containing micrococci, with which he inoculated thirteen animals, but failed in any instance to produce tuberculosis; and, moreover, in examining some tuberculous viscera he obtained from Professor Toussaint he was unable to detect any micrococci, though there were numerous bacilli. Mr. Cheyne accounts for this discrepancy by the fact that the French profe uses carbolic acid to disinfect his instruments with, w seems not to have the same power of destroying the sp of bacilli as it has in the case of other micro-organi Mr. Cheyne next turned his attention to Koch's experim and repeated them with some cultivations of bacilli obta from Koch himself. In every instance tuberculosis resu Further, on examination of tuberculous material, he in ably found bacilli present, and they were more numero the case of tuberculous animals than in tuberculosis i human subject. The exact reason for this does not at sent appear. The result of his inquiries upon this br of the subject is to show that a variety of materials, w in man are grouped together as tuberculous, produce tuberculosis when inoculated into animals, and that result is due solely to the tubercle-bacilli contained i inoculated materials.

The report then passes on to consider the relati phthisis to the tubercle-bacilli; and in the first pla are told that two distinct structures have been desc as tubercle in the lungs of rodents, viz., nodules of phatic tissue in close proximity to the vessels and br and nodules which are largely made up of epithelioid In the early stages of artificial tuberculosis, we are that bacilli are only found in the latter, and tha former are not to be regarded as tubercles; but we like to ask, if they have no relation to the tuberculou cess at all, how come they to be present, and what be of them? We gather that some of them sometime tain bacilli in the later stages, and are then to b garded as true tubercles, but we are left in doubt what we are to think about those in which no bacil detected. Returning to the epithelioid nodules, the in these are only found in the epithelioid cells thems The giant-cells, on which we have so long been taug rely, can be distinctly traced as originating from epith cells, especially from those containing bacilli. In the the great majority of these epithelioid cells are undoul derived from the alveolar epithelium; the bacilli from the bloodvessels or lymphatics, and pass int alveolar epithelium, where they grow, and cause mu cation of the epithelial cells until the alveolus be completely filled with them.

Coming then to phthisis, the acute form or caseous monia, and the chronic form or fibroid phthisis, are into consideration. We have already seen how the p commences in the alveolar epithelium, and it is e understand how it would spread from one alveolus next. The final changes depend mainly on the numb growth of the bacilli, and whether the patient furni suitable soil for their development: if they develop caseous pneumonia follows; if slowly, fibroid phthisi the first variety the alveoli rapidly become distende epithelioid cells, inflammation of the walls of the takes place, the epithelioid cells undergo caseous deg tion, and the walls break down, leading to the forma cavities. In fibroid phthisis the bacilli are few in n and grow slowly, fibrous tissue is extensively forme giant-cells get embedded in this fibrous tissue. Mr. C does not enter into the question as to how the get into the body. We should have thought, fro extreme frequency with which the lung is invaded, a pared with other organs, that there was a strong pre tion that the disease was inhaled direct into the lungs from the statements we have made above, such wou seem to be Mr. Cheyne's opinion, as he speaks bacillus invading the alveolar epithelium from the vessels or lymphatics. Such, no doubt, would be the in a case of general tuberculosis where the disease wa

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sumed to have been taken into the stomach; but where the lungs are alone affected, we should be inclined to adhere to our own view. Be that as it may, however, we regard this report as the first instalment of some thorough investigations well calculated to place our knowledge of this very important and deeply interesting subject on a surer basis.

ASYLUM SANITATION.

Barnwood House Hospital for the Insane at Gloucester is in many respects a model of what a hospital for the insane should be, and each of the annual reports on its condition gives evidence of growing prosperity and of careful administration. The Report for 1882, just issued, describes the sanitary arrangements adopted, and which appear to be alike simple and excellent. The main drain of the Hospital, which consists of a twelve-inch glazed earthenware pipe, ventilated by manholes and inspection gratings at intervals along its whole length, delivers its contents into a shallow straining tank, open to the air, at a distance of more than half a mile from the building, in the opposite direction from that of the prevailing wind. The sewage, after being coarsely strained, is delivered by open carriers on to the land from which the effluent water is removed by free deep drainage. At the building the branch drains, which have been renewed throughout, consist of six-inch glazed earthenware tiles, which in no instance run beneath any part of the building, and are intercepted before they reach it by syphons, which have on their house-side cut off ventilating gratings, through which it can at all times be seen that the pipes are kept free from deposit or obstruction. The water-closets are all self-acting by means of rods, not wires, and have Tyler's enamelled iron S-trapped pans and six-inch iron soil-pipes, which are carried up outside the building, their open ends terminating two feet above the roofs. The same pipe serves for a range of three water-closets on different floors, and opposite each it has an opening, secured by a bolted, flanged plate, through which inspection can be readily made from time to time, or any obstruction removed from the outside. The soil-pipes deliver into the open mouths of short, steep, ventilated, glazed pipes, which are continuous with the ventilated syphons already referred to. All slop and wash-up sinks and urinals deliver on to trapped gratings, and have no direct connexion with the drains. The urinals, which are of enamelled iron, are flushed by means of Field's self-flushing tanks, which deliver two gallons of water automatically at frequent intervals. Each has a large drop grating, which covers a shallow, sloped depression lined with hammered plate-glass set in cement, and is flushed simultaneously with the urinal by a perforated pipe which runs on all sides under cover of the flange of the grating. The operation of these several appliances has been so far exceedingly satisfactory, and the free ventilation of all drains and the isolation of the main sewer from every one of its tributaries would appear to render contamination of the atmosphere by sewer-gas practically impossible. The ventilation of the new buildings recently added to Barnwood House has also proved to be quite efficient. Fresh air is admitted behind coils of hot-water pipes, which heat it as it passes over them, just above the floor-line. The foul air passes out at two levels by gratings at the floor-line, and immediately below the ceiling, into an extraction flue which communicates with an open space surrounding the fireclay pipe which forms the flue of the boiler fires. The water-supply is derived from the Gloucester city main, which passes the Asylum on its way from the reservoir in the hills to the city. In nearly all cases the supply for ward and domestic purposes is derived in iron pipes direct from the main; but in all instances the water-closet cisterns are so supplied that their contents can be used for no other than water-closet purposes. The same thoughtfulness and judicious prevision which have brought the general management of Barnwood House Asylum to such a high pitch of excellence have evidently been brought to bear on its sanitary arrangements. These present several features worthy of imitation in other lunatic asylums, which, by adopting them, will rise in public confidence. The effects of the liberally and truly scientific administration of Barnwood House under the superintendence of Dr. Needham are sufficiently obvious. Notwithstanding that it has been recently enlarged, it cannot accommodate a large number of patients who seek admission to it; and after bounteously providing for the comfort and happiness of its inmates it earned last year a clear profit of upwards of £5000.

THE PATHOLOGY OF BRONCHIAL ASTHMA.

The pathology of bronchial asthma is such a favourite subject of investigation and discussion, especially with our German *confrères*, and the results arrived at by different authorities from time to time are frequently so discordant, that instead of reproducing at once their arguments in these pages, we are compelled to adopt an attitude of interested expectation, and to wait for the confirmation or disproval of the last new view on this as on many other subjects. The most recent contribution, however, to the pathology of asthma appears to us to be so important, and so likely to prove in the main correct, as to deserve to be submitted to the profession in this country, and to be carefully tested by clinical experience. This contribution comes from the pen of Professor Riegel, of Giessen (the author of the article on Asthma in "Ziemssen's Cyclopædia"), and appears in the *Zeitsch. für Klin. Med.*, Bd. V., page 413.

In approaching the consideration of the pathology of asthma, Professor Riegel was met by several distinct questions which are still more or less imperfectly settled. The first of these questions manifestly is, Is there really such a function in the bronchial muscles as active contraction, sufficient to affect the calibre of the tubes and to modify the pressure of the air within the lungs? Very different have been the answers given to this question by different physiologists—for we must be careful to notice that this is but a matter of physiology, and not of clinical medicine. Professor Riegel's results are entirely in accordance with the accumulating evidence of the work of recent, as well as of some of the older and most distinguished, observers—namely, that irritation of the bronchial muscles does raise the pressure within the lungs, and that this irritation may be induced through the medium of the vagus. This point having been settled, the next question was whether stimulation of the vagus caused acute dilatation of the lungs, such as is seen in asthmatical seizures; and this question, also, Professor Riegel was able to settle in the affirmative, the pulmonary area enlarging rapidly when the vagus was galvanised in the neck (in dogs), remaining large during the continuance of the stimulus, and slowly returning to its normal dimensions when the irritation was removed. Nothing could have been more easy, or indeed more natural, than to conclude after these two series of experiments that the pathology of bronchial asthma was practically settled; that this disorder is essentially a neurosis of the vagus, the dyspnœa due to bronchial spasm and the pulmonary dilatation being the direct results of irritation of the great nerve of respiration. Professor Riegel was too cautious, however, to rush to this conclusion, and his next set of observations showed the wisdom of his hesitation; for they distinctly proved that whilst irritation

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of the vagus unquestionably produces the phenomena of asthma, *it does not do so by causing spasm of the bronchi.* No doubt, as has just been shown, spasm of the bronchi is a result of irritation of the vagus; but there is a much more important, because much greater or more extensive, cause at work than this.

The turning-point in the investigation was the discovery that irritation of the vagus causes the phenomena of asthma, not by acting peripherally—that is, through the branches to the bronchi—but by influencing the central extremity of the nerve, that is, the medulla, and so (reflexly) the muscles of respiration. When the *central* end of the divided vagus of the left side was faradised, and the other vagus cut, the same asthmatic phenomena were produced; the reflex, therefore, did not occur through the bronchial nerves, but by the respiratory nerves to the diaphragm and intercostals. That this was the case was completely proved by section of the phrenics before irritation of the vagus, for the phenomena of asthma were then entirely absent. An altogether unexpected result was thus reached, namely, that asthmatical phenomena may be produced *reflexly* through the vagus, and that the principal portion of the effect is a sudden inspiratory depression of the diaphragm, followed by its continued tonic contraction. It would thus appear that the theory of asthma, which represents the disorder as essentially one of bronchial spasm, must be given up. There can be no doubt that irritation of the vagus does cause bronchial spasm and moderate dilatation of the lungs, but this effect has always been regarded as much too insignificant to account for the symptoms of the disorder as clinically observed; and now that it appears to have been satisfactorily proved that besides this peripheral effect there is a reflex effect of incomparably greater importance, there is no reason why the theory of bronchial spasm should be any longer maintained.

Two very obvious objections to the view first stated are anticipated by Professor Riegel. Can it be possible, in the first place, that the diaphragm may remain so long in a state of contraction as to cause the protracted dyspnœa familiar in many cases of asthma? There is no evidence to the contrary; and in the course of these experiments on dogs the diaphragm was actually seen to remain in a condition of contraction for ten minutes without producing asphyxia. Besides, the same objection might apply to the muscles of the bronchi. Again, it is a clinical fact that whilst the inferior lung-border is low in an attack of asthma, it moves in respiration. Is this fact compatible with spasm of the diaphragm? As a matter of fact it is: whether the phrenic be directly or indirectly stimulated, and the diaphragm thrown into inspiratory spasm, the lung-border moves slightly in respiration.

Lastly, Professor Riegel cautions us against coming to the hasty conclusion that we have now settled the pathology of bronchial asthma. Spasm of the diaphragm may explain some of the phenomena of the seizure, but it certainly will not explain all. For himself, he still holds that there may be vaso-motor disturbance and hyperæmia of the bronchi, along with spasm. Still, spasm there is, and the present investigation shows that it is chiefly a spasm of the diaphragm.

THE WEEK.

TOPICS OF THE DAY.

So much time having elapsed since the appointment of a Royal Commission to report on Metropolitan Sewage Discharge, and the public not having been admitted to the numerous meetings which have been held, the press has been semi-officially requested to publish an outline of what has taken place since the Royal Warrant was issued for assembling of the gentlemen nominated to form the C mission. At the outset of the proceedings the Metropoli Board of Works applied for leave to attend the inquiry counsel; and as it appeared that the investigation wa assume a judicial character, the Commission complied w the request, it being understood that [other parties wo also appear by counsel. The sittings for taking evid commenced on July 27 last, when there appeared the poration of London (as Port Sanitary Authority), the Tha Conservancy Board, a "general committee for the protec of the lower Thames from pollution," and the Erith B Board. The meetings of the Commission have since continued, usually twice a week, and have up to this occupied thirty days, during which nearly one hundred nesses have been examined and cross-examined, som great length. After hearing from the engineer of Metropolitan Board a general description of the main d age system, the Commission decided to confine their a tion, in the first instance, to the question whether any effects resulted therefrom, and invited evidence from complainants as to the facts of the case. This evidenc been of two kinds—popular and scientific. For the po evidence a very large number of persons engaged o interested in, the Thames near the sewage outfalls brought forward to assert the pollution of the wate accumulation of foul mud, damage to the shipping inte injury to health, etc., and there was produced a large of scientific evidence in regard to the state of the rive tidal action, and the drainage system generally. The for the complainants is now virtually completed, an Commission will in a short time proceed to hear the of the Metropolitan Board, which is expected also to b very full and elaborate character.

At the recent fortnightly meeting of the St. Pa Board of Guardians a report was brought up, statin the Committee had considered the letter from the Government Board, reporting that they had settled the that the Guardians were to pay the Managers of the C London Sick Asylum for the Highgate Infirmary, wi its fittings and furniture—namely, £50,000; and they r mended that their solicitor be instructed to take the sary steps for the conveyance of the Infirmary t Guardians for that sum. Further, that the Metrop Board of Works be requested to lend the Guardians th for the purchase, and the repayment to be sixty equa yearly instalments. This report was adopted, as al another on the subject of proposed additional worl accommodation for aged and infirm paupers. A m moved that application be made to the Local Gover Board for permission to emigrate pauper children, a was carried unanimously.

The Birmingham magistrates are to be commend their decided effort to protect the public in the ma unwholesome food. A manufacturer of potted meat recently charged before them with having five pi donkey-flesh upon his premises for the purpose of s human food. The Chief Inspector of Markets proved ing the defendant's house, where he found a bag cont portions of a donkey which had been partly boiled, a weight of which was seventy pounds. The joints were t and were found to have been cut from the carcase of a d in a neighbouring slaughterer's yard. The defendant the habit of supplying small shops with potted meat of which was found in the house, and also tins for cont it. He did not deny the offence, but stated that h been out of work for a long time, and was bound to do thing for a living. The magistrates said it was no

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such men, as there was an association in existence h paid the amounts imposed; he would therefore be enced to a month's imprisonment. At the same court her butcher was sent to gaol for a month for selling e-flesh as beef.

n inquiry recently held at the Coroner's Court, Hollo- by Dr. Danford Thomas, once more illustrates the heness of parochial sanitary authorities until some e case arouses public attention and compels them to action. The deceased was a child aged two years and months, daughter of a cabman who resided at ebbon-place, Sebbon-street. The father of the child she died at his residence, after suffering from only a t cold, from which no fatal effects were apprehended. Greenwood, of Canonbury-square, deposed that death ted from congestion of the lungs and pneumonia. The e, 4, Sebbon-place, was in a very dilapidated and hed condition: it was wet and damp, and quite unfit human habitation; it was, in fact, a nest of fever; was no proper ventilation to the place, and its con- n certainly required remedying. The father of the sed denied that the house was so bad as represented; he coroner reminded him that he was not confined to much as the deceased and other members of his family The jury, in returning a verdict in accordance with medical evidence, begged to call the attention of the ary authority to the neglected and dilapidated condition e premises in which the deceased died.

e *Cape Argus* says the moral of the recent small-pox mic does not seem to have been brought home to the c in general with that force which might have been ted. Parents are as negligent now in regard to the nation of their children as though small-pox had never amongst them, or would never rage again. The post cine officer is, consequently, again becoming a sinecure, hrough any fault of Dr. Landsberg, but because of ct and indifference on the side of parents, who have no ate regard for the health of their children. Nothing of a Compulsory Vaccination Act for the colony, with pre- s to medical men for the highest aggregates of success- ccination, will suffice to meet the necessities of the case. certainly both town and suburbs still contain enough e disease to remind the inhabitants of the fact of its g played such terrible havoc in Cape Town. Little than a week ago an inspection of a row of cottages n four hundred yards of Salt River Station revealed resence of no less than eight or nine cases of small- wo of which have since terminated fatally.

a recent report on the health of Salford, Manchester, atham calls attention to the evil influence of atmos- e impurity on the mortality from lung disease. He ared the mortality from this cause in his own district that of one similarly circumstanced, but not exposed to deleterious influences of a smoky atmosphere, viz., Cheshire, not more than a few miles distant from rd. During the four years 1878-1881 the annual rate rtality from lung disease was 334 per 100,000 in Mid- hire, against 598 in Salford; whereas the conditions of n the former are not superior to those in the latter, the one exception that the atmosphere of the Cheshire cts is less contaminated by smoke. The people gene- are not, he observes, more prosperous or better fed, he climate is certainly not warmer, so that the differ- in the mortality from respiratory disease may be ned to be mainly, if not entirely, due to the smoke nce. Nor does this appear to be all the mischief ectly caused by the smoky atmosphere; and if it were ble to measure the whole extent of its influence there would probably be a far more serious indictment to bring against the atmosphere of Salford. The efforts of the sanitary authority to secure an improvement in this respect appear to be of a very limited nature, whilst the present means at the disposal of Dr. Tatham to cope with the nuisance are deplorably inadequate, and he is confident in his opinion that, were the smoke inspector to devote the whole of his time to the work, a marked improvement in the Salford atmosphere could easily be effected.

The returns from Her Majesty's army of occupation in Egypt for the week ending the 26th inst. show that the force has now been reduced to 8632 officers and men, and out of this number 571 were at the same date sick in hospital. A further reduction is still to take place, and will, we believe, be carried out shortly, although the *Times'* correspondent, writing from Cairo, asserts that want of transport will delay the removal of the troops until May next.

THE GENERAL MEDICAL COUNCIL.

We are informed that the General Medical Council has been summoned to meet on Thursday, April 19, at two o'clock in the afternoon. The English Branch Council and the Executive Committee will meet on April 18, at 11 a.m. and 2 p.m. respectively.

THE UNIVERSITY OF EDINBURGH.

The Edinburgh Town Council, at its meeting on the 20th inst., resolved to vote the sum of £1000 towards the fund for completing the new Medical School of the University on the occasion of its three-hundredth session. In moving this resolution the Lord Provost alluded to the extraordinary increase in the number of medical students in recent years. In the year 1868-69 the number of students of Scottish extraction was 229; in 1881, 638—two and three-quarter times greater. From England they had in the earlier year, 159; in the later year, 585—three and three-quarter times greater. From Ireland, 12 in 1868-69, and 30 last year—two and a half times greater. Of foreign students, they had 16 in 1868-69, and 63 last year—a fourfold increase; and from India, 31 in 1868-69, and 120 last year—also an increase of fourfold. Of colonial students, they had 29 in 1868-69, and last year 202, or a sevenfold increase in twelve years. That a further increase is to be expected is shown by the fact that the number of students who have presented themselves for the Preliminary Examinations in Arts for the Medical Faculty this year is over 470, as compared with 406 for the corresponding examinations in March last.

THE PARIS WEEKLY RETURN.

The number of deaths for the eleventh week of 1883, terminating March 15, was 1209, and of these there were from typhoid fever 30, small-pox 13, measles 18, scarlatina 2, pertussis 13, diphtheria and croup 38, dysentery 1, erysipelas 6, and puerperal infections 5. There were also 48 deaths from acute and tubercular meningitis, 238 from phthisis, 53 from acute bronchitis, 91 from pneumonia, 72 from infantile athrepsia (33 of the infants having been wholly or partially suckled), and 30 violent deaths. The number of deaths for the week considerably exceeds the mean of the last four weeks, 1184. As regards epidemic diseases, there has been a slight increase of deaths from small-pox, measles, and pertussis over those of the preceding week, and a slight diminution of deaths from scarlatina and diphtheria. The births (1413) have reached a higher figure than they have hitherto attained; and although about 40 of the number should have been enumerated last week, yet the residue remains very large.

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COLLEGIATE LECTURES.

The following are the subjects for the remaining courses of lectures at the Royal College of Surgeons:—Mr. Frederick S. Eve (Erasmus Wilson Lecturer) will give three lectures on "Cysts, and Cystic Tumours in general." Professor Jonathan Hutchinson will deliver six lectures on "Certain Diseases of the Tongue"; and Mr. Henry Power will conclude with three lectures on the "Lachrymal Apparatus and Accessory Organs of the Eye." These several lectures will be commenced some time in June. The dates will be duly announced.

ST. GEORGE'S, HANOVER-SQUARE, HEALTH REPORT FOR 1881.

The tenth annual report of Dr. W. H. Corfield, Medical Officer of Health for the parish of St. George, Hanover-square, on the sanitary condition of the locality for the year 1881, records a most satisfactory condition of affairs. The population of the parish, corrected by the results of the recent census, was found to be 89,573, or 185 less than in 1871. A slight increase in the Mayfair and Belgravia sub-districts is more than counterbalanced by a decrease in the Hanover-square sub-district, due, as stated in Dr. Corfield's last annual report, to the demolition of small houses, and the erection of workshops on their sites. The death-rate of 1881 is shown to be almost as low as the unprecedentedly low rate for 1880 This, Dr. Corfield remarks, is more than he expected, and shows, it may be hoped, that some of the causes of these very low rates are permanent sanitary improvements of one kind or another. The corrected annual death-rate for the past year was 16·91 per 1000, the average during the preceding ten years having been 18·32. The rate for 1881 was lower than that hitherto recorded for any year, except 1880, when it was 16·64. The number of deaths from infectious diseases and diarrhœa, viz., 136, was less than in either of the preceding ten years, and considerably less than the annual average, which is 188·5. The epidemic of small-pox which prevailed in London generally during 1881 caused nine deaths in this parish, the largest number recorded in any year since 1871, when there were fifty-nine (except in 1877, when the number was twelve). As we have before observed, Dr. Corfield's report for the past year records an improvement in sanitary matters, which cannot fail to be gratifying to all concerned in the administration of the parish of St. George's, Hanover-square.

THE FATE OF PEPTONES.

It is certain that we ought to search after some physiological principles more earnestly and constantly than we at present do. Outside the solid nucleus of acquired truth there lies a zone of fluctuating doctrine, which affords a more or less plausible excuse for disregarding in our daily practice some of the more important physiological questions. Much as the information is wanted, we are yet quite in the dark as to the nature of the majority of chemical actions which go on inside the body. In the *Wiener Medizinische Wochenschrift*, No. 11, Professor Seegen's address before a recent meeting of the Medical Society of Vienna is recorded. The Professor dealt with the greater part of the literature of the subject of the behaviour of the peptones in the economy, and related some experiments conducted by himself. As all the medical world knows, the ingested proteids are largely converted into peptones by the combined action of the gastric and pancreatic digestions. Schmidt-Mulheim computed that at least three-fifths of the albuminoids were so treated by the digestive fluids. The manner of the conversion is by no means thoroughly understood. Kühne's elaborate researches clearly show that the metamorphosis is not a perfectly simple one. The immediate object of the transformation, looking at the highly diffusible nature of the easily absorbed peptones, is at once transparent, but the fate of the peptones on their arrival in the blood has yet to be thoroughly worked out. The investigations of Seegen may be regarded as attempts to resolve at least a part of this problem. Previous researches had made it highly probable that much of the hepatic glycogen was the result of the metabolism of proteid bodies. Seegen proclaims that he is the first to give the direct proof of the formation of a carbo-hydrate from an albuminoid body under the agency of the hepatic protoplasm. It is to be regretted that the experiments are not described in further detail. From the account given, we should be inclined to regard them as somewhat crude. Seegen's experiments seem to prove that by feeding animals with ready-formed peptones the amount of hepatic sugar is increased, that the liver is undoubtedly one of the principal seats for the conversion of the peptones, and that one of the products of this transformation is hepatic glycogen. The main facts of the method adopted were to place a portion of a liver, taken from an animal recently killed, but kept supplied with oxygenated blood—on the one hand in a solution of peptones, on the other in simple water. After a certain time the amount of dextrose in each experiment was carefully estimated, when it was found that the preparation with the peptones yielded the larger percentage of sugar. The chief part of the address was taken up with the recital of the methods and results of previous workers in this department of physiological chemistry. We may mention that experiments made by Schmidt-Mülheim have proved that peptones injected into the circulation of animals exert a toxic effect on the cerebral functions; so that it would appear that the speedy metabolism of the peptones is a necessary factor for healthy life. However, the question is too intricate to be dealt with satisfactorily in the present state of our knowledge.

ACADÉMIE DE MÉDECINE.

At the election on the 13th inst. to supply the vacancy in the section of Therapeutics and Medical Natural History left by the death of Dr. Pidoux, the following candidates were nominated:—Drs. Féréol, Hayem, Vidal, Desnos, Dumontpallier, and Ferrand. Dr. Féréol was elected by the votes of fifty-one of the seventy-six of the members present.

PHYSIOLOGICAL DISCOVERY.

Dr. McKendrick, Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology at the Royal Institution of Great Britain, will deliver, at the Institution, during the months of April and May, a course of ten lectures on "Physiological Discovery," from the historical, biographical, and critical points of view. The object of the lecturer is to trace the progress of physiological research from about the beginning of the sixteenth century to recent times, especially along those lines which have led to great results. He will describe briefly the lives of the great discoverers, indicate the influence of contemporary science on their ideas and opinions, and show how their labours have brought us to our present position. As far as possible, the fundamental experiments of discoverers will be shown or illustrated, and will be compared with present methods. The first lecture, to be given on April 3, will be on the Circulation of the Blood: a Problem in Hydrodynamics; as illustrated by Harvey, Borelli, Malpighi, Hales, Poiseuille, Ludwig, and Marey. The second, on the Circulation of the Blood: the Controlling Influence of the Nervous System; as taught by Whytt, Cullen, John Hunter, Parfour du Petit, Dupuy, Brachet, John Reid, H. Weber, Claude Bernard, and Brown-Séquard. The

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third, on Respiration: Relation of the Organism to the Air Breathed—External Breathing; as taught by Van Helmont, Boyle, Mayow, Priestley, Lavoisier, and Spallanzani. The fourth, on Respiration: Relation of the Living Tissues to the Gases in the Blood; as taught by Magnus, Lothar Meyer, Ludwig, Pflüger, Stokes, Hoppe-Seyler, and Paul Bert. The fifth, on Muscular Tissue: its Properties and Modes of Action; as taught by Borelli, Glisson, Haller, Wytt, John Hunter, Girtanner, Wollaston, Weber, von Helmholtz, Du Bois-Reymond, Heidenhain, Kühne, and Hermann. The sixth, on the Formation of the Blood; the investigations and teaching of Aselli, Pecquet, Jollyfe, W. Hunter, Hewson, Spallanzani, and Majendie. The seventh, on the Mechanism of Secretion; the researches of Malpighi, Johann Müller, Bowman, Goodsir, Ludwig, and Heidenhain. The eighth, on the Nervous System: Notions of Nervous Action generally; the teaching of Bauhin, Hoffmann, Schneider, Malpighi, Willis, Haller, Unzer, Charles Bell, Johann Müller, Waller, von Helmholtz, and Du Bois-Reymond. The ninth, on Nervous Actions: Reflex Acts and the Spinal Marrow; as taught by Whytt, Prochazka, Marshall Hall, and Brown-Séquard. And the tenth lecture will be on Nervous Action: the Higher Centres and the Brain; according to Flourens, Carpenter, Hitzig, Fritsch, and Ferrier. The conclusion will show (1) that physiology collects evidence as to function from various sources, morphological, physical, chemical, experimental, and pathological; (2) that a sound physiology is the basis of the healing art; and (3) that whilst physiology is the handmaid of medicine, she also claims recognition as a science, investigating problems so recondite as to demand the highest methods of physics for their solution. The course of lectures will begin on Tuesday, April 3, at 3 p.m., and be continued on each succeeding Tuesday, at the same hour, during April and May, and on June 5; with the exception of Lecture V., which will be delivered on *Monday*, April 30. The subscription to the course is one guinea for non-members of the Royal Institution.

MORTALITY IN BERLIN IN 1882.

The mortality of Berlin in 1882 (*Deutsche Med. Woch.*, February 14) was remarkably small as compared with former years, there having been, independently of dead-born, 30,460 deaths, or 25·9 per 1000 of the population, whereas during the preceding ten years the mortality has varied from 32·9 (1875) to 27·2 (1881), the great diminution of deaths of infants from summer diarrhœa having greatly contributed to this result. Of the 30,460 deaths, 12,067 (39·6) took place during the first year of life. Among epidemic diseases (with the exception of diphtheria) the deaths were less than during 1881. Thus, there were 144 deaths from measles (0·12 instead of 0·18), 610 from scarlatina (0·52 instead of 0·79), 5 only from small-pox, 355 from typhoid fever (being 0·30 in both years), 127 from dysentery (0·11 instead or 0·13), 292 from pertussis (0·25 instead of 0·35), and 4037 from diarrhœa and cholera (3·57 instead of 4·14). From diphtheria there were 1914 deaths (or 1·63 instead of 1·56).

UNIVERSITY OF GLASGOW.

The rectorial address of the Right Hon. John Bright was the most prominent topic of conversation among the students on the reassembling of the classes on Tuesday at Gilmorehill. Opinions seemed to be pretty well balanced as to the merits of the speech. The Conservatives, for the most part, are disappointed; the Liberals, who uphold the Lord Rector, consider that some parts of his speech were not quite up to their expectations. Whatever may be its merits or demerits, it has caused a stir among political parties, who are now looking forward to a lively contest at the election, which takes place at the beginning of next session. The speech was entirely political, and therefore a most unrectorial speech. The Conservatives are first in the field with the Marquis of Bute as candidate for the rectorial chair. It is pointed out that the Marquis has gained for himself a distinguished position in the ranks of literary men, and has proved himself a munificent patron of learning, to whose "fostering influence" our education, our art, and our science are largely indebted. Much dissatisfaction, however, is expressed among the Conservatives as to the Committee's nomination, as it is doubted, on religious grounds, whether the Marquis of Bute could be installed as the Lord Rector of a Protestant university. There is a feeling also that if a non-political candidate were proposed his return would be secured. The Liberals have not as yet mentioned definitely any particular candidate, but this, it is said, they will do within the next fortnight. It is, however, supposed that they are inclined to set up Earl Granville as the most acceptable nominee for rectorial honours.

AN INTRACOLONIAL MEDICAL CONGRESS.

At the instigation of the Netherlands Association for the Advancement of Science, in connexion with the Intracolonial Congress, to be held at Amsterdam from September 6 to September 8, 1883, it has been resolved to hold at the same time an International Colonial Medical Congress. The Committee has chosen certain questions for discussion, which it has referred to competent reporters for statements as to their present position, as a basis for the ensuing discussion. It is, however, open to the reception of other questions, but requests that all observations in relation to this Congress may be forwarded as early as possible, so as to allow of the programme being issued in August. In the meantime the Committee has referred the following six questions to the reporters named:—1. Quarantine: Reporters—Prof. de Chaumont, of Netley; Dr. Van Leent, Amsterdam; and Prof. Cervera, of Madrid. 2. The Special Education of Colonial Medical Practitioners: Reporter—Col. Becking, retired medical director of the Dutch East Indies, Utrecht. 3. The Hygiene of Unhealthy Occupations and Trades in the Colonies: Reporters—Prof. Amado, of Lisbon; and Prof. Van Overbeck de Meyer, Utrecht. 4. The Modifications which certain Diseases, and especially Infectious Diseases, undergo under the Influence of Tropical Climates: Reporters—Dr. Walther, Inspector of the French Marine Service, Paris; and Dr. Norman Chevers, formerly of Calcutta, and now of London. 5. Phthisis in the Colonies and Tropical Climates: Reporter—Dr. Carsten, Medical Inspector at the Hague. 6. The Treatment of Exotic and Tropical Diseases in Temperate Climates: Reporters—Sir Joseph Fayrer, London; Deputy Surgeon-General Ewart, London; and Dr. Le Roy de Méricourt, Medical Director of the French Marine, Paris.

THE GRANT MEDICAL COLLEGE, BOMBAY.

The annual meeting of the Grant Medical College, held in February under the presidency of His Excellency the Governor of Bombay (Sir James Ferguson), appears to have been a very interesting one. Dr. H. Vandyke Carter, the Acting Principal of the College, read the annual report—the thirty-seventh since the foundation of the College,—in the course of which, in pointing out how much the work of the institution had grown, he said: "In 1845 this institution was inaugurated with a total of 12 students, and during the succeeding five years the annual totals were 13, 18, 17, 22, 27. Numbers thence fluctuated greatly until 1866,

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when from an almost minimum of 15 they have steadily risen to a maximum in the current year of 288, or eighteen times the mean of the first five years; and as a matter of fact, the number of students now under tuition here is nearly, if not quite, as large as that of the chief London schools of St. Bartholomew's, University, London Hospital, and Guy's. This statement seems to me as impressive as it is novel; yet it is well founded, and if regard be had to the number of fresh entries only, it becomes amply confirmed. Thus, the seventy new admissions at Grant College exceed those of such London schools as St. Thomas's, St. George's, Charing-cross, King's, Middlesex, St. Mary's, and Westminster; and they also exceed the entries of the largest provincial medical schools of England, viz., Owens College, Manchester, and the Bristol. Data pertaining to the Irish and Scotch colleges are not readily accessible, and circumstances differ somewhat in different parts of the United Kingdom; but it will suffice if I have shown that our educational work in Bombay continues to merit a not unfavourable consideration. It may further be observed that the above-named local figures for 1883 do not include numbers of hospital apprentices regularly taught, who replenish the subordinate medical establishment of the conjoined army of Western India; and if there be added the fifty-four young men destined for Army service, the total of youths under medical tuition rises to 337, which exceeds the total at any single London school." He then urged the great need of additional facilities for tuition, of enlarged college buildings, of a suitable common-room, of experimental laboratories, chemical, physiological, and pathological, and of an increase of the teaching staff. He touched also on the question of "lady-doctors," observing: "If there exist a wide and a real need of female medical practitioners in Western India, the grade of such practitioners should, I imagine, correspond to that of our male graduates; and I know of no valid reason why the Grant College could not be organised to afford the instruction required by women-students in medicine. The principal object here seems to be that of replacing the indigenous *dai* by a suitably educated woman; just as the *vaids* are gradually being displaced by licentiates of the Bombay University, to the great benefit not only of men, but also of a very large proportion of the women and children of the native community. At present the classes of this College are so crowded and accommodation is so narrow that I have hesitated to introduce a new class of students. Let, however, the needed facilities be afforded us, and I believe this institution would be found equal to the occasion." The Governor, who, after giving away the prizes, addressed the assemblage, did not hold out any hope of aid from the Government, but thought the College must look to private liberality for the necessary pecuniary assistance. He thought that the experiment of bringing two or three "lady-doctors" of known skill to the country ought to be tried; and that if they did not find their services largely acceptable, it would be a calamity; and he considered that the training of female practitioners at the College would be most gratifying to the community.

THE SPREAD OF PUERPERAL DISEASE IN KENSINGTON.

In the report on the health and sanitary condition of the parish of Kensington for the month of February last, Dr. Orme Dudfield, the Medical Officer of Health, calls attention to the reprehensible conduct of a midwife practising her calling in that locality. In the previous report the unusually large number of deaths (viz., six) of women from puerperal diseases was referred to, but, Dr. Dudfield observed, as the deaths occurred in the practices of an equal number of medical men, the significance of the event was materially diminished. Recently, however, it came to the knowledge of Dr. Dudfield that one of the women had been attended by a midwife, and that the medical man who certified the cause of death was only called in at the last moment. The same gentleman certified in a second case, also attended by the same midwife; and as it transpired that she had had two other cases, not fatal, of the same nature, she was cautioned not to attend any confinements for some time. There would appear to have been no excuse for this woman's behaviour, since she was cautioned by three or four doctors, after the first fatal case on January 19, to relinquish practice for a time, which she did not do, as the other non-fatal cases referred to occurred subsequently, but before the second fatal case in February. The medical man who certified the two deaths informed Dr. Dudfield that not only did he caution the midwife to discontinue her practice for a suitable time after the first case, but also that he himself had abstained from this branch of practice since January 19. Another of the practitioners referred to, in like manner stated that he did not attend in her confinement the woman whose death he certified as having been caused by puerperal peritonitis, but after seeing her he abstained altogether from midwifery practice for many weeks. If women who follow the calling of midwives cannot, without punishment, be brought to understand their duty upon occasions such as the one under notice, such punishment should be meted out in decided and vigorous measure.

THE DUBLIN ARTISANS' DWELLINGS COMPANY.

The half-yearly meeting of the shareholders of this Company was held on Monday, March 5; Mr. Richard Martin, D.L., in the chair. The report recommended a dividend at the rate of 4 per cent. per annum, free of income-tax, leaving more than £600 of net profit to be added to the reserve fund. The total number of tenement-houses belonging to the Company was 536, with a population of 2510. The mortality amongst that population spoke very favourably and conclusively as to the good sanitary arrangements of the houses which they had built, because the deaths were only 19 in number, or at the rate of 15·1 per 1000, as compared with 26 per 1000, which was the death-rate of Dublin at large. Again, of these 19 deaths 6 were under one year, and 9 under ten years while their population included not less than 547 children under five years of age—a proportion of children more than double that of the general population of Dublin; and of course the mortality amongst young children was greater than amongst adults.

BACILLUS OF GLANDERS.

Our readers will find at page 160 of our impression for February 10 an account of some very important observations on glanders. A further contribution, chiefly corroborative, is contained in the *Berliner Klin. Woch.*, No. 11, from the pen of Dr. Israel. The bacilli were detected in the morbid products of glanders in the lungs of diseased horses; they were easily found in those parts of the nodules which had undergone caseation, but were more highly coloured and better preserved in the zone of advancing inflammation. Nevertheless, Dr. Israel never saw them in the area of hepatisation which frequently surrounds the nodule in the lungs. The bacilli were cultivated through several generations, from the fifth and sixth of which rabbits were inoculated, with varying results. Two died with typical signs of glanders, one succumbed without any characteristic change being found, and the other remained alive and well. Some artificial experiments were carried out by inoculating some sterilised fluids contained in glasses with matter taken from a subcutaneous abscess. These experiments were productive

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of awkwardly negative results. But an explanation of satisfactory nature was forthcoming. On examination it was found that the matter contained only spores, not bacilli. Another fact of interest which Dr. Israel has to impart is that he has witnessed a clot in the vessels which was crowded with bacilli. This suggests to him, as a similar observation in tuberculosis did to Weigert, the possibility of the spread of the disease by the vascular system. It is only fair to mention that Dr. Israel exercises scientific caution in advancing a theory or in supporting a doctrine.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

The Dr. James Watson Prize, of the value of £50, has been adjudicated to Dr. William Macewen, Surgeon of Glasgow Royal Infirmary. The subject on this occasion was surgical, and the title of the successful essay is—"An Experimental Inquiry into the most Suitable and most Reliable Material for the Ligature of Arteries and for Sutures." The competition was open to Fellows and Licentiates of the Faculty.

GLASGOW HEALTH REPORT.

During the fortnight ending March 17 there were 632 deaths registered as compared with 609 for the previous fortnight, representing a death-rate of 32 in place of 31 per 1000. In the corresponding fortnight of last year the death-rate was 7 per 1000 less. Of the excess of deaths registered this year 40 per cent. are caused by infectious diseases, 28 per cent. by pulmonary diseases, 22 per cent. by miscellaneous unclassified diseases, and 10 per cent. by nervous diseases specially affecting children. Dr. Russell says that last week was the coldest recorded in March since March, 1881, which was phenomenal in severity. The number of deaths below one year of age was 128 in place of 116, and of persons aged sixty years and upwards 99 in place of 93. Pulmonary diseases caused 227 deaths in place of 212. Fever caused 8 deaths instead of 7, and of these 7 were due to enteric and 1 to typhus fevers. The number of deaths from infectious diseases of children was 92 in place of 77, viz., 50 from whooping-cough, 34 from measles, and 8 from scarlet fever. Whooping-cough alone contributes 2·5 deaths per 1000, and measles alone 1·7, so that these two diseases make the death-rate 32 in place of 28. The average age of the 50 fatal cases of whooping-cough was twenty-three months and a half, and of the 34 cases of measles eighteen months and a half. The whooping-cough epidemic is most fatal in the eastern and northern districts, the measles in the southern and western districts. The number of cases of fever registered was 43 in place of 48, viz., 37 of enteric fever and 6 of typhus. There were 191 cases of measles, 71 of whooping-cough, 63 of scarlet fever, and 13 of diphtheria registered, of which 43 were removed to the hospital, and the remainder supervised at home.

THE SUNNY SOUTH.

An English resident at Cannes, writing on the 18th of this month, says:—"We have had dreadful weather. On the 8th we woke up to find the place in deep snow, from a foot and a half to two feet, down to the water's edge. Before this had time to melt, more fell, with a hard frost; the thermometer sometimes at 23°. The heavy weight broke down my trees, nearly all evergreens, the beautiful Australian mimosas and acacias also being in full flower. The frost has killed the lemon-trees and the orange-trees, and the geraniums and heliotropes look as if they had been burnt. The poor peasants will suffer much, as even the olive-trees have been frozen. The snow lay on the ground till yesterday, when a heavy rain, following a hailstorm, made it disappear."

THE TREATMENT OF LEPROSY.

Surgeon-Major Peters has contributed to the *Edinburgh Medical Journal* (March, 1883) the results of his experience in the treatment of this dire malady at the Leper Asylum at Belgaum during two years. The treatment may naturally be considered under two heads, viz.:—1. *Local Applications.*—For the ulcerated parts an emulsion of gurjun oil is most strongly recommended. Dr. Peters claims for it that under its use the ulcers heal rapidly, and that the cicatrices never give way when once formed; that by its use the skin is kept soft, and cracking prevented. Moreover, flies avoid people who are using this ointment. Failing this, he recommends carbolic oil (one in forty), but it is more expensive, and not so efficacious in healing the ulcers. For the tubercular form of leprosy Dr. Peters considers that we have a potent remedy in the cashew-nut oil, the application of which to the tubercles causes them to soften and break down into ulcers. These are then to be filled with gurjun oil. When they are healed over, if there is any thickening left, the whole process should be repeated. In the anæsthetic form the cashew-nut oil may also be used, being spread over the affected areas. 2. *Internal Remedies.*—Chaulmoogra oil would seem to be almost a specific, for not only does it alleviate the dyspeptic symptoms so commonly present, but it also causes absorption of the tubercles. Iodide of potassium was found useful in cases where there was reason to suspect association with syphilis. In regard to diet, the patients should be well fed, and have fresh meat, fresh fish, and vegetables. Salt meat and salt fish should be most vigorously shunned, although in none of his patients could the disease be attributed to the use of salt fish as an article of diet. It would appear that grain is often damaged by damp after being stored up in granaries, and Dr. Peters considers that this unwholesome grain is quite as capable as unwholesome fish of giving rise to leprosy. In several of his patients the disease was distinctly hereditary, whilst in some no cause for it could be assigned.

CAPITAL PUNISHMENT IN SWITZERLAND.

The Swiss cantons must be congratulated on the expeditious manner in which they remove a law from their statute-books, or replace it if it be found impracticable to do without it. In two cantons, those of St. Gall and Lucerne, capital punishment has lately been re-enacted—in the latter by a majority of seventy-three votes to eight,—and it appeared, from the debate which preceded the vote, that the practice of sentencing murderers to long periods of imprisonment has produced no good results. Public opinion may also have been swayed by a shocking murder committed some months ago in the canton of Vaud, in which case the murderer could only be sentenced to twenty-five years' imprisonment, as capital punishment is not the law of that canton. Abroad, the right measure of punishment seems almost impossible to apportion in the case of persons sentenced to imprisonment for life. Time remissions offer an inducement for good behaviour when men have been condemned to fixed terms; and the hope of such remissions also serves to keep the minds of these men in a healthy condition; but where no hope of release can be held out, it has generally been found that prisoners either droop into insanity or become more and more dangerous; and it was owing to the difficulties experienced in the management, by ordinary means, of culprits under life sentences, that the Swiss cantons were induced to fix the maximum term of imprisonment at twenty or twenty-five years, and to allow time remissions which practically enabled a murderer to get his discharge in twelve or fifteen years. The cantons of St. Gall and Lucerne discovered, however, that this system had no terrors for criminals, and

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that it was also open to the serious objection of letting well-connected murderers be treated with a scandalous leniency. If, in the next few years, murders diminish in number in these two cantons, there is no doubt that capital-punishment will again become universal throughout the Swiss Republic.

SCURVY AT THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

For the second time this session, scurvy has been discussed before this Society. On both occasions the subject was treated from a somewhat novel aspect. Dr. Neale, who accompanied the *Eira* arctic expedition, was, contrary to the generally accepted doctrine, of opinion that "lime-juice may be dispensed with, if *fresh* meat can be obtained." He insisted very strongly on the value of fresh, recently killed meat, as being a better anti-scorbutic than any *preserved* meat, however carefully it may have been prepared; he also insisted on the importance of fresh air, and to this end recommended that the men should live in huts, rather than in close, ill-ventilated cabins. Mr. Page and Dr. Barlow related cases of sub-periosteal hæmorrhage occurring in weakly infants, who had been artificially fed, and, following the same line of reasoning as Dr. Neale, they came to the conclusion that this hæmorrhage was due to scurvy, brought about by the absence from the diet of *fresh food*. Their cases rapidly improved under a suitable diet, in which the juice of raw meat, lime-juice, milk, etc., were included. The question thus opened up is one of the greatest importance, for, as was pointed out by one speaker, this method of feeding infants has been going on for years, and is now very largely prevalent in all classes of the community. The heavy death-rate of infants under one year is well known, and is universally attributed to injudicious artificial feeding. If those who survive this ordeal are likely to become the subjects of scurvy, it is high time that public attention should be drawn to this question. Mr. Page's definition of this as a "scurvy-diet" cannot fail to attract professional attention, and good will necessarily follow, even if his definition is not universally endorsed. We shall again recur to this question on a subsequent occasion, after the discussions alluded to above have been duly published. Meanwhile we would draw our readers' attention to them, and recommend the subject to their earnest consideration.

LEPROSY IN VENEZUELA.

Although leprosy has in all ages forced itself on the attention of the medical profession and the public alike, its origin and perpetuation are still involved in obscurity. With improved hygiene it has, like the plague, disappeared from the greater part of Europe, though it lingers still in Norway, in Spain, and in Greece. Widely spread throughout the East, from time immemorial, it is endemic also in the Pacific Islands, and even in New Zealand, where it is known as "Ngerengere." In the New World too it is met with under no less divergent circumstances of climate and of race, occurring in Cape Breton, and among the French population of Louisiana, the coloured people of the West Indies, and among all classes in Brazil and others of the South American States. There is no evidence of a satisfactory nature as to its contagiousness, unless, perhaps, when in a very advanced stage. It has been acquired by Europeans long resident in those countries under unfavourable conditions; but though it is most frequent among the poor and ill-fed, it is nowhere exclusively confined to any class. The evidence of its being hereditary is overwhelming, and it is probable that the seclusion from society enjoined on lepers by the Mosaic law was intended as a check on intermarriage between healthy and tainted families. Fifty years ago the then President Bolivar opened an asylum for lepers on an island in a lake near Maracaibo; but little use was made of it until 1876, when several ladies of that city set to work to raise funds for the amelioration of the condition of these unfortunates, whose numbers had of late increased to an alarming extent. In 1879 a law was passed, authorising the forcible removal of lepers to the asylum; but popular prejudice induces many families to conceal their afflicted members, and though there are already 125 under treatment, it is believed that 400 still remain in Maracaibo and its vicinity. The climate of the island is healthier and more agreeable than that of the town, and while the poorer patients reside in a hospital, those who have private means are allowed to rent cottages with gardens and grounds in different parts of the island, where they cultivate fruits and vegetables, and breed goats and poultry profitably. After long investigation and discussion it has been determined to allow intermarriage among the patients as a means of brightening their existence, though unions between lepers and healthy persons are strictly prohibited. This was done in the belief, which events have thus far confirmed, that marriages between lepers would be infertile. It is, however, not easy to understand the distinction, for if a leper can beget offspring in one case why should he not in the other? or if the inability to procreate reside in the female leper, why may she not marry anyone with equal impunity? The disease in Venezuela and Colombia exists in every form and phase, the tuberculous being perhaps the most frequent. In advanced cases blindness and mutilation of the extremities are common. Fingers and toes are shed or peeled off painlessly by the patients without loss of blood. In other cases the whole body is covered with scales or confluent ulcers. No treatment has been found of any permanent benefit. Chaulmoogra oil promised excellent results, but in nearly every case induced such severe gastric disturbance that the patients could not be induced to persevere with it. The present Secretary of Government, a physician of high standing and European education, prefers arsenical treatment, not with a view to ultimate cure, but as a means of ameliorating the condition. One case among others may be cited as inconsistent with the notion of contagion. A woman who came to the island seventeen years ago, accompanied by her daughter, then three years of age, has from the first had the disease in an aggravated form. The girl, now twenty years old, though in constant attendance on her mother, is still exempt, indeed her features and complexion are unusually attractive. If she ever manifest the disease it will be from heredity, not from contagion.

THE ST. HELENA HOME FOR TRAINED NURSES.

A home with the above title, having for its object the founding of an institution for the maintenance, education, and benefit of trained nurses, was opened in London last week. Its distinctive features are, to provide a cheerful and well-ordered home, where young women who have adopted the calling of nursing may, after a thorough hospital training, reside under proper superintendence, may be further educated for private nursing, and may have constant and regular employment. And it is proposed also that a due proportion of each nurse's earnings shall be placed to a sound pension fund, so as to make provision for sickness, old age, and other disabling contingencies. It is intended to add to the home a hospital for paying patients, a "home-hospital" on such a basis as to charges as to leave, after paying all expenses, a small profit that shall go to the pension fund for the nurses. A detached villa residence, standing in its own grounds, has been secured, at No. 1, Grove-road, St. John's Wood, adjoining

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Lord's Cricket Ground. An influential committee, headed by the Duke of Bedford, has been formed, and sufficient funds have been obtained to start the undertaking, but further help is needed. We have had an opportunity of inspecting the house, and found it well arranged, very nicely furnished, cheerful and bright in appearance, and on the whole, though some of the nurses' dormitories are rather small, well deserving of commendation. The Home is to be registered, under licence from the Board of Trade, as an *association not for profit*. The intentions of its promoters are excellent, and we heartily wish the institution all success.

DEATH OF PROFESSOR CHARLES LASÈGUE.

THE Paris Faculty of Medicine has just lost one of its most distinguished members in the person of the eloquent clinical professor, Charles Lasègue, who died on March 20, in the sixty-seventh year of his age, in consequence of diabetes, which had latterly become complicated with albuminuria. The favourite pupil of Trousseau, and gifted with rare power of speech and great critical acumen, he soon acquired a great reputation as a lecturer not only among the students, but also among practitioners. One of the editors for many years of the *Archives Générales de Médecine*, he contributed numerous articles to that and other journals, and especially such as had any bearing on mental pathology. In this branch of medical science he acquired the highest authority as one of the official experts. Although he has written so much that might be profitably collected together, he has left no separate work beyond his various theses.

THE TREATMENT OF PUERPERAL SEPSIS.

A RECENT number of the *Archiv für Gynäkologie* contains a long article by Dr. Wilhelm Fischel, based on the practice of the midwifery clinic under Professor Breisky, of Prague, during a period of three years. In it Dr. Fischel discusses the washing out of the uterus with antiseptic solutions as a means of preventing or curing septic infection in the puerperal state. The subject has been so much written about, both in this country and on the Continent, that we think we should only weary our readers were we to reproduce the general tenor of Dr. Fischel's arguments and recommendations. It will be enough to say that he thinks these injections extremely valuable. But in his paper some pieces of experience are brought forward, which seem to us worth mentioning. As our readers will be aware, some Germans have expended ingenuity in devising plans for continuously irrigating the uterus. These, according to authors whom Dr. Fischel quotes, when put in practice, have resulted in an increase of the puerperal mortality, and of puerperal disease. We may refer our readers, with reference to this subject, to the number of this journal for June 25, 1881, page 705. But even in cases in which intra-injection is called for, this proceeding is not altogether devoid of risk. Dr. Fischel mentions a case in which, while a glass tube was in the uterus, the patient suddenly coughed violently, and forced the uterus down on the tube. A convulsive seizure followed, which lasted half an hour. Eight days after, the patient died, and, on post-mortem examination, an abscess about the size of a walnut was found at the point of entry of the right tube into the uterus. In another case, fatal peritonitis appeared to have been directly due to an intra-uterine irrigation. On autopsy the left tube was found inflamed, containing pus, and widened at its uterine end.

THE Library of the Royal College of Surgeons will be closed on Friday, March 30, for the purpose of the examinations.

MR. RICHARD T. PLIMPTON, Ph.D., will deliver twenty lectures, at University College, London, on Quantitative Analysis. The lectures will be given on Mondays and Fridays at three o'clock. The course is intended to furnish a description and critical examination of the best-known methods of the quantitative determination of the chief acids and bases. The lecturer will also direct attention to the best analytical methods of too recent introduction to have found place in the usual text-books. The first lecture will be given on April 13.

EXAMINATIONS for the degree of Bachelor of Medicine, both first and second, will be held at the University of Oxford in Trinity Term, on days to be hereafter notified. Candidates for either of these examinations are requested to send their names, on or before May 1, to the Regius Professor of Medicine, Medical Department, Museum, Oxford.

THE cost of cremating seven thousand bodies per annum at Bombay is said to be only £3000, or rather less than ten shillings for each corpse.

WE understand that a new weekly journal, devoted to the popular exposition of sanitary matters and to the education of the people in the laws of health, will be shortly issued by Messrs. Wyman and Sons, London. The new journal will be entitled *Health*. Its programme includes original articles, essays on personal health, and departments in which the interests of the family circle, of recreation, and of correspondence on health topics, etc., will be duly considered.

AN anonymous donation of £1000, for a convalescent home for sick nurses and patients, was announced at the last meeting of the Birmingham and Midland Hospital for Women.

THE service at Westminster Abbey for the benefit of the Westminster Hospital resulted in a net profit of upwards of £400 for the funds of the charity.

MR. GEORGE AUGUSTUS IBBETSON, F.R.C.S. Eng., having resigned the appointments he has held for a quarter of a century as Dental Surgeon and Clinical Lecturer on Dental Surgery in University College, the Council of that institution have elected him Consulting Dental Surgeon, no similar appointment having been made since the establishment of University College.

THE CÆSARIAN OPERATION AND ITS SUBSTITUTES.—During a discussion which took place at the New York Academy of Medicine (*New York Medical Record*, 1882, No. 27), in which Dr. Garrigues expressed his preference for Dr. Thomas's new operation of gastro-elytrotomy to the Porro-Müller operation (oöphoro-hysterectomy), Dr. Lusk observed that although Porro's operation had been performed in selected cases, yet there had been only forty-seven recoveries to fifty-five deaths. Patients still died of shock, many of septicæmia, and a few from hæmorrhage; and the question arose whether the time had not come for relinquishing this operation. Was the old Cæsarian operation deserving of the bad reputation that had been heaped upon it? When we turned from hospital experience to results that had been obtained in country districts, there had been collected a sufficient number of cases of which complete records had been obtained to place its success above that of any of the proposed substitutes. The operation had been performed many times, under conditions which would not be admitted for a moment when considering the propriety of either Porro's or Thomas's operation.

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THE MEDICAL ACT AMENDMENT BILL, 1883 (H. L.).

THE first Irish opposition to the measure recently introduced in the House of Lords by the Lord Privy Seal comes from the University of Dublin. The Provost, Fellows, and Scholars of Trinity College are petitioning against the measure, and in support of their petition have published the following statement:—

"1. The Bill proposes to deprive the medical graduates of the University of Dublin of the privilege of direct registration, although it is not alleged that the University has in any way abused that privilege. It is contrary to sound policy to deprive the University of Dublin of privileges which it has used for the great benefit of the public, and of the medical profession, because other bodies may have abused a similar privilege. To use the language of Professor Huxley's separate memorandum appended to the Report of the Royal Commission—'To strip a large proportion of the medical authorities of privileges which they can be shown to be using well and wisely, because of the abuses which obtain among a small minority, does not appear to me to be a justifiable employment of the authority of the State.' The petition of the University of Dublin proposes to accept coadjutor examiners, appointed by the Medical Council, at their final medical examinations, as a condition to its retaining the existing right of direct registration. This proposal has the approval of Professor Huxley and Professor Turner, the two Royal Commissioners who were the most intimately acquainted with medical education.

"2. With regard to the proposed constitution of the Medical Boards, the claim of a University to be represented on such Board should not be based merely on the total number of medical degrees conferred by it, but also on the high education in arts and other faculties given by it. This principle is clearly admitted in the Bill by giving the Universities of Oxford and Cambridge a proportion of four-fifteenths upon the English Medical Board, to which the number of their medical graduates would by no means entitle them. But even taking the low ground of the work done in conferring medical degrees and licences, the following figures show that the Irish Universities are entitled to as large a representation upon the Irish Board as the Scotch Universities are upon the Scotch Board, and to a much larger representation than the English Universities are upon the English Board:—

(A.)—*Irish Qualifications*, registered during the nine years ending 1882, and remaining in the Register for 1883:—Total number of persons on the Register, 1656; total number without university degrees, 932; total number with university degrees, 724. These figures show that during the last nine years the proportion of persons registering with medical degrees from the Irish universities is 43·6 per cent. of the total number of persons registering with Irish qualifications.

(B.)—*Scotch Qualifications*, registered during the nine years ending 1882, and remaining in the Register for 1883:—Total number of persons on the Register, 4095; total number without university degrees, 2289; total number with university degrees, 1806. These figures show that during the last nine years the proportion of persons registering with medical degrees from the Scotch universities is 44·1 per cent. of the total number of persons registering with Scotch qualifications.

(C.)—The proportion of persons registering with medical degrees from English universities is very much smaller than in the case of Ireland or Scotland.

"Notwithstanding these facts, the Bill proposes to confer a majority of eight-fifteenths upon the English universities, and of eight-elevenths upon the Scotch universities on their respective Boards; while it is proposed to give the Irish universities a minority of four-elevenths on the Irish Board, being only one-half of the representation provided for the Scotch universities."

The King and Queen's College of Physicians have also met to consider the Bill, but we must reserve a notice of their deliberations.

SCHEME FOR ENCOURAGEMENT OF ORIGINAL RESEA IN SANITARY SCIENCE.

THE following are the details of the munificent sch the Grocers' Company for the encouragement of o research in sanitary science. We trust that others wealthy City companies will follow the grand exampl set by the grocers. The scheme consists of two fo endowment: the one provides a maintenance during p of researches to be chosen by the worker himself; the meant as reward for actual discovery, in fields of rese be specified from time to time by the Company. W former intention the Company establishes three Re Scholarships, each of £250 a year; with the latter int they appoint a Discovery Prize of £1000, to be give in every four years.

Research Scholarships.—The Research Scholarshi intended as stipends for persons engaged in making researches into the causes of important diseases, an the means by which the respective causes may be pre or obviated. The Court of the Company propose to a to two of the scholarships in May, 1883, and to a t May, 1884; after which the vacancies which occur filled in each succeeding May. Subject to the condit tenure, each appointment will be for one year; a holder will be eligible for reappointment.

Candidature for Scholarships.—Applications for ap ment to scholarships must be made during the m April in each year, by letter addressed to the Clerk Grocers' Company, Grocers' Hall, London, E.C. Can must be British subjects, and, when competing for appointment, must be under the age of thirty-five. candidate, in his application, must make an exact sta of the research or researches which he proposes to take, and must declare that if appointed he will conf the conditions under which the scholarships are held application must be accompanied by first-class testim both general, as to his personal and scientific charact special, as to his qualifications for the research or rese which he proposes to undertake; and he may, if he p also adduce in support of his application the evidence work which he has in progress, or has already publis the same or in any kindred field of study. Candidat be required to wait upon the Court or upon the Sci Committee appointed by the Court at some time in the of May.

Appointment to Scholarships.—The Court reserve to selves full discretion as to appointing from among t didates who shall apply, or withholding a scholar there is no candidate of sufficient merit, and the Com not to be under any legal responsibility with regard same. Pains will be taken to estimate the relative i ance of the subjects of research which the different dates propose, and the relative degrees of probabili those researches would result in the desired incre knowledge. The general intention will be that, as b candidates whose evidences of character and quali are considered adequate, preference shall be given candidate whose application proposes the more imp research; and that researches shall be considered imp in proportion as they are judged likely to throw ne on the causation or preventability of some important or diseases.

Renewal of Scholarships.—In appointments to s ships, preference will within certain limits be give first year's scholar who desires to continue for a secon or to a second year's scholar who desires to continu third year, the research or researches on which he h engaged, and which he has not yet completed. Th say, a second year's appointment will in general be g to any scholar who during the first year has made ad progress in his work; and a third year's appointme in general be granted to any scholar who during t and second years has done work of distinguished Applications for any such renewals of appointmen (like original applications) be made in the month o

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by letter addressed to the Clerk of the Company. Scholars who may desire to continue longer than for a third year any research or researches on which they have been engaged, and scholars who may desire to be reappointed with a view to some line of research different from that of their original appointment, will not be privileged as against new candidates, but will be at liberty to compete with them on equal terms, under the rules which apply to candidates in general. Any person who, having at any time been a scholar, is a candidate for fresh appointment, may refer (as for testimonial) to whatever work he has done as scholar.

Conditions of Tenure of Scholarships.—The year of scholarship shall begin on the first day of June, and shall end with the last day of the succeeding May. The stipend of each scholar shall be payable to him in instalments, quarterly or monthly, as he may prefer. The scholar shall diligently follow the research or researches which, in his application, he has proposed to undertake. The scholar shall defray all expenses of whatever research he has undertaken. All researches shall be conducted under conditions of place and time satisfactory to the Court. The scholar shall afford all reasonable facilities which the Court may desire, for themselves or for persons on their behalf, to observe his progress in any research in which he is engaged; and he shall, if the Court desire, make written report to them on its progress. At or before the end of each year of scholarship, or, in particular cases, at such later time as the Court may approve, the scholar shall publish the result of his research or researches, either in print or, if desired by the Court, by a lecture or lectures to be delivered at Grocers' Hall, or elsewhere as the Court may appoint. The Court are at liberty to annul at any time any appointment if in their uncontrolled discretion they consider a scholar as neglecting his engagement, or as guilty of any serious misconduct.

Quadrennial Discovery Prize.—The Quadrennial Discovery Prize is intended to reward original investigations which shall have resulted in important additions to exact knowledge in particular (previously defined) sections of sanitary subject-matter. The Court will, once in four years, propose some subject for investigation; and a period of at least three years and a half will on each occasion be allowed for the investigation of the subject that has been proposed. In determining, on each occasion, what particular subject shall be proposed for the prize, careful regard will be had to all the scientific circumstances of the time, both as to the urgency of existing needs for particular kinds of knowledge, and as to the expectations which may reasonably be held that discovery in the needed kinds of knowledge can be made within the allowed period. The subject for the first Discovery Prize will be announced in May, 1883, and the period for investigation will extend to the last day of December, 1886. The Court will announce the award in May, 1877; when also (as at present advised) they will propose a further subject for investigation. The general conditions of candidature and award will be as below stated, but with liability to amendment from time to time; and on each occasion when a subject for the Discovery Prize is announced, special conditions referring to the particular subject may also have to be laid down. All the conditions which at any particular time shall be in force will be obtainable from the Clerk of the Company.

Candidature for Discovery Prize.—The Discovery Prize will be open to universal competition, British and foreign. The period allowed for the competition will begin with the day of announcement of the subject for investigation, and will end with the last day of the fourth following December. Any person who desires to be regarded as a candidate for the prize must deliver, or cause to be delivered, at the Hall of the Company, within the allowed period, a letter in which he declares himself to be a candidate for the prize, and the treatise on which he bases his candidature: such letter and such treatise to be addressed to the Clerk of the Company, who will give a dated receipt for the same. The competition treatise of a candidate may, if the candidate so prefer, be delivered in successive parts, each bearing its proper date. Each treatise in competition for the Discovery Prize must be an original work by the candidate who sends it in. It may be a treatise which he has published at any time within the allowed period, or may be a treatise which he has not previously published. Although candidature is not restricted to any one nationality, all treatises, and all communications with the Company in relation to them, must be in the English language. Translations into English of competition treatises published (within the allowed period) in a foreign language will be received on a like footing with treatises originally in English. All treatises must be in print. Each treatise must bear the name of its author. Any particular candidate may be required to demonstrate practically to the Court or the Scientific Committee any fact or result which he claims to have discovered. Candidature will be held to imply that the candidate undertakes to accept as regards himself the award which the Court shall make.

Award of Prize.—The Discovery Prize being intended to promote the fullest possible elucidation of the given subject, the respective merits of candidates will be rated by that standard; and if the Court be advised that the most meritorious candidate has produced an original solution of the main scientific problem or problems involved in the matter of the competition, the Court will award to him the entire prize. Should the Court be advised that no candidate has solved the main scientific problem or problems, but that valuable progress towards the object has been made by one or more of the candidates, or that collateral discovery valuable to sanitary science has been incidentally made by some candidate in his prosecution of the main research, the Court may apply such portion of the prize as they may see fit in recognition of merits thus brought to their notice. In estimating the originality of treatises, the Court will have regard not only to the state of knowledge which existed at the time when the subject for investigation was announced, but also to such later advances of knowledge as may have been made up to the time when the treatises were sent in. Where two or more candidates equally claim to have made discovery in the subject-matter of the prize, further information may be required of them in support of their respective claims, and the Court will judge between the claims as they shall think right. Each candidate will have been at liberty to notify to the Court at his own time any discovery which he believes himself to have made. Neither the prize, nor any portion of it, will be awarded to any person who has not formally declared himself a candidate for the prize. The awarding or withholding of the Discovery Prize is to be entirely in the discretion of the Court, and the Company is not to be under any legal responsibility with regard to the same.

General.—Except as to Scholarships and Discovery Prizes already awarded or advertised, this scheme shall have effect only during the pleasure of the Court, and the Court reserve to themselves the right of altering the scheme in any way they may think fit.

FOUNDATION OF MEDICAL SCHOLARSHIPS.

In the Chancery Division of the High Court of Judicature, Ireland, on March 21, the case of Perrin *v.* Stewart was before the Master of the Rolls.

This was a friendly suit to establish the will of the late Dr. H. H. Stewart, of Eccles-street, Dublin. The personalty was sworn under £27,000, and there was £500 a year arising out of freehold. Various bequests were given, and one or two annuities charged on the reality; but the bulk of the funds was left to charity, together with a residue of the income from the freehold, after discharging the annuities. The testator in his will made kindly mention of the Stewart Institution for Imbecile Children, at Palmerstown, County Dublin, to which he had given £5000 in his lifetime. The Institution was to be taken into consideration in distributing the amount he left for charity. This was now represented by the fund in court of £18,553, and the residue of the income from freehold. A letter, dated after the execution of the will, and in the handwriting of the deceased, stated his wishes more definitely—that provision should be made, as far as possible, for the promotion of education. The matter was now before the Court for directions as to the main lines on which the scheme should be worked out. His Honour said he would direct that they should forego a mortgage held by the deceased on the Stewart Institution for £1950, together with the accruing interest, and he would give out of the capital in hands a further sum—not very large—to be afterwards decided, to that Institution, of which Dr. Stewart was the founder.

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The residue should be applied to the foundation of medical scholarships—to be called "Dr. Stewart's Medical Scholarships"—in the University of Dublin and the Royal University of Ireland. Thus, he thought, the intentions of the generous donor might best be carried out. The details of the scheme should be carefully settled by the senior counsel, and brought into court on June 1.

FROM ABROAD.

Danger of the Parasitic Theories.

Amidst the almost universal incense of admiration that awaits in France every fresh announcement of the results of M. Pasteur's researches, it is as well to note that some observers are not so easily satisfied. In the *Progrès Médical* for March 10 we find the following criticism from the pen of M. Jousset de Bellesme:—

"We were not among the last to raise our voice against the application of the theory of microbes to medicine, and to signalise the serious inconveniences which might be induced by the introduction of these doctrines into pathology. When we showed in this journal(a) that these theories, almost entirely hypothetical, engaged medicine in an unfortunate direction by attributing to morbid phenomena a simplicity that they are far from possessing in reality, and by leading to treatment both irrational and dangerous for the patient, we were taxed with exaggeration and foregone conclusions. And yet we were but the echo of a large number of clinicians, and so true is this the case that at the present time a reaction against these tendencies has set-in in the school of French pathologists. Practitioners who pursue therapeutics in an impartial manner, and so to say experimentally, had evidently received M. Pasteur's theories in the hope of deriving from them an excellent means of treating disease. In no other way can be explained the success of the parasitic doctrine, and the somewhat premature prepossession of which it became the object, chiefly on the part of the young medical generation. It is such a great point, in order to combat a disease, that we should be aware of its cause, and M. Pasteur was so affirmative, that a good number of practitioners came to the conclusion that from the moment that infectious diseases were known to be caused by invasion of microbes, it sufficed to kill the microbe in order to cure the disease. All those who have reasoned in this fashion have only, together with M. Pasteur, forgotten one thing, which yet deserves well that it should be taken into consideration—the patient. Yes, unfortunately there is a patient in this question of microbes applied to pathology. It is not so simple a matter as in the laboratory, where the microbe is regenerated and strengthened in its chicken-broth. We have only to pour on it the blackest of poisons or the most energetic of antiseptics, and all disappears—all except the germs of these singular bodies, if we are to believe M. Pasteur. But when we have a patient in our hands we scarcely can treat him, however stuffed with microbes he may be supposed to be, as we would the chicken-broth, and deluge him with floods of carbolic or salicylic acid. Still, there have been found practitioners who have dared to do this; and Prof. Jaccoud, whose high authority none will contest, has taught us the results of these audacious attempts in the treatment of typhoid fever. It has come to pass just as might have been anticipated; the employment of antiseptics in large doses has introduced into the statistics of the mortality of typhoid fever an element which formerly only figured there very exceptionally—sudden death. It is but too certain that from the moment the idea is started that typhoid fever depends upon a microbe developed in the economy, a resort to antiseptics necessarily takes place. Those are employed which are best tolerated by the economy—salicylic acid, sulphate of quinine, and even carbolic acid. As the administration of these in small doses leads to no result, logic requires that the doses shall be increased and pushed on until this mischievous microbe is annihilated. Unfortunately, while on this road, as already stated, the patient is forgotten; but he, in his turn, does not forget, when the dose is sufficient, to die suddenly. Sudden death, then, is one of the results which may spring up in the art of healing from the discoveries of M. Pasteur; and on reflection, we cannot but regard it as highly extraordinary that doctrines which may lead to such results have been able to attain so great a vogue in medical practice. For, even supposing that the theories of M. Pasteur are exact, and that typhoid fever is really the fruits of an invasion of microbes, there is evidently no advantage to therapeutics to be derived from the knowledge of this fact; for this very simple reason—that the organism would not tolerate sufficiently strong doses of antiseptics to kill in the blood or amidst the tissues the lower parasitic organisms, the resistance of which to these agents is greater than that of the more highly differentiated cells of our economy. And as to believing that an antiseptic will be found which destroys bacteria without attacking the histological elements in man, it is to fall into a great illusion and to misunderstand the laws of general physiology. The more an organism is differentiated, the less does it resist external agents capable of injuring it. Consequently, we may affirm that, of all organic cells, it is well-nigh those of bacteria which are most resistant to the action of poisons and antiseptic substances. However this may be, certain it is that typhoid patients to whom antiseptics are administered in large doses die suddenly, and quinine itself makes no exception to this rule. And thus Prof. Jaccoud,(b) in his lecture on the treatment of typhoid, protests forcibly against these therapeutical temerities."

(a) *Medical Times and Gazette*, April 29, 1882, page 451.

(b) *Ibid.*, February 24, 1883, page 228.

REVIEWS AND NOTICES OF BOOKS.

A Dictionary of Medicine, including General Pathology, General Therapeutics, Hygiene, and the Diseases peculiar to Women and Children. By various Writers. Edited by Richard Quain, M.D., F.R.S. London: Longmans, Green, and Co. 1882. 8vo, pp. 1816.

[Concluding Notice.]

In our concluding notice of this important work we have to refer to the articles devoted in it to diseases of the nervous system, and those on more or less special or detached points. So rapid has been the advance during the last few years in our knowledge of the physiology and pathology of the nervous system, that here, if anywhere, we might have expected the dictionary to be somewhat out of date, and in a work of so considerable extent it would have been excusable. But just in proportion to the difficulty of bringing the articles up to date was the importance of accomplishing this, and we can confidently say that it has been accomplished. The articles are very numerous, and are uniformly of the highest excellence. After Dr. Bastian's introductory remarks on Diseases of the Brain in general, we come upon Mr. Hutchinson's articles on Abscess, Concussion, and Compression of that Organ. These, as might be expected, show throughout the author's keen observation and admirable powers of exposition. We would commend to those concerned in railway cases the grim humour of the closing sentences of the article on Concussion:—"As a rule, however, even after very severe concussions, no such ill results are left, but the patient regains after a time perfect cerebral health. This remark must, however, not be held to apply to concussion received in railway accidents; for in those cases there is a prospect of pecuniary compensation, and the sequelæ are often severe, prolonged, and very peculiar." Of Dr. Gowers' articles on Diseases of the Cerebral Vessels, on Cerebral Hæmorrhage and Cerebral Softening, it would be difficult to speak in terms of too high praise; and the same statement may be made regarding his articles on Diseases of the Cranial Nerves, on Labio-glosso-laryngeal Paralysis, and numerous others throughout the work. Dr. E. Long Fox writes two excellent papers on Tumours and Malformations of the Brain, while Dr. Ferrier in his articles on Lesions of the Convolutions and Cortex Cerebri, of the Central Ganglia, the Pons, Medulla Oblongata, and Cerebellum gives us the *crême de la crême* of his valuable work. Dr. Bastian, in a series of able and exhaustive contributions, discusses the Diseases of the Spinal Cord and Meninges, and he writes also on Convulsions, Hydrocephalus, and many other subjects. The veteran neurologist, Dr. Brown-Séquard, writes on Epilepsy, Dr. Buzzard on Hysteria and Hystero-epilepsy, Hypochondria-

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sis, Neuralgia, etc. Dr. Stephen Mackenzie discusses the various forms of Vertigo, including an account of Menière's Disease. Dr. Lockhart Clarke's brief but able articles on Locomotor Ataxy and Infantile Paralysis have probably been left untouched as they came from his pen. Perhaps it would have been better had they been supplemented in some of those points that have recently been observed in the clinical history more especially of the first-mentioned malady. To every medical man we can most cordially recommend the perusal of Dr. Broadbent's article on Chorea. It is a model of full clinical description, followed by detailed and well-grounded treatment.

The articles on Medical Jurisprudence and Toxicology are chiefly by Dr. Ferrier, Dr. Poore, and Dr. Stevenson; those on Insanity, as we have already said, by Drs. Sibbald and Blandford, while Dr. Langdon Down writes on Idiocy, Cretinism, etc., Drs. Saundby and Batty Tuke on the Histology of Insanity. We have already in our first notice referred to some of the special subjects, and have now space simply to refer to a few of those unnoticed. Among the most important of these we may include Contagion, by Mr. Simon; Chyluria, by Dr. Lewis; Croup and Diphtheria, by the late Sir John Rose Cormack; Cancer and Tumours, by Mr. Godlee; Sunstroke and many other articles, by Sir Joseph Fayrer; Diseases of the Testes, by Mr. J. McCarthy; Ulcers and Diseases of the Veins, by Mr. Cantlie; Thrombosis and Embolism, by Dr. Cayley; also several excellent articles by Dr. Sangster on Diseases of the Skin. The articles on General Therapeutics by Dr. Lauder Brunton and Dr. Farquharson need no commendation, and we trust their general nature will not cause them to be overlooked. The article by Dr. Hermann Weber on Sea Air, Sea Baths, and Sea Voyages, along with those on Climate by the late Dr. Sparks and by Dr. Henry Bennet, give information especially valuable to those called on to give advice in these matters. In his article on Personal Health, Dr. Southey gives much sound advice, and tells many home truths in a pleasant style. We need not say that Public Health is treated by Dr. Parkes in a manner that leaves nothing to be desired. In the brief articles by Sir William Jenner on Deformities of the Chest, and by Sir James Paget on Pathology, we have small but characteristic samples of their work, that of the first showing his keen clinical observation, that of the second his philosophical and logical habit of mind. We should have been glad to have found similar samples of the work of some other leaders in medicine whose names are absent.

Few articles in the work probably will be read with more interest than those by Florence Nightingale on the Training of Nurses and the Nursing of the Sick. If few nurses can be expected to reach the high ideal pictured in these articles, every nurse and every medical man will be the better of having read and digested these strong good words full of sound common sense, loyal to the physician, gentle and wise for the patient.

Should it be thought that in our notices of "Quain's Dictionary of Medicine" we have bestowed indiscriminate praise upon it, we can confidently refer to the work itself for our justification. It is distinctly what German writers call an "epoch-making" work, and we are pleased to hear that already it has proved its position.

Brain. January, 1883.

THE first and fourth articles in the current issue of *Brain*, though dealing with different subjects, are alike remarkable in one very important respect—that in each the author, albeit with many apologies, and with a caution amounting to timidity, does yet at length venture to leave the firm ground of fact, and to strike out a little way upon the broad stream of speculation. The ease with which speculation may be, and often has been, rendered absurd by incompetent treatment, and the necessarily intimate alliance of medicine with minute and continual observation, have rendered the medical profession, especially in this practical country, intensely distrustful of its use; and the fact that almost every important advance in every science has been effected by the aid of some daring hypothesis, is in danger of being forgotten. Honour is therefore due to writers who venture to use a discredited method. The first of these articles, on the Etiology of some Diseases of the Spinal Cord, is by Dr. Donkin, and, although in parts obscurely expressed, and sometimes wanting in clearness of thought, it is both suggestive and important. The main points made by Dr. Donkin are, that the higher portions of the nervous system are developed late, many of them after birth, many of them comparatively late in life. These tardily completed structures are therefore built up, not by the inherited developmental forces alone, but by these forces acting under the modifying influence of the circumstances in which the individual lives. Hence, where these circumstances are unfavourable, the structures will be likely to be defective. Further, the diseases of which he treats—locomotor ataxy and spastic paraplegia—are characterised by structural changes which occupy physiological regions, or follow the distribution, not of the vascular supply nor of any other anatomical element, but of some special function. From this he argues a functional origin; by which he means, if we understand him aright, that an excessive amount or unusual direction of nerve force or discharge, passing through a region of grey matter, may so modify its structure as to render it incapable of carrying on its normal work. The other article alluded to is a careful and well-reasoned attempt by Dr. Allen Sturge to connect the occurrences of angina pectoris with those of epilepsy, and especially with those epileptic attacks which are set going by peripheral disturbances; and to suggest a probable mode of the action of counter-irritation. Dr. Walton, of Boston, U.S.A., contributes a paper on Deafness in Hysterical Hemianæsthesia, which is conclusive proof, if proof were now needed, of the reality of the loss of sensation in these cases. Dr. Ross continues his paper on the Spasmodic Paralysis of Infancy; Dr. Angel Money gives some statistics of Chorea, carefully arranged; and Professor Ferrier has an article on Hemiplegic Muscular Atrophy of Peripheral Origin. The clinical cases are, as usual, of considerable interest; and are followed by the usual abstract of work done, which is thorough as far as it goes, but is limited in scope, all the notices save two being of German writing. Doubtless the German school is very important, but we occasionally hear of good work being done in France and Italy, and even in America.

The Alienist and Neurologist for January, 1883,

CONTAINS a brief but adequate *resumé* of our knowledge concerning Myxœdema, translated from the Italian of Dr. Seppilli by Dr. Workman, of Toronto. This is followed by an interesting record of the cure of a case of the opium habit, presented in the letters of the patient. The treatment was carried out by the patient himself at a distance of several hundred miles from his physician; and with a courageous and manly persistence which are nowhere common, but which are very rare indeed among the devotees of opium and alcohol. Dr. Albert Blodgett has a dolorous article in which he shows that nearly every circumstance of our advancing civilisation tends ever more and more to deteriorate the race of man into a race of neurotics, lunatics, and drunkards. These cheering reasonings are pursued to their logical result,—the necessity of providing more asylums, and enacting more rigorous laws in order to fill them. To this desirable arrangement there is one objection which appears to us fatal. If "every potential homicide and suicide" is to be locked up, who is to be left outside to turn the key? Would not Dr. Blodgett find it rather lonely? Or does he mean to come inside with the rest of us, and send for the inhabitant of some other planet to lock us in? Dr. Pliny Earle contributes another of his dispiriting articles on the curability of insanity, which are all the less welcome since we can find no flaw in his reasonings, and are compelled *nolens volens* to accept his conclusions. He shows unanswerably that the percentage of cures of insanity has been factitiously raised by the inclusion of many cases which have returned again and again to asylums, and on each fresh discharge have been recorded as cured. When every allowance and deduction has been made, however, he still admits an average of more than 20 per cent., which is, after all, not so very discouraging. It should here be stated that the statistical tables of English asylums will in future distinguish between the number of recovered *cases* and the number of recovered *persons*, and also, as far as possible, between recoveries from a first attack and from a subsequent attack. The records of cases by Dr. Mickle and Dr. Wise are of interest, as are the articles by Dr. Hughes on Cephalic and Spinal Electrisations, and of Dr. Danillo (St. Petersburg) on Female Diseases among the Insane.

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GENERAL CORRESPONDENCE.

THE NEW MEDICAL ACT, 1883.

[To the Editor of the Medical Times and Gazette.]

SIR,—The proposed Medical Act of 1883 is now before the profession, and deserves very careful study, as it introduces for the first time a new principle—viz., that medical practitioners shall be compelled to pay a fee (the amount not being fixed in the Act) for the right to practise, in the shape of *"an annual registration fee for keeping the name of each medical practitioner on the Register."* Such a tax might be an embarrassment to a young or needy practitioner, but it might not be objected to by the bulk of the profession if the Act gave a *quid pro quo*. But does the Act do so? In the first place it is proposed that entry to the profession in future shall be by one of three portals—an English, a Scotch, or an Irish Board. This is vastly different to a one-portal system, and there are no real safeguards that these three Boards will not bid against each other for popularity by a reduced stringency in examination. What the profession needed was a one-portal system, and not this three-headed monster. The advantage gained by the representation of the profession through the election of four members for the United Kingdom on the Medical Council is of little value, considering the fact that there are eighteen seats on that Board.

If a man ceases to practise, his name is to be struck off the Register; so that when the transfer of names is made on the appointed day, many a veteran practitioner, now retired, will find his name expunged from the roll of duly qualified practitioners unless he pays the annual tax. A man retiring from ill-health for a year or two will be in the same position. The convenience of students now entered, and the rights of those now in practice, are dealt with in a very high-handed way by this new Bill, and, despite the recommendation of the *Lancet* that all enlightened practitioners should support the Bill, it is to be hoped that independent members of the profession will endeavour to obtain such amendments in the Bill as will secure the rights of those now in practice, both to continue their practice and to hold such appointments as they may now hold. I am, &c.,

March 26. M. C.

IS IT A CANCER?—Prof. Goodell, in a lecture on cancer of the uterus (*Phil. Med. Reporter*, March 3), said:—"Now, suppose a woman comes to you, and you diagnose cancer of the uterus, are you going to say, 'Madam, I am very sorry to tell you that you have a cancer'? No; don't you do that. I should not tell even if she asked me to tell her the truth; but in the majority of cases they do not want to know, and will say to you, 'Now, doctor, if you find a cancer, don't tell me.' No matter how good a woman is, or how fully prepared for the future she may be, the knowledge that she has a cancer is a terrible blow, and she at once gives up, begins to go downhill rapidly, and soon dies. I never, except in very rare instances, tell the patient that she has a cancer, but I always tell some member of the family, or a friend, exactly what is the matter. Suppose the patient asks straight up and down, 'Is it a cancer?' You do not want to tell a lie, and you do not want to say that it is a cancer. I get out of it in this way. I say, 'This is not that kind of cancer which you understand. This is not a hard cancer, like that which comes in the breasts, and which is hopeless. You have a bad ulceration of the womb. It is not hopeless; there are cases which are cured.' About three years ago I learned a lesson on this point. I was asked by a physician to see a near relative of his. His suspicion was that it was a cancer. I said to him, 'Suppose that this is the case, shall I tell the lady?' He replied, 'Yes, she ought to know; tell her, by all means.' After I had examined, and found a carcinoma, I said, 'I am very sorry to say that this is malignant,' and then went on and told her in so many words what the trouble was. She never rallied from that. She made up her mind that her days were numbered, and that there was no use in doing anything, and in a short time she died. I say, then, Never tell a woman that she has a cancer." (We do not publish this advice as worthy of being followed, but rather the contrary.)

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 7.

Dr. H. GERVIS, President, in the Chair.

CAST OF FEMALE BLADDER.

DR. AVELING exhibited this specimen. The patient suffered from retention of urine for four days after delivery. This was relieved by the catheter, and the bladder was subsequently washed out. Three weeks after delivery the cast exhibited, which was formed by exfoliation of the vesical mucous membrane, was passed. Fifteen months afterwards the patient still suffered from incontinence of urine, but, except for this and a recto-vaginal fistula, was well.

Mr. HOPKINS WALTERS had seen a similar case, due to retention, which had lasted four days, from retroversion of the gravid uterus. The cast was passed the sixth day after relief of the retention. The patient recovered without further vesical trouble.

FIBROMA OF OVARY.

Dr. JOHN WILLIAMS exhibited a solid ovarian tumour removed by him. It was pear-shaped, about three inches in diameter at its thickest part, and consisted of white fibrous tissue, with areas of mucoid degeneration, and in the centre extensive calcareous change.

The PRESIDENT remarked on the rarity of such tumours.

TUMOURS REMOVED BY ABDOMINAL SECTION.

Dr. BANTOCK showed a dermoid ovarian cyst, a specimen of double hydrosalpinx, and five uterine fibroids, which he had removed by abdominal section. In three of the fibroid cases the tumours, weighing upwards of seven, four, and two pounds respectively, were removed on account of pain, there not being much hæmorrhage. In one, on account of hæmorrhage, he removed the ovaries. This was followed by metrostaxis lasting four weeks, and, at first, diminution in the size of the tumour. Three months after operation the uterus had regained its former size: the hæmorrhage recurred, and gradually increased, and therefore he removed the tumour, which weighed three pounds, and presented cystiform degeneration. In the remaining case the ovaries had been removed about a year previously by another surgeon, but this had been followed by increase in the hæmorrhage and no diminution in the size of the tumour. He (Dr. Bantock) therefore removed it. In cases such as these he thought oöphorectomy could not come into competition with hysterectomy; for cystiform degeneration of uterine fibroids was as surely fatal as ovarian cystoma. He could not concur in the opinion that hysterectomy should only be done when oöphorectomy had been tried and had failed. He did not think much was gained by ligature of the uterine arteries: the collateral circulation was too efficient. He had now performed twenty-two hysterectomies, of which twenty had recovered, in none of which had "full antiseptic precautions" been used.

Mr. KNOWSLEY THORNTON thought Dr. Bantock's cases illustrated the value of oöphorectomy. Removal of the uterine appendages had in each case been only imperfectly accomplished, and this accounted for the persistence of hæmorrhage. Moreover the tumours were undergoing atrophy, the cyst formation being part of the degenerative process. He had seen these patients when hysterectomy was performed, and their condition of health seemed to him so good, that without further information he did not understand the reason for the operations. He thought that the condition of patients was not so good after hysterectomy as after oöphorectomy. After the former there was a possibility of a permanent fistula or of a ventral hernia.

Dr. SAVAGE said the condition of Dr. Bantock's patients was such as to justify the operation. The mortality was one in eleven—not greater than that of ovariotomy. Battey's operation he thought detestable.

Mr. DORAN thought long series of after-histories were needed before the profession could judge between the two operations.

Dr. ROUTH thought oöphorectomy (except as a *pis aller*) a shameful and often useless operation, unsexing the patient, and failing to cure. He thought evidence was required in

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support of Mr. Thornton's assertion that the operations were imperfectly done. The atrophy of the tumours might be due as much to the age of the patients as to the oöphorectomy. The ill-health of the patients was such as to justify the operations in Dr. Bantock's cases.

Dr. Wynn Williams had sent two of Dr. Bantock's patients to him, and thought the operation was thoroughly justified in each.

Dr. Bantock said the amount of hæmorrhage was such as to make the patients hopeless invalids, and he thought this justified the operation. Examination of the specimen showed that the ovaries had been thoroughly removed.

Uterine Polypi.

Dr. Wynn Williams exhibited two polypi—one fibroid, the other of mucous intermixed with fibrous tissue.

Dr. Routh mentioned that the tumour in the second case had at one time been taken for an inverted uterus.

It was referred to a committee for examination and report.

The President then delivered an address, for which a vote of thanks was moved by Dr. R. Barnes, and seconded by Dr. Graily Hewitt. (This address is given in full in another portion of the present issue.)

Turning in Cases of Contracted Brim.

A short paper on this subject by Dr. Burchell was read. The author described a class of cases in which after several easy deliveries the birth of later children became difficult. Out of 8000 deliveries he had met with forty-five such cases. He attributed the progressive difficulty of labour to deposit of bone on the sacral promontory. In these cases attempts at forceps-delivery often failed, and then perforation was resorted to. He believed they were better treated by turning. Out of forty-five cases so delivered by him he had saved the children in thirty-eight. He thought this practice was new when he first adopted it, and that still its advantages were insufficiently recognised.

Dr. Robert Barnes had largely practised turning in cases of minor degrees of contraction of the pelvic brim, and formerly placed it between the forceps and craniotomy. He now thought there were few cases in which Tarnier's forceps was not superior.

Dr. Champneys said increasing difficulty of successive labours was accounted for by increasing size of the children and diminishing power in the mother. Progressive diminution in the size of the pelvis had never been verified by measurement. Either forceps or turning, if applied to all children, would show a large percentage of success, although not really beneficial.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 13.

John Marshall, F.R.S., President, in the Chair.

Malformation of the Shoulder-Girdle.

A paper by Mr. Alfred Willett and Mr. W. J. Walsham was read, entitled "A Second Case of Malformation of the Left Shoulder-Girdle, with Remarks on the Probable Nature of the Deformity," of which the following is an abstract:—In vol. lxiv. of the *Transactions* is a paper by the authors on "The Dissection of a Specimen of Congenital Malformation of the Bony Thorax, Spinal Column, and Left Scapular Arch, removed from the body of a woman thirty-two years old, with Remarks on the Probable Nature of the Deformities." The malformation of the shoulder-girdle consisted of a triangular bridge of bone stretching between the spinal column and the scapula. The present paper is founded on a similar malformation in a child eight years old, from whom the bridge-like piece of bone was removed by Mr. Willett, the child making a good recovery. The portion of bone removed was of an irregular triangular form, with a truncated apex. It had an osseous attachment to the spines of the seventh cervical and first dorsal vertebræ, and was connected by a layer of cartilage to the base of the scapula. It measures one inch and three-eighths in length, and one inch and a quarter at its widest part. It was covered by periosteum, and muscular fibres were inserted into it. *Remarks.*—The malformation is evidently similar to that in the former specimen, which, for comparison, is again exhibited. It differs, however, in that the union of the bridge of bone to the scapula in the first case was osseous, in the present case cartilaginous—a difference which the authors believe throws additional light on the nature of the deformity. They regard it, in both specimens, as an over-development of the epiphysis which normally exists along the posterior border of the scapula, and consequently as the homologue of the supra-scapular bone of the lower vertebrata. The points that they think favour such a view are—1. The apparent continuity in the first specimen of the bridge of bone with the supra-scapular epiphysis, of which it appears to be an outgrowth. 2. Its cartilaginous attachment in the second specimen to the scapula (central piece). 3. The absence of analogy between these cases and exostoses, and the impossibility of explaining how, if they were exostoses from a vertebra, they could have become secondarily attached to the scapula. 4. The insertion of certain muscles into them, showing that the abnormality occurred at a very early period of development. 5. The abnormal condition, in the first specimen, of the scapula itself, and the presence of concomitant malformations of evident congenital origin. The intimate osseous union of the bridge of bone to the spine might suggest its being a so-called spinal exostosis. It differs from such, however, in that it is not covered with cartilage except where united to the scapula, in its flattened condition, in its growth in only one direction, and in its broad base of attachment to the scapula. The union to both the spine and scapula, moreover, can be better explained on the assumption of its being a supra-scapula. That an overgrowth of the epiphysis may occur is shown by specimens in the Museums of the Royal College of Surgeons and St. Bartholomew's Hospital. The epiphysis which normally exists in man at the base of the scapula presents a much higher grade of development in some of the lower animals. In some it remains throughout life as a distinct bone—the supra-scapula—which in some even (the thornback skate) is united to the spine. As the supra-scapular epiphysis in man is admitted by all to be the homologue of the supra-scapular bone of animals, it follows that if the bridge of bone is an overgrowth of the epiphysis it must also be the homologue of the supra-scapular bone. We have seen that this epiphysis in man may actually present an abnormal backward development (specimens in the Museums of the Royal College of Surgeons and St. Bartholomew's Hospital) comparable to that, say, in the rabbit. It is advancing, therefore, but one step further to compare the bridge of bone in one specimen to the distinct supra-scapula of the frog, and but one step further still to conceive it united to the spine, as in the skate. On this theory we regard the abnormality not as a mere overgrowth of the scapula, but as having existed in its present form, though of course unossified, from the time of the differentiation of the cartilaginous shoulder-girdle from the mesoblast, and therefore as having had an attachment to the spine from the earliest period of its development. Considering the similarity of the primitive cartilaginous shoulder-girdle in all early vertebrates, it would not seem that such a grave departure from normal development was required to produce the abnormality. Analogous processes are not wanting in the human body, as, for instance, the overgrowth of the transverse processes of the seventh cervical vertebra into a cervical rib. If by a forward extension the transverse process, the homologue of a rib, may, as in birds, be developed into an actual rib, why may not the scapular epiphysis, the homologue of the supra-scapula, be developed by a similar but backward extension into an actual supra-scapular epiphysis, as in reptiles and fish? Given a cartilaginous union between the scapula and the spine, there is no difficulty in explaining how the ossific centres in the spinous process and supra-scapula would meet and become fused, any more than in the analogous process of the union of the epiphysis and diaphysis in an ordinary long bone. The probabilities of the malformation having existed from a very early period of development are strengthened by the following facts:—1st. The attachment of the muscles into the bridge of bone. 2nd. The rudimentary condition of the scapula itself in the first specimen. 3rd. The concomitant malformations of the spine, ribs, and clavicle, which were shown in the former paper to have occurred at a very early period of the development of the embryo.

The President, in inviting discussion, remarked on the

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fact that two instances of such a curious condition should have come under the observation of the same surgeons within so short a time. The question arose, whether this abnormal bone was of irregular formation and accidental, or whether it was a reversion to a lower type, or whether it was an ossification of some structure normally present, such as the rhomboid muscle. Professor Flower, he believed, did not quite agree with the authors' conclusions, but he had not himself supplied any other more probable hypothesis.

Mr. Hows thought that all our most modern investigators inclined to the belief that mammals had been developed directly from amphibians. In support of this view he mentioned the resemblance of the shoulder-girdle of the echinida and that of the amphibia, and the persistence of the cervical ribs. Recent observations also had confirmed the fact that the limb-girdle is developed from the limb itself, and not from the spine; thus any connexion of the former to the spine must be secondary and accidental. Other affinities between mammals and amphibians were also mentioned, which lend support to the author's views that the bone corresponded to the supra-scapula. The junction with the spine was a difficulty which he was not prepared to explain. Mammals were highly specialised animals, and abnormalities in them were reversions to a lower type more often than new departures. In some of the toads, the ossification was similarly complete. In the skates, fusion also took place, obviously for the purpose of giving more complete attachments to certain muscles which they required for their special movements.

Professor Thane said: The interest and significance of this peculiar condition of the shoulder-girdle is much increased by two cases so much alike having been observed, and by a similar condition having been met with in the fœtal cat. The most probable explanation is that put forward by the authors, as the possibility of the osseous arch having been developed in one of the muscles passing from the vertebral column to the scapula is excluded by the results of the careful dissection made of the first specimen. The view that the osseous growth is a supra-scapular element is supported by its form and general appearance, by its position, and its mode of connexion with the scapula, and by the circumstances that a vestige of the element is normally present in the form of an epiphysis on the vertebral border of the scapula, and that an unusual development of parts usually represented by vestigial structures is not uncommon, *e.g.*, in the case of cervical ribs. The fact that ossification has taken place at a period of life earlier than that at which bone is deposited in the supra-scapular epiphysis is also not opposed to this hypothesis, the great development of the part being taken into consideration. The connexion with the spine is, however, not to be explained so readily, but on the supposition that the bony plate was an outgrowth from the spine, the union with the scapula offers quite as great, and in the second case, where the union is cartilaginous, a still greater difficulty. If the part in question be regarded as a supra-scapular element, then the case becomes one of atavism, but the connexion with the vertebral column cannot be explained in the same way, since in the rays, where alone such a condition exists, the union is clearly a physiological adaptation giving support to the enormously expanded pectoral limb; and moreover this family is widely removed from, and does not appear to be in the direct line of descent of, the mammalia.

Professor Cubnow thought that in the connexion of this bone with the spine lay the chief difficulty in accepting the author's view of its nature and homology.

The Hon. Secretary read a letter from Mr. Marshall (Professor at Owens College, Manchester), expressing dissent from the views of the authors, chiefly on the ground that the deformity was one-sided.

The President was also struck with the one-sided nature of the deformity, and in both cases it was on the left side. He agreed that the bone was not at all like an ossified tendon or muscle; its intimate structure was almost sufficient proof of this. He thought its union with the spine might be explained by its proximity in the first instance setting up some inflammatory process, by means of which its adhesion had finally been brought about. This view seemed to him more probable than that it was a reversion to some lower type.

Mr. Willett replied. He acknowledged the large share which his coadjutor, Mr. Walsham, had contributed to the paper. He thought some of the views expressed tended to strengthen their theory of reversion, and also the fact that ossification must proceed from without inwards, their view that it was scapular rather than spinal in origin.

Mr. Walsham also replied. He stated that Professor Parker, on first seeing the specimen, exclaimed that it was what he had long been looking for—"the man-skate."

The child was shown. She could raise her arm, and move it freely in all directions.

The Society then adjourned.

THE PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, March 20.

J. W. Hulke, F.R.S., President, in the Chair.

Syphilitic Inflammation of the Liver.

Dr. Coupland read the report of the Morbid Growths Committee on Dr. Sharkey's specimen of syphilitic inflammation of the capsule of the liver. They had only been able to examine the sections, as the liver had not been preserved. They quite agreed with Dr. Sharkey that the small nodules were unmistakable gummata. As regarded the nature of the hard fibrous tissue spreading into the substance of the liver from the surface, they had not enough evidence before them to enable them to decide. The report was signed by Dr. J. F. Payne and himself.

Epithelioma of Stomach with Secondary Nodules in the Skin.

Dr. Finlay read the notes of this case, and showed some microscopical specimens of the tumours, and drawings of the patient. The patient was a man who, six weeks before he came under observation, had first complained of pain in the epigastrium, and had noticed a swelling near the umbilicus. This was followed by the appearance of other cutaneous tumours. There had been occasional hæmorrhage from the bowels. When he came into the Middlesex Hospital he was emaciated and cachectic. No tumour could be felt in the abdomen. One of the tumours in the skin was removed during life, and was found to have an alveolar structure, with columnar epithelium. The patient died in five weeks; and at the autopsy a tumour was found at the cardiac end of the stomach near the œsophagus, and there were secondary nodules in the lung, liver, suprarenal capsule, and skin. The primary growth was that in the stomach, and it was found to be of an epithelial type.

The President called attention to the great number of secondary deposits, and said that he had never seen so many nodules found in a tissue so remote from that in which the primary development occurred.

Dr. Coupland referred to a case where a nodule found at the umbilicus proved to be secondary to a cancer of the sigmoid flexure; the examination in this case, during life, of one of the nodules had thrown much light upon its nature by pointing to the alimentary canal as the primary seat of disease.

Lymphatic Cysts.

Mr. Barker showed three cysts which he believed to be of lymphatic origin. They were taken from the body of a boy who had come into University College Hospital with an enlargement of the right thigh, diagnosed to be a myxoid lipoma, and for the removal of which amputation at the hip-joint was performed. The boy unfortunately died a few hours after the operation, and no pathological changes in the viscera were found beyond profound anæmia. Lying on the brim of the true pelvis on the right side there was found a small thin-walled cyst; it was touching the bladder, and about the size of a small walnut; the surface was irregular; it was thin in places, not tense, soft. Another (larger) one was found at the lower end of the right kidney; the sac was bounded in front by the peritoneum; it was loculated and had a smooth serous lining; the contents (about an ounce) were unfortunately lost during the performance of the autopsy. Another cyst was found in the scrotum near the root of the penis; it was loculated, and had the same smooth endothelial lining. All three cysts were in a line on the right side of the body: the two upper ones could not be injected from below or from the bladder; the third had not been opened. He believed they were all dilated lymphatic spaces, though he was not able to prove this. The contents had not been examined.

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DILATATION OF URETERS FROM PROLAPSE OF BLADDER.

Mr. BARKER also showed a specimen of prolapse of the uterus, vagina, and bladder, which was so extreme that when a catheter was passed during life it was found that the bladder did not lie in the pelvis at all. As a result of this there had been obstruction to the flow of urine into the bladder, and consequently dilatation of the ureters and the pelves of both kidneys; this had led to some interstitial change in the kidneys, as evidenced by the puckered state of the surface of the kidneys. He then discussed the mode of production of interstitial nephritis by an obstruction to the flow of urine.

TUMOUR OF SKULL AND BLADDER.

Mr. CLUTTON showed a skull-cap, a portion of dura mater with some new growth attached, a bladder, and some microscopical specimens of the new growth found in these various situations, taken from the body of a man aged sixty-two. When he first saw the patient there was a fluctuating tumour on the top of his head. As this did not in any way subside under the use of antisyphilitic remedies, he had been forced to open it, and then found that the bone was perforated. This was followed by a very profuse discharge from the ulcer whose base was formed by the dura mater. Pieces of bone continued to crumble away; but there were no brain symptoms, though he suffered much from pain in the head. Death took place nine months after he came under observation, and a year from the commencement of the symptoms. At no time were any symptoms referable to the bladder noticed. At the post-mortem examination a tumour was found in the bladder near the orifice of the left ureter. The ulcer in the scalp measured five inches by four, and corresponded with a hole in the skull, the bone all around this being invaded by the spreading new growth. The dura mater was likewise extensively invaded by the new growth, and a hernia cerebri was commencing to be formed. On microscopical examination he had found the growth in the skull to be an alveolar sarcoma, consisting mostly of bands of large cells, with here and there small spindle cells; there was not much interstitial tissue. The growth in the bladder presented similar appearances. From the absence of any vesical symptoms during life he should infer that the growth in the bladder was secondary to that in the skull.

Mr. BUTLIN had been much surprised to hear this called a case of alveolar cancer, as it had seemed to him to be a most typical instance of a squamous-cell carcinoma, and both in the sections under the microscope and in the drawings there were most typical nests of epithelial cells. Then he could not agree with Mr. Clutton that the bladder-tumour was secondary; it was a small circumscribed growth, and showed no signs whatever of having been formed rapidly; he should think it had been growing for months, and not days or weeks. In his view the tumour of the skull was certainly secondary to the tumour of the bladder. He hoped that the specimens would be referred to the Morbid Growths Committee.

Dr. THIN thought that the nodules in the skin at the margin of the ulcer in the scalp ought to be examined, as he thought this might prove to be a case of rodent ulcer.

After some remarks from Mr. ROGER WILLIAMS,

The PRESIDENT observed that this case afforded a very good illustration of the fact that tumours could perforate the skull without leading to the production of any brain symptoms.

Mr. CLUTTON said that he had arrived at the opinion that this was a case of alveolar sarcoma, after examining carefully a good many sections from different parts, but he was quite willing to admit that it was a case in which there was room for doubt, and he had brought it forward in order to obtain the opinion of the Society upon it. He would gladly submit the specimen to the Morbid Growths Committee.

RHEUMATIC SUBCUTANEOUS NODULES.

Dr. ANGEL MONEY showed some sections from a case of this affection. The patient was a female aged ten years, who had had scarlet fever, followed by rheumatism, three years previously, from which time the cardiac disease probably dated. She had had frequent attacks of rheumatism and some choreic movements. There was a history of rheumatic fever in the father, and one of chorea in a sister. There were signs of great hypertrophy of the heart; the rheumatic nodules had been noted by the patient for some time—possibly months; they were found on the right and left elbows and on the right patella. The clinical history, whilst under observation, was of a fluctuating sort, dyspnœa and œdema coming and going without much apparent reason. The patient died rather unexpectedly. At the autopsy the heart was found to be hypertrophied and dilated, the pericardium universally but not firmly adherent. Some nodules about the size of a millet-seed were to be felt in the wall of the right ventricle. There were some slight valvular changes. The liver, spleen, and kidneys showed some of the usual changes, probably secondary to the cardiac mischief. Sections from a nodule on the back of the right elbow were found to consist of fibro-cartilaginous tissue. A section of a nodule from the pericardium looked something like connective tissue from a tendon of a mouse's tail. There were signs of a chronic diffuse peri- and myo-carditis.

Dr. CAVAFY exhibited some microscopical specimens of nodules, and also the heart, and plaster casts of the hands, showing many nodules, taken from a boy aged seventeen, who died under his care in St. George's Hospital. The patient had suffered from acute rheumatism five years previously, and had been short of breath since that illness. When admitted he presented the ordinary signs of heart disease, and there was a loud systolic murmur at the apex audible all over the chest. There were nodules on the backs of both hands, elbows, and patellæ; they were placed quite symmetrically, and varied in size from half a hazel-nut to that of a hempseed. The skin was freely movable over them, and they themselves were slightly movable over the deeper structures; they ached a little, but were not tender; some were tougher and more resistant than others, the larger ones being more compressible than the smaller ones. Death ensued from the heart affection in about five days. The pericardium was universally adherent; the heart was greatly enlarged, being both dilated and hypertrophied; there was thickening and contraction of the mitral valve, so that the orifice would barely admit the tip of the finger; on the auricular surface of the mitral valve there was a ring of minute vegetations; the aortic cusps were thickened, and there were vegetations on their free margins. The nodules were examined microscopically; the smaller ones were composed of young, actively growing, fibrous tissue, and the whole structure was very compact. The larger nodules were also composed of fibrous tissue, but this was arranged more loosely in strands, which were separated widely in places, the intervening areas having perhaps been occupied by œdema, or in some places by cellular infiltration; in parts the meshes in these areas were more or less rectangular, and filled with a material which stained deeply, and was probably some form of fibrin. Both varieties were very vascular, and the arteries in them much thickened, especially the inner coat, the lumen being nearly obliterated. In the larger nodules there was proliferation of the endothelium of the vessels.

Dr. DAWTREY DREWITT showed a little boy, aged seven years, who had had an outbreak of nodules, which, however, had all disappeared now. The boy had signs of disease of the mitral valve, and had had rheumatism, but he had never had chorea. Dr. Drewitt pointed out that these nodules occurred on all the exposed parts of the body by preference, and might therefore be partly due to friction. There was an analogy, too, in respect of the heart affection, for the vegetations occurred on just those parts of the valves that were most liable to friction.

Dr. PAYNE observed that similar nodules were seen in chronic rheumatic arthritis, and that they went away after a time. He would ask members to look for them when the joints of the wrists, hands, and elbows were were stiffened. A common situation was just above the lower end of the radius. He wished to put the question—Did they always occur close to an inflamed joint, and if so, were they not of the same nature as the changes in that joint?

Mr. PARKER had not found nodules so highly organised as Dr. Cavafy's specimens were; the bloodvessels were not nearly so thick; the fibrous tissue was coarse, closely packed, and highly vascularised. There was usually a varying amount of cell infiltration. The nodules resembled rheumatism in that they came and went suddenly, but they were not painful. He narrated briefly the case of a girl aged eleven, who had previously suffered from rheumatism, and who became much worse when a crop of nodules appeared, her heart symptoms being then aggravated.

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Mr. Stephen Mackenzie observed that the marked thickening of the intima described in these nodules was not peculiar to this condition, and was seen in blood diseases—for instance, scarlatina and pyæmia.

Dr. Mahomed asked whether the skin over the nodules ever became inflamed, and mentioned the case of a woman who had come under his observation suffering from rheumatism, and who had raised nodules on her arms, the skin over them being reddened, and some were softened. Of course, the question of gummata was raised, but there was no history pointing to syphilis. He thought that perhaps the nodules in rheumatic arthritis were not quite of the same significance as those in children. He asked whether the nodules seen on the peritoneum were of the same nature.

Mr. Eve pointed out that the description given of these nodules coincided exactly with that given last year by Dr. Gilbart Smith in reference to a case of xanthelasma.

Mr. Hutchinson had several times seen the skin over these nodules inflamed. He had long been familiar with them in rheumatic arthritis, and also in gout; and he referred to a case where they occurred on the hands and ears, and proved to be only fibrous, and contained no salts whatever.

Stomach from a Case of Gastrostomy.

Mr. Page showed the stomach of a man upon whom he had performed the operation of gastrostomy for stricture of the œsophagus. The operation was performed in two parts, the stomach not being opened till the fifth day. No bad symptoms ensued, and the patient went on very well until the twenty-first day, when he ailed a little, and in the evening of that day felt sick. Next day there was violent vomiting with acute pain in the region of the stomach, and on the following morning (*i.e.*, on the twenty-third day) he died from collapse. At the post-mortem examination there was found parenchymatous inflammation of the walls of the stomach, presumably spreading from the wound of the stomach.

Mr. Silcock said that he had examined the body of the last patient, and found the coats much thickened, being fully half an inch thick. On section a creamy-like fluid exuded from the submucous or muscular coats, to which the thickening was to be attributed. The mucous membrane was of a dead-white colour, and there were no rugæ. Some "buttery" lymph was found in the peritoneum, but no flakes as in the ordinary plastic inflammation. This condition of stomach occurring after gastrostomy had already been described by several observers. He thought in this case there had been digestion of the margins of the wound, and thus the submucous tissues had been opened up. The creamy fluid above described was found to contain many micrococci.

Fatty Tumour of Neck.

Mr. Hutchinson showed a recent specimen of a fatty mass removed the previous day from the neck of a patient at the London Hospital. Such cases were not very uncommon. The patient in question had large symmetrical masses on the back of the neck and under the jaws; he also had symmetrical tumours on both forearms, apparently perfectly encapsuled, and tumours in the region of the parotid gland, about which it was very difficult to decide whether it was the gland itself enlarged that was felt, or a fatty tumour distinct from this. The tumours seemed so distinctly to be encapsulated that he was induced to undertake the removal of one from the neck, when he found that there was no capsule at all, and he was obliged to content himself with removing a portion. The tumour was found to consist of very firm fat, with bundles of dense fibrous tissue interspersed in its meshes. He showed also photographs of another man with swellings on both parotid regions and marked proptosis, presumably due to a deposit of fat in the orbit. The proptosis was so extreme that the sight of one eye had already been lost.

Acute Yellow Atrophy of the Liver.

Dr. Cayley showed a recent specimen of acute atrophy of the liver, taken from the body of a man who had died under his care at the Middlesex Hospital. The patient was a man aged thirty, who died after an illness of four days' duration, the prominent symptoms being slight jaundice from the first, delirium, collapse, and coma. In places the liver cells seemed to have almost completely disappeared.

Card Specimen.

Mr. Lawson showed a large Calculus which had formed round a mulberry calculus, and between this and the superimposed calculus there was found, on section, some exceedingly offensive ammoniacal fluid pent up.

Mr. J. H. Morgan showed two children—one, aged fourteen months, with Congenital Cystic Hygroma of the Neck, beneath the chin; and the other, aged eight months, with a large almost purely subcutaneous Nævus in the same situation.

MEDICAL NEWS.

Apothecaries' Hall, London.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 22:—

Anwyl, James Norman, Devon and Exeter Hospital.
Curnock, Wesley, Portland Villa, Leamington.
Cuthbert, Wm. Hawkins, The Grove, Newtown, Montgomeryshire.
Mander, Percy Robert, Grimsbury, Banbury.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Barton, Henry Thomas, the London Hospital.
Bindley, Victor Norman, the London Hospital.
Dodson, Arthur Edward, Charing-cross Hospital.

BIRTHS.

Alabone.—On March 24, at Lynton House, Highbury Quadrant, N., the wife of Edwin W. Alabone, M.D., of a son.

Andrews.—On March 14, at Wote-street, Basingstoke, the wife of Samuel Andrews, L.R.C.P., of a daughter.

Blaxland.—On January 20, the wife of Herbert Blaxland, Medical Superintendent of the Hospital for the Insane, Callan Park, New South Wales, of a son.

De Denne.—On March 24, at Cradley Heath, Staffordshire, the wife of T. V. De Denne, M.R.C.S., of a son.

Jalland.—On March 18, at St. Leonard's House, York, the wife of W. H. Jalland, F.R.C.S., of a son.

Lithgow.—On March 15, at Stirling House, Farnborough, Hants, the wife of T. G. Lithgow, L.R.C.P., of a son.

Mackern.—On March 24, at Sunnydene, Tunbridge Wells, the wife of John Mackern, M.B., of a daughter.

Wilson.—On March 28, at Morar, Gwalior, Bengal, the wife of Surgeon-Major James Wilson, A.M.D., of a daughter.

MARRIAGES.

Blackman—Budden.—On March 20, at Islington, Charles William Blackman, of Natcott, West End-lane, West Hampstead, N.W., son of C. T. Blackman, M.R.C.S., of 41, Highbury-grove, N., to Gertrude Frances, second daughter of John H. Budden, of 15, Canonbury-park North.

Hill—Barber.—On March 21, at Mount Zion, Birmingham, Alfred Bostock Hill, M.D., F.I.C., eldest son of Dr. Alfred Hill, Medical Officer of Health, Birmingham, to Elizabeth, elder daughter of W. H. Barber, Esq., of Ashbourne, Richmond-hill-road, Edgbaston.

Kelly—Beart.—On March 26, at Norwich, A. B. Kelly, L.R.C.P., M.R.C.S., of Davies-street, Berkeley-square, to Mary Elizabeth, third daughter of the late Robert Gates Beart, Esq., of Raynham, Norfolk.

Loughnan—Birkett.—On March 27, Alfred Stack Loughnan, fourth son of the Rev. Timothy Loughnan, to Mildred Haydon Annie, second daughter of Edmund Lloyd Birkett, M.D., of 48, Russell-square.

DEATHS.

Black, Alfred, third son of Francis Black, M.D., of 33, Kensington-gardens-square, W., on March 28, aged 28.

Brodie, Kathleen Mary, eldest daughter of Surgeon-Major John F. Brodie, A.M.D., at Waterford, on March 22, aged 5.

Chaldecott, Thomas Andrews, M.D., M.R.C.S., L.S.A., late of Hongkong, at Harcourts, Chertsey, Surrey, on March 26.

Eton, Edward William, M.D., late of Windsor, at Stoke Pogis, on March 25, in his 73rd year.

Gruggen, William John, M.D., late R.N., at 29, Pilgrim-street, Liverpool, on March 22, in his 64th year.

Irwin, William Crossley, M.D., at Belvoir-street, Leicester, on March 26, aged 74.

Montefiore, Nathaniel, F.R.C.S., J.P., at 18, Portman-square, on March 28, aged 68.

Morris, Beverley Robinson, M.D., of Burnham, Somerset, at 17, Burr-street, Nottingham, on March 19, aged 66.

Robathan, Edward, L.R.C.P., M.R.C.S., at The Grove, Risca, Mon., on March 27, aged 73.

Welch, Francis, M.R.C.S., late of Taunton, at Portadown-road, Maida Vale, on March 24, aged 73.

Young, Alexander Chesney, M.D., at 5, Whitehall-yard, Whitehall, on March 21, in his 84th year.

UNION AND PAROCHIAL MEDICAL SERVICE.

RESIGNATIONS.

Ashbourne Union.—Mr. G. F. Barnes has resigned the Ashbourne District: area 25,680; population 8456; salary £45 per annum.

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Union.—Mr. S. F. Gosling has resigned the Biddulph District: population 5557; salary £50 per annum.
Union.—Dr. W. Pratt has resigned the Fourth District: area ulation 2384; salary £40 per annum.
Union.—Mr. James Hartley has resigned the Lavening District:); population 2250; salary £40 per annum.
Incorporation.—Mr. H. F. Elliot has resigned the Ruyton rea 17,423; population 3863; salary £52 per annum.
merel Parish.—The office of Medical Officer for the Workhouse y the death of Mr. Prosper F. de Larne: salary £120 per annum.
nion.—Mr. Timothy Wood Lee has resigned the Thame District orkhouse: area 11,955; population 4873; salary £100 per annum. Workhouse £40 per annum.
nion.—Mr. Charles James Marsh has resigned the Second rea 10,624; population 3964; salary £78 per annum.

APPOINTMENTS.

rston Union.—William Arthur Wilding, L.K. & Q.C.P. Ire., ng., to the First District and the Workhouse.
Uckford Union.—Frederick O'Connor, L.K. & Q.C.P. and re., to the Second District.
Union.—Frank Squire Boreham, L.R.C.P., L.R.C.S., and L.M. L.S.A. Lond., to the Budworth District.
nion.—Robert Corles Sanders, L.R.C.S. Ire., to the Marton

rth Township.—Thos. W. H. Garstang, M.R.C.S. Eng., L.S.A., t Medical Officer.
e's Union.—Robert James Hamell, M.D. Queen's Univ. Ire., L.R.C.S., and L.M. Edin., to the E and F District.
Union.—William Christopher Thompson, L.K. & Q.C.P. Ire., L.R.C.S. Ire., to the Pinchbeck District.
Union.—Charles Cumberland Brodrick, L.R.C.S., L.R.C.P., din., to the Whitchurch and South Lydford District.
-on-Severn Union.—Nicoll F. Searancke, M.R.C.S. Eng., din., to the Third District.

PPOINTMENTS FOR THE WEEK.

March 31. *Saturday (this day).*

t St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal a.; Royal London Ophthalmic, 11 a.m.; Royal Westminster ic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

April 2. *Monday.*

t the Metropolitan Free, 2 p.m.; St. Mark's Hospital for of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; stminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

TITUTION, 5 p.m. General Monthly Meeting.

ICAL SOCIETY OF GREAT BRITAIN, 8 p.m. Casual Communi- Mr. Ackery and Mr. Lucas. Mr. J. Bland Sutton, "On the ent of the Lower Maxilla." Mr. Alfred Coleman, "On ous Fracture of Teeth."

OCIETY OF LONDON, 8½ p.m. Dr. de Watteville will show a hod of obtaining Light for Medical Purposes. Dr. Symes , "On the Alpine Winter Health-resorts." Mr. Benton will ew Form of Diet Chart and a Form of Feeding Cup. Dr. , "On the Use of the Moxa in Chronic Affections of the Spinal

3. *Tuesday.*

t Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Oph- 1 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West p.m.

TITUTION, 3 p.m. Prof. McKendrick, "On Physiological Dis-

AL SOCIETY, 8½ p.m. Drs. Frederick Taylor, Finlay, Hale lfe, Stephen Mackenzie, Seymour Taylor, etc.—On the Morbid and Pathology of Diabetes.

4. *Wednesday.*

: University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, sdon, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, maritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; stminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. ospital for Stone, 2 p.m.; National Orthopædic, Great treet, 10 a.m.

OGICAL SOCIETY, 8 p.m. Mr. G. B. Longstaff, "Phthisis, s, Pneumonia: Are they Epidemic Diseases?"

L SOCIETY OF LONDON, 8 p.m. Specimens will be shown. urt Barnes, "On a Case of Labour with Atresia Vaginæ." an, "On Gangrene of the Vulva."

5. *Thursday.*

t St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; opædic, 2 p.m.; University College, 2 p.m.; Royal London c, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital es of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; ross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

SOCIETY, 8½ p.m. Dr. S. Phillips will exhibit a patient with ongenital Dislocation of the Radius. Pathological Specimens: k—Tubercular Ulceration of the Bladder, Prostate, etc. Mr. e—General Dilatation of the Ventricular Cavity in the Brain atic. Dr. John Williams, "On Antiseptics in Midwifery in Hospitals and Private Practice."

TITUTION, 3 p.m. Dr. Waldstein, "On the Art of Pheidias."

6. *Friday.*

Central London Ophthalmic, 2 p.m.; Royal London Ophthal- a.; South London Ophthalmic, 2 p.m.; Royal Westminster e, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; .m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's y Mr. Lister), 2 p.m.

TITUTION (Council Meeting, 3 p.m.), 9 p.m. Mr. A. Geikie, Cañons of the Far West."

ON MEDICO-CHIRURGICAL SOCIETY, 8 p.m. Ordinary Meeting.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 24, 1883.

BIRTHS.

Births of Boys, 1250; Girls, 1216; Total, 2466.
Corrected weekly average in the 10 years 1873-82, 2720·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	941	946	1887
Weekly average of the ten years 1873-82, corrected to increased population ...	920·1	910·4	1830·5
Deaths of people aged 80 and upwards ...	...	...	88

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	3	1	2	6	...	3	...	3
North ...	905947	1	6	10	4	5	...	4	...	3
Central ...	282238	...	8	...	1	1	...	...	...	1
East	692738	...	10	9	1	6	...	3	...	4
South	1265927	2	9	9	6	14	2	4	...	7
Total	3816483	3	36	29	14	32	2	14	...	18

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·672 in.
Mean temperature	35·1°
Highest point of thermometer	46·6°
Lowest point of thermometer	20·6°
Mean dew-point temperature	28·9°
General direction of wind	E.N.E.
Whole amount of rain in the week	0·32 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 24, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Mar. 24.	Deaths Registered during the week ending Mar. 24.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2466	1887	24·9	46·8	20·6	35·1	1·73	0·32	0·81
Brighton	111262	63	52	24·4	46·0	25·0	36·0	2·22	0·88	0·97
Portsmouth ...	131478	80	68	27·0	...	...	...	...	...	...
Norwich	89612	52	55	32·0	...	...	...	...	...	...
Plymouth	74977	31	44	30·6	48·0	24·5	35·8	2·12	0·27	0·69
Bristol	212779	112	84	20·6	46·4	20·0	33·4	0·78	0·53	1·35
Wolverhampton .	77557	48	41	27·6	41·0	19·1	30·1	−1·06	0·59	1·50
Birmingham ...	414846	295	185	23·3	...	...	...	...	...	...
Leicester	129483	100	60	24·2	43·8	20·8	32·8	0·45	0·45	1·14
Nottingham ...	199349	128	109	28·5	43·5	17·9	32·2	−0·11	0·35	0·89
Derby	85574	64	31	18·9	...	...	...	...	...	...
Birkenhead ...	88700	47	53	31·2	...	...	...	...	...	...
Liverpool	566753	390	352	32·4	44·8	28·2	34·2	1·22	0·36	0·91
Bolton	107862	80	59	28·5	42·3	22·9	31·7	−0·17	0·48	1·22
Manchester ...	339252	197	201	30·9	...	...	...	...	...	...
Salford	190465	113	75	20·5	...	...	...	...	...	...
Oldham	119071	73	54	23·7	...	...	...	...	...	...
Blackburn	108460	55	63	30·3	...	...	...	...	...	...
Preston	98564	85	50	26·5	...	...	...	...	...	...
Huddersfield ...	84701	44	35	21·6	...	...	...	...	...	...
Halifax	75591	35	40	27·6	...	...	...	...	...	...
Bradford	204807	91	78	19·9	40·2	25·6	32·7	0·39	0·23	0·58
Leeds	321611	198	167	27·1	...	...	...	...	...	...
Sheffield	295497	173	163	28·8	41·0	21·0	32·2	0·11	0·57	1·45
Hull	176296	121	111	32·9	45·0	22·0	33·5	0·84	0·37	0·94
Sunderland ...	121117	91	67	28·9	42·0	30·0	35·7	2·06	0·41	1·04
Newcastle	149464	109	83	27·9	...	...	...	...	...	...
Cardiff	90033	52	40	23·2	...	...	...	...	...	...
For 28 towns ...	8620975	5393	4304	26·1	48·0	17·9	33·5	0·84	0·41	1·04
Edinburgh	235946	114	79	17·5	42·5	27·5	33·9	1·06	0·81	2·06
Glasgow	515589	345	359	36·3	...	...	...	...	...	...
Dublin	349885	160	271	40·4	48·7	20·2	33·3	0·73	0·47	1·19

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·67 in. The lowest reading was 29·37 in. at the beginning of the week, and the highest 30·03 in. on Thursday evening.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Temperance Appellations.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—"Printer's Devil" says he would like to know how I spell *viaduct*. Well, just as everybody else spells it; but I do not think that aqueduct and viaduct are quite alike in their formation. Aquæductus is a genuine Latin word, used by old Latin writers: aquæ ductus, a course or channel of water. "Viaduct," I believe, is not old Latin at all, but it may be regarded as meaning a road led or conducted from one place to another—*via ducta*. As "Printer's Devil" asks me a question, I feel bound in courtesy to give him an answer, remembering what Edgar says—"The prince of darkness is a gentleman." I am, &c.,

March 24. D.

Ellsworth L. H., New York City.—We are not acquainted with the tubes and inhalers about which you inquire, and do not know where they can be obtained.

Invalid.—The performances at Mr. and Mrs. German Reed's entertainment are always amusing, and the piece that is now being played is no exception to the rule. It is an additional recommendation that their programme is finished at a reasonably early hour, and that the hall is never hot and stuffy.

Dr. H. Kornfeld, Silesia.—We are not acquainted with any recorded instance of cerebro-spinal meningitis and multiple abscesses in the brain as a result of injury. In the absence of *any signs* (post-mortem) of violence, we should hesitate to affirm the possibility of such a causal relation.

Proprietas.—Consult a medical man who makes diseases of the skin his special study. We do not know anything about "Dr. Cowan, the author of the 'Science of a New Life.'"

Incomplete Small-pox Returns.—When the vaccination officer's report to the West Bromwich Guardians, last week, on the cases of persons suffering from small-pox in the parish, was presented, the Clerk to the Board pointed out that the return was incomplete, inasmuch as no mention was made of the cases at the small-pox hospital and the workhouse, or of others, in the medical officer's return. The Guardians resolved upon requiring the attendance of the vaccination officer at their next meeting, to explain the omission in his report of all cases of small-pox in the parish.

Workhouse Children and Board Schools.—The Rotherham Board of Guardians has adopted a resolution in favour of sending the pauper children in the workhouse to board schools in the town.

A Distressing Casualty.—Mr. De Larue, a surgeon at Devonport, died a few days since under the following painful circumstances. He lately conducted a post-mortem examination on a body far advanced in decomposition. At the time he had an abrasion on one of his fingers, and thus his hand became poisoned. Eruptions all over his body supervened, and he died after twelve hours of unconsciousness. He was of middle age, and leaves a widow and young family.

The Doctors' Claims, Bangor.—At the last meeting of the Local Board cheques were signed for the payment of the doctors' charges, in connexion with the late epidemic, for £273 14s., reduced from £416 9s.

St. Thomas.—It is said that the Herbert P. E. Freund charged with being disorderly in front of St. Paul's Cathedral, and sent to prison for a month, was formerly a student at your Hospital, and a son of the late Dr. Freund, physician to, and founder of, the German Hospital. The unfortunate man had escaped, as the Alderman said, from a lunatic asylum.

St. John Ambulance Association.—A centre has been opened at Gibraltar. The Chief Justice, Sir H. G. Burford Hancock, presided at an inaugural meeting, and the Governor-General has accepted the office of President.

M.R.C.S. informs us that he was in the Museum of the College of Surgeons when the Chinese giant, now being exhibited in London, entered it, accompanied by Dr. Richardson. He is stated to be eight feet high, but on placing him side by side and on a level with O'Brien, the Irish giant (also eight feet high), he was seen to be much shorter—in fact, very little taller than Freeman, the American giant, in the same fine collection. From the best authenticated observations it appears that the tallest persons on reliable record did not, according to the celebrated Haller, exceed nine feet. Dwarfs generally die from premature old age, and giants from exhaustion. O'Brien and Freeman both died young.

Psychologist.—You are not quite correct; the lines are by Milton, to the following effect, viz.:—

"The mind is its own place, and in itself
Can make a heaven of hell, and hell of heaven."

Evading the Factory Acts.—In the provinces the magistrates seem determined to aid the inspectors in vindicating the Factory Laws. Within the past few days a Blackburn joint-stock company was fined £18 for infringing the law; at Rowley a chair manufacturer was fined 20s. for a similar offence; and the Quicksedge Spinning Company has been mulcted in penalties, at the Saddleworth Police-court, amounting to £50 for breaches of the Factory Acts.

A. J., Lambeth.—The Metropolitan Street Improvement Bill, 1883, will deal with the question of providing suitable dwellings for artisans. The Metropolitan Board of Works have promoted the Bill. The Board had tried to go on the lines laid down by the Select Committee, but the Home Secretary sought to impose somewhat stronger conditions than those which the Select Committee recommended; but after careful consideration the Board has resolved to accede to the Home Secretary's conditions, and the Government aid will therefore be given in passing the Bill.

Diphtheria.—The Tettenhall College, Wolverhampton, has been temporarily closed in consequence of several of the students having been seized with this disease, and the students sent to their homes. The sanitary system of the College, it is stated, is of the most approved character, and it is not thought that the disease originated at the College.

The Gothenburg System, Nottingham.—An experiment is about to be tried on what is known as the Gothenburg system, at Nottingham. A public company has been organised for the purpose of conducting public-houses. The Corporation possesses public-house property, and the Mayor is the chairman, and several members of the Corporation are on the board of directors of the new company. Cheap and wholesome food and drinks are to be provided for customers, including alcoholic and refreshing temperance drinks. It is proposed to give the public a share in the advantages which are obtained from the granting of licences, and to withhold all personal interest in the sale of intoxicating drinks from the managers; the latter to have a share of the profit on the non-alcoholic beverages and the food only. The profits, after paying a dividend of 5 per cent., are to be paid over to the Corporation, to whom the houses belong. Coffee-taverns in various provincial towns pay dividends considerably over 5 per cent., but this seems to be a fair and reasonable return. The proposed system appears, in fact, to be the "Gothenburg" anglicised.

"Just Qualified."—We never give advice on the subject. Consult some of the medical agents or the topographical list in Churchill's "Medical Directory," which will give you the number of inhabitants and qualified local practitioners. We should say the suburbs mentioned by you are already overstocked, particularly Wimbledon.

The Birmingham and Midland Counties Sanatorium.—From the seventeenth report it appears that during the past summer months all the beds were constantly occupied, and many persons were frequently waiting their turn for admission. During the year 929 persons passed through the Sanatorium, showing an increase, compared with the last year, of seventy-one. The total receipts were £1991 14s. 11d., and the expenditure £1758 9s. 7d. The year commenced with a subscription list of £855.

The Liverpool Ladies' Charity and Lying-in Hospital.—The Committee has purchased from the Corporation a plot of land at the corner of Brownlow-street and Brownlow-hill as a site for the new hospital. At present the charity has only £1700 in hand for the erection of the new building.

Sanitary Arrangements, Rome.—It is stated that the Duke Leopold Torlonia has taken in hand the matter of sanitary arrangements of Rome, and will see to the funds being forthcoming.

The Bradford Sanitary Association.—The Association numbers one hundred members, seventy-five of whom during the past year availed themselves of the advantage of having their premises examined. In fourteen cases baths were found in closet-rooms—a practice which was strongly condemned.

COMMUNICATIONS have been received from—

Dr. John Shea, Reading; Dr. Crichton Browne, London; Mr. J. Dixon, Dorking; The Registrar of the Apothecaries' Hall, London; The The Secretary of the Faculty of Physicians and Surgeons, Glasgow; Mr. W. C. Gordon, London; Mr. F. Edwards, London; The Secretary of the Building Trades Exhibition, London; The Secretary of the Harveian Society, London; The Registrar-General for Scotland, Edinburgh; Mr. J. B. Berry, London; The Secretary of the Local Government Board, London; Dr. Bergmann, Wiesbaden; Mr. J. Chatto, London; The Secretary of the Epidemiological Society, London; The Honorary Secretary of the Medical Society of London; The Honorary Secretary of the Pathological Society, London; Mr. Frank Spence, Manchester; The Sanitary Commissioner for the Punjaub, Lahore; Dr. J. W. Moore, Dublin; Mr. Horton, New York City, New York; The Honorary Secretary of the West London Hospital, London; The Proprietors of the "Christian Commonwealth"; The Honorary Secretary of the Odontological Society of Great Britain, London; The Regius Professor of Medicine, University Museum, Oxford; The Honorary Secretary of the Obstetrical Society, London; Dr. T. F. Pearce, London.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Therapeutic Gazette—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Ciencias Médicas—Nederlandsch Tijdschrift voor Geneeskunde—Revista de Medicina—Revue d'Hygiène—Archives de Neurologie—Italian Times, March 24—Times of India, January 12—Boston Journal of Chemistry—Girl's Own Paper—Sunday at Home—Friendly Greetings—Leisure Hour—Boy's Own Paper—New York Medical Journal.

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ORIGINAL LECTURES.

GULSTONIAN LECTURES
ON
STERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London, February, 1883.

By J. MATTHEWS DUNCAN, M.D., F.R.C.P.L.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, etc.

LECTURE II., PART III.—ITS THEORY OR CAUSATION.

IN Galton's statement of the actual infertility of heiresses there is observable a remarkable comparative paucity of male issue—a fact which goes, like many others, to confirm the ancient and still prevalent opinion that relative sterility or weakness of reproductive energy tends to the production of females rather than males. This department of the study of sterility I shall not enter on, the causes of the excess of females over males in all births being the subject of an extensive literature, and its relations being too numerous and complicated for advantageous discussion in this place. But I may state that I have long been impressed with a belief, in accordance with the chief pertinent facts, that the excess of female births is due to the prevalence of a degree of weakness of reproductive energy. Excess of female births is coincident with other evidences of sterility.

We have already given reason for believing that when a woman bears above ten of a family she shows an unnatural or excessive amount of fertility; and this belief is corroborated by the demonstration we now propose to give that excessive families occur chiefly in women who are married in the sterile age, or ages of weak reproductive energy characterised by absolute sterility and by morbid production, whether abortive, premature, or mature. At present we only consider the production of mature children, and we find the unnatural intensity of fertility in the young shown by absolutely large number—that is, above ten; while in the elderly it is shown by rapidity of births or intensity of fertility, so long as it lasts; and we may here remark that it has been elsewhere proved that for such women as begin childbearing late in life, there is a prolongation of the period of fertility beyond the average age of ceasing to bear, not a prolongation, as estimated from beginning to end, of actual childbearing.

TABLE XVII.—*Showing the Fertility of Mothers Married at Different Ages.*

Years elapsed since birth of first child.	Average number of children to each marriage formed at ages—			
	16–20.	21–25.	26–30.	31–35.
10	5·05	4·51	4·42	3·44
20	7·68	7·01	6·43	3·00
30	8·41	7·89	6·80	7·00
40	10·85	8·24	5·00	4·00

That the fertile younger are more fertile than the fertile older is shown by the preceding table of data derived from St. George's-in-the-East. That the younger fertile have a longer perseverance in fertility than the fertile older is shown by Table XVIII., derived from my work on Fecundity. That the unnatural intensity of fertility in women bearing large families begins with the commencement of childbearing is shown by Table XIX., from Ansell, which demonstrates the rapidity, only up to the birth of the third child, in families of various numbers. Up to the third birth the rapidity is twice as great in families of sixteen or more as in families not above three, and it is easily counted that while the small families came slowly, and the excessive families quickly, the families from seven to twelve came early at the average rate of one every eighteen months. That the unnatural rapidity of childbearing in excessive families continues throughout childbearing life is shown early by Tables IV. and V. In my table the quickest childbearing is every ten months, the family being nineteen in number. In Ansell's table the quickest is every fifteen months, the family being eighteen.

Lastly we show, by a table framed from the Edinburgh and Glasgow data, that the wives beginning fertility at advanced periods of life have an unnatural intensity of fertility while it lasts, a greater intensity than that of women married and beginning to childbear at the best ages. (See Table XX.) The table reads thus: To take the second row of figures—Fertile women five years married and under ten have, if they are now from fifteen to nineteen years of age, 2·5 children; if now from twenty to twenty-four years of age, 3·19 children; if now from twenty-five to twenty-nine years of age, 3·75 children; and so on.

Multiparity is a term already well recognised as implying that the subjects of it have had two or more pregnancies and births; but a woman may bring forth two or more children at once, and to this condition we apply the term pluriparity. The most common degree of pluriparity is the production of twins, these occurring about once in every eighty pregnancies. Triplets and higher numbers are very much rarer, and the rarity increases with the number.

Chiari, Braun, and Spaeth have given good evidence that abortions are comparatively more frequent in plural than in ordinary pregnancies. M'Clintock, founding on large experience, shows that hydramnios is also common. Acephalous monsters are found only in plural pregnancies. Monstrosities of all kinds are commoner in plural than in ordinary pregnancies. There are more dead-born children in plural pregnancies. The children born alive in plural pregnancies are more difficult to rear. "The proportion," says Ansell, "of infants that are stillborn or die soon after birth is, in the case of males nearly five times, and in the case of females nearly four times, greater in multiple than in single births."

Subsequently we shall adduce evidence that pluriparity is specially associated with idiocy and imbecility of the children, and that it specially affects the sterile ages, or ages of weakness of reproduction. Excessive family, that is, above ten in number, specially affects the same ages, and is dangerous to the lives and injurious to the health of both mothers and children. Both have therefore an alliance with sterility.

In a case of quintuplets the mother's age was forty and the pregnancy the tenth. In 7 cases of quadruplets the age of the mother was given in 6, and the mean is twenty-seven; the number of pregnancy was given in 6, and the mean is nearly three. The ages were nineteen and twenty with first pregnancies; twenty-five with third pregnancy; thirty with number of pregnancy not stated; thirty-two with a fifth pregnancy; and thirty-five with a fourth pregnancy. In one case of second pregnancy the age of the mother was not given. From a great variety of sources I have collected 43 cases of triplets (and of these I give in the subjoined tables some account). (See Table XXI.) In 40 cases the age of the mother is given, and the mean is thirty. In 41 cases the number of the pregnancy is given, and the mean is four. (See Table XXII.) It is naturally expected that our best evidence should be derived from twins, but while this is really so we have, even in these cases, to deplore the inadequacy of the data in point of number. I have not at present sufficient time at my disposal to enter into the details of the production of twins, and for these I refer you to my work on Fecundity. It is there shown that the frequency of twins increases with the age of the mother and with the number of the pregnancy, the very early ages of the mothers and the first pregnancy forming exceptions to the rule.

In a paper by Arthur Mitchell, published in the *Medical Times and Gazette* (November 15, 1862), he shows that twins are peculiarly liable to be imbeciles or idiots. The conclusions of Mitchell's paper are so pertinent to the present subject that I quote them here at length. "1. Among imbeciles and idiots a much larger proportion is actually found to be twin-born than among the general community. 2. Among the relatives of imbeciles and idiots twinning is also found to be very frequent. 3. In families, when twinning is frequent, bodily deformities [of defect and of excess] likewise occur with frequency. 4. The whole history of twin births is exceptional, indicates imperfect development and feeble organisation in the product, and leads us to regard twinning in the human species as a departure from the physiological rule, and therefore injurious to all concerned. 5. When we pass from twins to triplets and quadruplets, everything we

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know regarding these latter gives support to the general conclusions in question."

Besides these accumulated dangers and disasters to the children produced in plural pregnancies, we know that plural pregnancy is dangerous and disastrous to the mothers. The trivial and the graver disorders of pregnancy are more common in pluriparous than in uniparous women, and the disasters and deaths in childbirth and in childbed are also more numerous in the pluriparous than in the uniparous. Nothing can be better demonstrated than that woman is naturally or normally uniparous, and that pluriparity is an unnatural or abnormal condition connected with sterility by being observed in the sterile ages, or ages of weakness, or imperfection of reproductive power. It does not imply the desirable productiveness of health and vigour, but the reverse.

Pluriparity in a population, then, is not an indication that its social condition is as it should be. It shows, according to its amount, that marriages take place too early or too late in life; and it may be predicated of such a population that it has a correspondingly large maternal and infantile mortality, and that the reared children are not of the finest. While woman is normally or physiologically uniparous, like the mare and cow, many of the other domestic animals are normally or physiologically pluriparous, as the dog, the rabbit, and the sow; and the fertility of most birds is a sort of pluriparity.

In the uniparous animals pluriparity is rare in various degrees in the different kinds; but the extreme rarity in some, as in the mare, may to some extent depend on the circumstance that, in general, only the finest specimens at the most suitable ages are allowed to exhibit their fertility. Little, indeed, is known about them with the exactness desiderated with a view to comparison with woman. Yet we may safely assert that among breeders of horses and cattle the production of twins is, with a view to their interest in both mother and offspring, not looked upon with favour.

In the sheep there is such a frequency of twins, and even of triplets, that there may be some hesitation in classing it with uniparous mammals.

In the pluriparous animals, on the other hand, uniparity is uncommon, and pauciparity is an indication of reproductive weakness or imperfection, while a just degree of pluriparity is natural or physiological. It is remarked, says Spencer, by Buffon that when a sow of less than a year old has young, the number of the litter is small, and its members are feeble and even imperfect.

The domestic hen, in its fertile career, admirably illustrates the rise and decline of pluriparity, and the variations are in accord with the great law of age which holds good in women and in all living beings. Its first and its last productions are small in size, and are believed to be peculiarly liable to be addled or without yelk, or to be otherwise incapable of being hatched. In its first year, according to Geyelin, it produces only 15 or 20 eggs; in its second, 100 or more, up to 120; in its third year, from 120 to 135, and here the climax of fertility is reached; in its fourth year it produces from 100 to 115; in its fifth, from 60 to 80; in its sixth, from 50 to 60; in its seventh, from 35 to 40; in its eighth, from 15 to 20; in its ninth, from 1 to 10. The fertility rises quickly to its summum in the third year of life, and more slowly fades to its disappearance in the tenth year of life.

In like manner the bitch and pig begin their fertile course with a small number, which year by year rapidly increases; and after a few years, whose number I cannot give, again decreases, till fecundity disappears, the last production being often a premature or a dead fœtus. The pluriparous animal has its best young when its progeny is most numerous. The best young may be so described, as in pups, on account of their intelligence, docility, or special talents; or they may, as in a litter of pigs, be best because they are large and easily made to grow to great bulk or weight. In the case of the bitch, it is impossible to reduce to an exact statement the value of pluriparity, but it is no doubt very great; and while it is the case that when most in number are produced there is also most in weight, the statement of weight of the pups gives no idea of their value. In a litter of pigs the value of pluriparity is a simpler matter, being estimated almost entirely by weight and capability of rapid growth; and both may be very well stated in figures.

The uniparous mare has a foal which may be valued partly for bulk, especially if it is to do rough, heavy work; but the bulk of a foal bred in the racing stud is a matter of comparatively little moment; and I daresay all will agree that the nobler the breed of horses, or the higher the qualities expected in them, so is bulk in the foal of less and less importance, and so also is pluriparity less and less desirable.

We have already used estimates of weight and length of single children as indications of fertility in woman; and if weight and length of twins were a test of paramount import, then twinning would, correspondingly, connote fertility, as 12 lbs. exceeds 6½ lbs. or 7 lbs. But there are higher qualities than the combined weights and lengths, and it is these higher qualities that are deficient in twins. Weight and length are valued merely as indications of general health and full development of individuals, not of twins.

Pluriparity in uniparous animals is rare, and for its study great accumulation of instances is required; and knowledge regarding it in these animals is tardily gained. Pluriparity in some common domestic animals is an every-day matter; and without any deliberate study its variations strike even the obtuse, a class often specially sensible of the pecuniary advantages of the higher degrees of pluriparity. It is the striking characters and advantages of high degrees of pluriparity in pluriparous animals that have led to the general adoption of the erroneous opinion that pluriparity even in the uniparous animals, as in woman, is an unqualified sign of fertility.

In pluriparous animals, and specially in the common hen, the quick rise and more gradual decline of fecundity is plainly observed, the climax in the hen, as in other pluriparous animals, being marked by the highest number of annual production or in a single brood or litter. In woman there is the same kind of variation, but in her it is a decline from occasional pluriparity to the production with due intervals of the best kind of single births; and the rise is back again to occasional pluriparity and hurry of births one after another.

In the common hen the rise to the climax occupies three years of life, and the more gradual decline occupies six years, according to Geyelin's data, already given. In woman the decline to the lowest, if we count roughly, from fifteen to twenty-five years of age, occupies ten years, and the more gradual rise, from twenty-five to forty-five, occupies twenty years. In the hen the rise is from 15 to 135, and the decline from 135 to 1. In woman the decline is from about 1·02 to 1, and the rise again to about 1·02. There can be little doubt that a similar rise and fall, or fall and rise, are to be found in the history of the fertility of other living things. The curve of this climax and anti-climax is not a part of a circle. Dr. Routh, in a valuable paper on "Procreative Power," published in the *London Journal of Medicine* for 1850, describes this curve, representing what he calls the inclination of procreative power, and thinks the circle is perhaps the nearest that could be selected; but the circle cannot be made to represent the figures on which he relies. He makes the age of greatest fecundity in woman twenty-six; and the climax and anti-climax may be partially indicated by the following figures, which he gives:—At fifteen years of age the figure is 22; at twenty it is 82; at twenty-six it is 100; at thirty it is 92; at thirty-five it is 74; at forty it is 54; at forty-five it is 39.

In leaving the subject of twins, it is natural to refer to malformations and monstrosities as showing weakness or disorder of the reproductive powers, but on this point I have no good detailed evidence to adduce meantime. Yet it is well known that a great body of opinion is in favour of the view, and there are many facts pointing in the same direction. In the course of these Lectures I have frequently mentioned such opinions and facts, but the subject is well worthy of special study. Here I would only refer to the frequent combinations of idiocy and malformation, of idiocy and twins, of idiocy and premature or post-mature maternity, of malformation and twins, of interbreeding and malformation, of interbreeding and sterility, as combining to form an argument that may, if worked out, be found to be conclusive on this question.

Experiments in producing malformations and monstrosities in the common fowl have been very fruitful in results, and demand caution in judgment as to the potency of such influences as age of the mother. Especially interesting in this view is the recent discovery of Dareste that mere delay of incubation, in the case of the eggs of the common fowl, is a cause of malformation in the chick.

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TABLE XVIII.—*Showing the Amount of Continuance in Fertility of Wives Married at Various Ages, as shown within Twelve Months.*

Age of mother at marriage	15–19	20–24	25–29	30–34	35–39	Total.
The number child-bearing in the fifth year of married life is 1 in	2·6	2·7	4·1	4·9	10·5	3·2
The number child-bearing in the tenth year of married life is 1 in	3·2	4·0	5·9	8·7	...	4·4
The number child-bearing in the fifteenth year of married life is 1 in	4·6	6·8	18·2	37·4	...	8·0
The number child-bearing in the twentieth year of married life is 1 in	8·5	14·6	129·8	...	...	16·3
The number child-bearing in the twenty-fifth year of married life is 1 in	68·0	480·5	...	...	...	171·0

TABLE XIX. (*from Ansell*).—*Showing Intensity of Fertility in Mothers of Families of Different Numbers.*

In families consisting of the under-mentioned numbers of children.	Interval between the marriage of the parents and the birth of the—		
	First child.	Second child.	Third child.
	Years.	Years.	Years.
1, 2, or 3	1·78	4·84	7·38
4, 5, or 6	1·37	3·32	5·49
7, 8, or 9	1·18	2·82	4·68
10, 11, or 12	1·05	2·54	4·15
13, 14, or 15	1·06	2·40	3·81
16 or more	0·96	2·15	3·47

TABLE XX.—*Showing the Intensity of Fertility in Wives Mothers of Different Ages.*

Duration of marriage.	Mother's age.						
	15–19.	20–24.	25–29.	30–34.	35–39.	40–44.	45–49.
Under five years	1·128	1·519	1·825	1·844	1·827	1·698	1·200
Five years and under ten	2·500	3·190	3·750	4·048	4·085	3·792	4·000
Ten years and under fifteen	...	5·333	5·453	5·903	6·197	5·964	6·500
Fifteen years and under twenty	...	...	6·000	...	7·914	7·993	8·435
Twenty years and under twenty-five	...	...	...	7·000	9·396	9·718	10·528
Twenty-five years and under thirty	...	...	...	...	...	12·368	13·600
Thirty years	...	...	...	...	...	...	13·000

TABLE XXI.—*Showing the Ages of Mothers in Forty Cases of Triplets.*

	Age of mother.																
	19.	20.	23.	24.	25.	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	38.	44
Number of cases	1	3	1	2	4	2	2	1	6	1	1	1	1	6	2	2	3	1

TABLE XXII.—*Showing the Number of Pregnancy in Forty-one Cases of Triplets.*

Number of pregnancy	1	2	3	4	5	6	7	8	10	11	12	
Number of triplets	8	8	12	2	2	2	3	1	1	1	1	

HYPODERMIC INJECTION OF ERGOTINE IN PROLAPSUS ANI.—In a *thèse* by Dr. Jette he describes what he has observed of this treatment, first introduced at the St. Louis Hospital by M. Vidal. The formula is composed of one gramme of Bonjean's ergotine and five grammes of cherry-laurel water. It should be freshly prepared, so as to be of a limpid colour and fresh and agreeable odour. The injections are made every other day, commencing with fifteen drops, and, if this is insufficient, going on to twenty or twenty-five. This is inserted very slowly into the fibres of the sphincter to the depth of from two to four centimetres. Severe lancinating pain is caused, which then becomes dull and continuous, only ceasing after some hours. After three or four injections contractions of the sphincter and fibres of the intestine commence. A sense of constriction and traction upwards is felt by the patient and observed by the surgeon. Various disturbances may take place; thus, if the doses of ergotine are too weak, there may be frequent desires to go to stool and to pass urine; and when they are too strong there may be spasm of the neck of the bladder, with temporary retention of urine. In some persons M. Vidal observed a tendency to vertigo or syncope, and painful præcordial constriction, with a hard, close, somewhat slow pulse. The latter injections become more active, as if cumulative, and cause a more prolonged tenesmus than the early ones. The duration of treatment oscillates between some days and some weeks, and seems quite independent of the solution employed, the dose injected, and the intervals observed. To render the cure certain when once obtained, it is of importance that three or four supplementary injections should be made.—*Revue de Thérapeutique*, March 4.

NAUSEA AND VOMITING IN UTERINE AFFECTIONS.—We often find that in women the subjects of uterine affections, nausea or even vomiting persists for months or even years, and, as a general rule, remedies prove of little use until the original affection or its reflex consequence have disappeared. Dr. Cheron, however, has under these circumstances found great benefit result from the administration of bromides in an effervescing mixture, of which the following is the formula:—No. 1: Bicarbonate of potash 2 grammes, water 60 grammes, and bromide of potassium 2 grammes. No. 2: Citric acid 4 grammes, water 120 grammes, and syrup 40 grammes. A teaspoonful of No. 1 and a tablespoonful of No. 2 to be poured into a glass and drunk immediately. The dose may be repeated every hour or half-hour—the quantities stated in the above formula representing the maximum to be taken per diem. In localised pelvi-peritonitis this mixture often arrests the tendency to vomit, even during the acute stage.—*Archives de Tocologie*, February.

IODOFORM IN FISSURE OF THE ANUS.—Dr. Boardman Reed, writing in the *Philadelphia Medical News*, March 3, observes that he has found iodoform very efficacious in this troublesome affection. The formula he employs is:—Iodof. pulv. 3ss., balsam Peruv. 3ij., cosmolini 3j. To be applied three or four times a day after washing the parts. The balsam of Peru much disguises the offensive odour of the iodoform, and probably adds to the healing power of the ointment. In treating anal fissures by this or any other means, laxatives sufficient to produce one soft stool a day should be employed; but anything approaching purgation will be likely to aggravate the congestion, and prevent a cure.

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CROONIAN LECTURES
ON
MODERN THEORIES AND TREATMENT OF PHTHISIS.

Delivered at the Royal College of Physicians, London.

By JAMES EDWARD POLLOCK, M.D.,
Consulting Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

Lecture II., Part I.

Mr. President and Gentlemen,—In my former lecture I had to ask your indulgence while we considered in review the several theories regarding the nature of phthisis which prevailed up to a quite recent period. The necessity for this retrospect will, I hope, be apparent as we proceed to an analysis of the present pathology. Nor, as I trust, will it prove impossible to reconcile the various views of many observers, who saw only by the light of existing pathology, and could scarcely be expected to prophesy of the future. In so far as they were skilled observers and faithful recorders of what they saw, their records are invaluable and necessary portions of our knowledge; no additions which can be made, and no theories which could be started, can do away with the foundation of facts thus established. The reasoning from such may vary, and prove to be true or unstable; but the record is imperishable, and has become the property of all succeeding generations of pathologists. The great danger has been at all times a too exclusive method of arguing from a few facts, and more injury than can be estimated has resulted to the study of phthisis from regarding it as a special affection, and so separating it from the great mass of general pathology. It is possible that many, if not all, diseases are specific in one sense—that is, they may have a peculiar and individual cause, and an undeviating course in dependence on it, and to this view the modern pathology undoubtedly tends; yet that any affection stands outside the general laws of diseased action, and may be studied apart from others, would be an error misleading in the study of that individual disease, and which must inevitably result in mistakes.

We have now arrived at the germ theory of phthisis, having examined those of the French and German schools which preceded it, and, so far as we are able, the English mind on the subject; and as I hold it impossible to subject phthisis to an isolated examination, and to regard it as separated from general pathology, I shall take the liberty of examining briefly the whole theory of the induction of diseases from germs introduced from without, as well as the disorders resulting from their introduction into the economy of the living body, and the method of their multiplication in the system, with the symptoms thereby induced. We shall then examine the phenomena of phthisis from this point of view, comparing its symptoms with those of other affections which are recognised as due to a similar infecting cause.

In the outset, let us observe that the argument regarding the introduction of germs, parasites, or septicæmia into the living body implies a recognition of the localisation of disease. None of the theorists argue that the whole system is at once infected. There is a given starting-point, be it the wound or inoculated spot, and even when the breathed air has introduced septic or specific germs into the blood by the lung, it must, and does, soon find a local centre in which it forms a nidus, and whence it spreads by some of the methods we shall consider. That each specific germ has a point of selection, or a locality, in which it can especially grow and multiply, is an observed and necessary part of the infection. Thus the typhoid germ selects the mucous glands of the intestines, and the poison of rabies the brain and nerve centres, probably the pons. From this consideration it is evident that there are structural or other peculiarities of certain localities in the body in which they differ from other parts. To carry this view higher, it may be almost considered that the proposition of Bichat is true; and that the various tissues are possessed of a particular life. The modern theory would seem to show that you can poison the individual life of certain tissues, as the nervous or at least that certain infectants address themselves peculiarly to particular structures of the body, and there find a centre in which they flourish, and in which alone they can germinate and fructify. Bichat taught that the life of superior organisms, as man, is not due to the action of a unique central force, but to the ultimate result of the particular lives of the various tissues which enter into their composition. The organism of an animal he likened to a federal state, and the elementary cells to the citizens. Virchow, in his Cellular Pathology, especially studies to discover the causes which interfere with the life of the ultimate tissues of the body, and he thought that a great number of the disease-producing causes are living beings, vegetable and animal, which live as parasites at the cost of the human organism. There is no doubt, therefore, that long before there was any discovery of infecting germs the pathological mind was being prepared for the new theory. It was no longer sufficient to recognise a blood-poison acting by indescribable means on the whole system, devitalising and destroying it in totality, but it was seen that the death of particular parts of the system was possible, and that certain poisons addressed themselves to certain structures. This was proved to be true of chemicals introduced from without, as lead, which affected the muscles, or antimony, which is found in the solid viscera. It is but a step from this to recognise that certain germs manifest a selection for certain parts of the human body, and this was seen in the days before microscopes, in the known habitats of hydatids in the liver, lungs, and brain, in the lumbricus in the small intestine and the ascaris in the rectum. In 1835, Owen found the trichina, and Virchow somewhat later described the fever dependent on these parasites and their peculiar site in the muscles. There are, doubtless, other examples, but the foregoing will illustrate the fact that the localisation both of certain poisons and of certain parasites was known. In 1836, Latour gave the name of torula cerevisiæ to the ferment which converts sugar into alcohol and carbonic acid. The vegetable nature of certain germs, and their power of indefinite multiplication, by assimilating to themselves all the materials of an organism to which they are exposed, till "the whole lump be leavened," must have struck many thoughtful observers. The experiments of Schwann at Berlin in 1837 proved that meat can be preserved from putrefaction by keeping it from the air or by subjecting the air to a high temperature, and upset the theory previously held that septic processes are due to oxygen. Thus we arrived at the fact that putrefaction is caused by organisms springing from germs in the air, and that heat can deprive these germs of their vitality. As the torula converts sugar, so germs convert albumen. In both instances the minuteness of the agent is remarkable. It was found that putrefying pus contains myriads of vibriones or jointed bodies which arose by a process of self-multiplication out of similar bodies by segmentation, or fissiparous generation. Pasteur's well-known experiments confirmed these results and largely extended them, and it was thus established that the atmosphere is filled with myriads of such germs, found indeed less abundantly on the tops of the Alps, or in equatorial parts, but literally everywhere. From hence has arisen the well-known method of Professor Lister, who has applied the knowledge of these facts with such splendid results to operative surgery.

In 1866, Rindfleisch first noticed bacteria in the organs of those who died of traumatic infective disease, as pyæmia and puerperal fever, in the form of pinhead deposits in the heart and muscles. Later on these become filled with a thin fluid pulp. These cavities contained vibriones, which afterwards penetrated between the fasciculi of the muscles, and then into the muscular fibre. They were found in the heart and kidney, and finally in the blood. The unhealthiness of a wound was found to be in direct proportion to the number of spheroid bacteria in its pus, and general infection was held to be due to bacteria in the blood. Further observations demonstrated the existence of micrococci in the bullæ of erysipelas, and in the lymphatics on the edge of the erysipelas. Bacteria were also found in the pus of phlegmonous abscess, in its walls, and in diphtheria. In the latter diseases they penetrate deep layers of tissues and lymphatics. When traumatic infective diseases set in, the discharges become putrid. Anthrax is remarkable for the uniform presence of bacteria. These were also found in scarlet fever, small-pox, and typhus, and in cholera.

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The two tests of microscopical examination and chemical reaction were applied by Koch to these parasites in septicæmia, and the diseases we have named, and a third and most important one, inoculation. In form, the bacilli are found either as bacilli or micrococci, as chains of granules, or rods, or long oscillating threads. Koch thinks that a distinct bacteric form corresponds to pyæmia, septicæmia, erysipelas, gangrene, and spreading abscess; but Naegele says, "I have for ten years examined thousands of different forms of bacteria, and I have not yet seen any absolute necessity for dividing them even into two distinct species." It is certain, therefore, that a peculiar morphological form is common to several diseases, as pyæmia, diphtheria, small-pox, and cholera; yet even Koch is struck by the difficulty, and says that it is impossible that all these diseases can be produced by one parasite, and asks, Although the bacteria appear the same, may there not be a difference, just as the sweet and bitter almond look alike, but have important chemical differences? Chemically it has been found that bacteria resist acids, alkalies, and ethers, but are demonstrable by their absorption of certain aniline dyes; and it is to this fact, as is well known, that we owe their recognition with certainty. It is possible to remove the albuminoid structures in which they are embedded, and leave the coloured vegetable parasite.

The experiments by Davaine on inoculation of animals with putrid matters are well known, and the remarkable fact discovered that by transmitting the infection through a series of animals the germs are not exhausted, but multiplied, so that at last he succeeded in producing the characteristic effects by using the trillionth part of a drop of blood. He thus infected successively twenty-five animals. He used diverse fluids, from scarlet fever, puerperal fever, small-pox, typhus, and always found bacteria in the blood. He also produced diphtheria and erysipelas artificially in animals. He found (as did Koch) that bacilli grew into the vessels and entered the circulation through spaces in their walls. They penetrate the white corpuscles of the blood, the capillaries and large veins, and appear to have entered the system by the subcutaneous cellular tissue in the neighbourhood of the spot inoculated. It is found that when the bacilli disappear the disease can no longer be produced by inoculation. The animals made use of in these experiments were rabbits and mice; but Koch distinctly states that the septicæmic bacillus cannot be inoculated on every animal, and often failed in mice. On the other hand, death occurred in twenty-four hours after inoculation with the smallest drop of blood from anthrax, and the lungs, liver, spleen, and capillaries were found filled with bacilli. The well-known experiments of Pasteur and Klebs which have been called the culture of germs offer much evidence on the difficult and disputed question as to each disease in which bacilli are found having a separate parasite which is capable of identification. Taking a material presumed to contain an infective virus and others, they have by exposing it to certain conditions of temperature and free access of oxygen found one germ specially grow, and its infecting power increase more than the others. A preponderating development thus obtained in one germ is found to have stronger infecting powers than the others in the mass examined. By successive experiments the one infecting germ is isolated. To this have been applied both the inoculation test described, and also the chemical. Thus it has been observed that the bacillus of anthrax does not colour with fuchsine, while that of leprosy does. Crudeli is of opinion (and no one has more thoroughly adopted the germ theory) that in the greater number of cases there is no proof of different kinds of bacilli except from pathological effect, and that we must obtain the morbid ferment isolated from every other substance with the greatest clinical care. He acknowledges that the entrance of septic ferments with the blood is not always followed by disease, and contends that for such production of morbid effects they should necessarily find a home in the body, and there grow and form a colony.

I have hitherto considered septicæmia, and the opinions of experimenters on the so-called ferment and on the parasitic bacteria presumed to be the essential cause. But we are aware that many other diseases besides those named are referred to the same cause—namely, germs entering the system from without,—and amongst these are found malarious fevers, and notably tubercle. Before proceeding to discuss the latter I would state in a condensed form the physiological and pathological reasons assigned by the eminent originators of the doctrine of germs both for and against the theory. Pasteur argues that all contagious endemic and epidemic diseases result from ferments. All infectious diseases are due to living beings capable of multiplying in the organism. He argues from the disproportion between the determining cause and the effect, the quantity of the poison introduced in relation to the gravity of the resulting disorder; and, secondly, from the reproduction of infecting material in the organism in enormous quantities.

Chemical ferments do not augment in quantity, although they produce changes in the composition of other substances. In living ferments they always go on increasing in proportion as the fermentative process advances, precisely what occurs in the specific agent of each infection during the course of the specific disease. The incubation period is remarkable. In chemical ferments we should see the specific action always show itself till it had met with all the material in the organism which it was capable of decomposing; but in animal ferment there is always an incubation found, more or less long, till the germs are evolved of all the living organisms which constitute the disease. It may be supposed that these remarks apply only to diseases of infection or contagion, like scarlet fever or erysipelas; but it will be seen that they are made with regard to the most chronic affections attributed to parasitic origin, as tubercular diseases, and also to malaria and rabies. The duration of the incubation period varies according to the species of the infecting agent. It is short in the acute exanthemata, longer in others of milder course. Tuberculosis has a latency of twenty days, and rabies often a period of years. As is well known, Pasteur reduces the period of incubation of rabies by inoculating direct into the brain. The poison is thus at once fixed in its bed of choice, instead of having to make its way to it through various tissues (during which time it is latent), and the well-known symptoms can be produced in a few days. He has no doubt that a living organism causes rabies, which finds in the brain the conditions for its development and multiplication.

The cyclical course of diseases so originated is also dwelt on in proof of their parasitic origin. In all acute miasmatic affections the stages of disease can only be explained by the progressive multiplication of a living ferment in the body This is followed by the death of the organism, when there is recovery. In such cases there is always a stage of invasion, increase, acme, decrease, and resolution; or there are remissions, either daily or of some days, accounted for by the death of one crop of parasites, followed by a renewed access of disease when a new generation of germs is matured, and set free in the organism. In this way the remission and return of tertian or quotidian fevers and the daily hectic access of phthisis are accounted for. Chemical ferments would not act so, but would work through the whole system at once, and either kill the patient, or exhaust themselves by finding no more material to work on.

To prove this doctrine it is necessary that the presence of the parasite be constant in all materials which show themselves able to produce infection, that it can and does develope and reproduce itself in the organism of man, and that this parasitic being can alone, and isolated from every other matter contained in the infecting material, determine any given infection. To this we might add that each parasite should have distinct morphological characters; but it is well known that there is often a perfect likeness between germs, some of which are infective and some not.

The questions whether the microscopic organisms, of which we have been speaking, constitute a distinct species, or are capable of modification, and are even mutually convertible, and whether they are not found naturally in the tissues and fluids of healthy animals, have occupied some of the most acute observers of our time. Lister asserts that they are not found in healthy tissues. Bastian is of opinion that they may take their origin in unhealthy or dying processes by a method which he calls heterogenesis. Lewis has experimentally shown that by impairing the nutrition of any given organ bacteria may be made to appear; and Burdon Sanderson, that they may be also made to appear on tissues of previously germless animals by exciting an intense inflammation within the peritoneum or beneath the skin by means of germless chemical agents.

Virchow, at the Medical Congress of 1881, taking the parasitic nature of certain diseases as proved, inquired whether there were not different forms of the same parasite

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giving rise to different affections or to modifications of the same disease, and spoke of the great interest attaching to the process of culture of germs, now well known. Büchner had by this method modified, and almost transformed, the germs of *Bacillus anthracis*, and by a series of culture generations had developed a perfectly innocent plant, the hay bacillus. Again, taking the hay bacillus, he thought he could give it virulent properties by a sort of "undomestication," making it wild again. Thus, by giving the organism a special kind of soil and a more vegetable diet it might be made innocent; by a more nitrogenous diet and under other circumstances it might be made wild or malignant again. Virchow, again, while he believes in the difference of the kind of germs entering the body, recognises strongly the resisting powers of the system, and the facilities given to the entrance of disease by weakness, which diminishes such resistance. Béchamp believes that germs of bacteria exist in all living and healthy animals—an opinion endorsed by Billroth. Some are of opinion (or were at the Congress) that there are no specific bacilli, as Forker, who considers that these organisms produce infection only in a secondary manner, their morphological form being indifferent. Hüter thought that there were specific modes of activity in micro-organisms, but a certain unity in all.

I must apologise for reciting these various opinions, but those I have quoted are all from personal experimenters on a large scale, and their recorded judgment is representative of the varied and fluctuating views of the thoughtful on the subject in all countries. By scrutinising their variety we shall at least learn that knowledge, while rapidly progressive, demands an impartiality of mind and a caution in decision, for the facts may not be borne out by the later experiments of to-morrow. As regards the germ theory in traumatic diseases, many hold that normal blood and tissues contain micro-organisms, and that these are not causes of disease, but become so from an abnormal increase in their number, because the fluids have become so altered as to present conditions favourable to their development. To this it is replied that Burdon Sanderson and Koch himself did not find such in healthy blood, nor did bacteria spontaneously develope in man or animals. The latter author concludes that the frequent discovery of micro-organisms in traumatic infectious disease renders their parasitic origin probable, but thinks that we should have established for every such disease a parasite with marked morphological characters; while he is so persuaded of the ultimate truth of the proposition that he says, "May there not be the possible presence of a lifeless disease ferment never yet demonstrated, or other unknown quantities?" With these unknown quantities we have, however, but little to do at present.

Before examining the latest discoveries regarding tubercle, let us shortly notice some of the other parasitic diseases. The bacillus of typhoid finds its principal centre in the small intestines, but it can multiply itself outside the body, and penetrate living organisms by means of air, water, milk, etc. However it may have been introduced, it is found in the lymphatics of the intestine and the mesenteric glands, passing thence by the bloodvessels into the whole organism. Transfusion of blood has carried the disease from one to another, as also has taken place in malarious fever according to Crudeli. These two diseases are not considered contagious, though secondary colonies of bacilli are found in the spleen, lymphatic glands, and spinal cord. Most curious and interesting is the discovery of the specific ferment of malaria attributed to Obermeier in 1873. According to Crudeli, who in Rome has had abundant opportunities of studying the subject, the parasite is a spirillus, and appears as filaments. The bacillus is sporigenous, multiplies by spores inside its filaments, which break up and gain their exit either from their centre or from one extremity or both. They require a free exposure to the air, and a temperature of 20° C. for their development. They are found in all marshes, and in malarious districts not marshy, and in the superincumbent air of such districts. Not only spores, but developed bacilli, are found in the air. Cuboni found them in the sweat of his hands and face when in the Pontine Marshes. These spirilli move briskly in the blood, are always found during an access of fever, diminish after the access, and entirely disappear in the period of apyrexia. This has been observed in man and in apes, and Carter inoculated apes with the blood of man in malarious fever, and with the result of producing the fever. Guttmann has seen the spirilli in the blood thirty hours after death, and Koch in the interior of organs. In 1879, Crudeli and Klebs appear to have satisfied themselves of these facts. In pernicious fever (the worst form of malarial fever, in which I have seen patients who fell down comatose while at work in the fields) these bacilli are most numerous in the blood and in the spleen, which is of a dark colour, almost black. They are also found in the brain. Experiments in 1880-81 in Rome prove their existence in the blood in the invasion or cold stage of the fever. A subcutaneous injection of these bacilli in rabbits and dogs produced tertian and quotidian fevers. They grew rapidly in favourable conditions, which seem to be moderate moisture, free exposure to oxygen, and a tolerably high temperature. The presence of putrid matters is hostile to their growth, so that soils which have never been manured are most favourable. It is a notable circumstance that quinine placed in the soil even in small proportions kills them. During the access of fever these bacilli get liberated into the blood and lymphatics, and the periodicity of these marsh fevers is said to be due to successive generations of parasites being sent into the blood. I would only further notice that in influenza and hay fever bacilli have been found in the nasal cavities and frontal sinuses, a fact which led Helmholtz to treat coryza by injection of quinine. In acute rheumatic fever micrococci have been observed by Crudeli and others in the articulations and in the mitral valve. In acute pneumonia the presence of parasitic germs has been demonstrated. In syphilis germs of micrococci are held to be the essence of the disease, being found in the blood of infected persons and in the lymphatics. Gummata are new colonies, slow of formation; and it is noticed that maladies beginning with mild symptoms find the system prepared to resist them. Inflammatory reactions in chronic infections retard their course by retaining the infective matter in their various centres, but these are in their turn preventers of the action of remedies which cannot reach the part.

BIRTHS AND DEATHS IN VIENNA IN 1882.—According to the official statements, there occurred 29,272 births in 1882, and there were 1405 infants born dead. There were 21,595 deaths, or 29·16 per 1000. Of these deaths 18,722 took place among the Viennese population and 2873 among strangers. The mortality was proportionally high from February to May, and in the other months, especially the summer months, it was remarkably low. Deaths below the tenth year of age contributed a larger proportion to the general mortality than in 1881—viz., 44·34 in place of 41·15; and that in consequence of the greater prevalence of diseases dangerous to childhood, as scarlatina, measles, pertussis, croup, etc. The deaths from miasmatic-contagious diseases amounted to 2328 or 10·78. The suicides were 224 in number.—*Wiener Med. Woch.*, February 24.

LITHOLAPAXY IN INDIA.—Surgeon Freyer, of the Bengal Medical Service, publishes, in the *Indian Medical Gazette* for February, a "Second Series of Ten Cases of Lithotrity at a Single Sitting." Amongst the twenty cases so operated upon, at ages varying from twenty to eighty-five, he had only one which proved fatal, that of an old man who was practically moribund when the operation was undertaken. The other cases all made good recoveries, and had not been chosen as being especially favourable for the operation. The operation is especially effective when the calculi are very small—say weighing less than two drachms,—the patients in some of these having been able to return home next day. But even very large calculi are amenable to the same procedure, providing that they are not extremely hard. In one of the cases a hard uric acid calculus, weighing three ounces and a quarter, was removed, being the largest one ever removed at a single sitting. "The amount of manual labour required in crushing a hard and large stone of this kind is something excessive. I do not remember having ever felt so exhausted before as I was after the completion of this operation, and the muscles of my right arm ached for two or three days subsequently." In all the cases the calculus was completely removed at the sitting, and it is very much better that this should be done at once, even when the stone is very large, than that a piece should be left behind to produce future irritation. In all the cases, previous to dismissal, the bladder was carefully examined for fragments left behind; and for this purpose Sir H. Thompson's sound was employed, as being the only one capable of detecting very small calculi.

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ORIGINAL COMMUNICATIONS.

THE TREATMENT OF PARTURITION AND OF THE PUERPERAL STATE IN HOSPITAL PRACTICE.

By WILLIAM ALEXANDER, M.D., F.R.C.S.,
Visiting Surgeon, Liverpool Workhouse.

During the year 1882, 337 cases were confined in the lying-in wards of the Liverpool Workhouse. Four of these died, two from phthisis, in the last stage of which parturition took place; one from puerperal convulsions, that came on twenty-four hours after an easy and unassisted parturition; and one from capillary bronchitis, of which the woman was dying on admission. We thus see that none of them died from any septic influence.

Of the cases, 199 were admitted in a parturient condition, 138 had lived in the workhouse from three days to three months. The primiparæ numbered 139.

With these remarks on the year's results, I will pass on to the object of the paper, viz., the theory and practice of the treatment of parturition and of the puerperal state that seem to me most rational after ten years' hospital experience.

Amongst the lower classes, at any rate, nature, when left to herself as much as it is possible to leave her, seems to treat puerperal cases with better results than when she is aided by the highest medical skill and with all the appliances of hospital treatment. What nature, unaided to the same extent, could do amongst the rich is, and from the nature of the case ever will be, unknown. The mortality amongst the forsaken women of the "sinks" of Paris has been shown to be less than the mortality among their sisters of the boulevards of that city; the mortality in the practice of midwives to outdoor charities has been demonstrated to be much less than the mortality amongst the puerperal patients of doctors; and the mortality in workhouse hospitals has been proved to be less than the mortality in special lying-in hospitals. It has never been satisfactorily explained why untrained or imperfectly trained midwives have better results than medical men, nor why workhouse hospitals have a lower mortality than special lying-in hospitals.

It is possible, and to my mind extremely probable, that the puerperal mortality amongst the poor is greater than the returns would lead us to believe, and that the difference between hospital mortality and home mortality is not so great as statistics seem to show. A considerable number of women are admitted to the medical and surgical wards of the workhouse hospital annually, suffering from perimetritis and peritonitis of puerperal origin. Some of these cases die, and I am afraid they do not swell the black list of outdoor maternities. I have never entered upon the invidious task of bringing these fatalities home to the accoucheurs or accoucheuses; but they certainly shake my faith in the accuracy of statistics of outdoor lying-in cases. Still, the difference between the mortality of the parturient women surrounded by good hygienic conditions and under the care of skilled and experienced persons, and of parturient women surrounded by bad hygienic conditions and under the care of unskilled attendants, is so much in favour of the latter that we must waive all minor considerations of small inaccuracies in the statistics, and boldly inquire why a woman in a wretched hovel, attended by a Mrs. Gamp, has a better chance of recovery after delivery than the same patient in a comfortable hospital, or than a lady in a palace, though both the latter are attended by a president of the Obstetrical Society?

Parturition is said to be a physiological process, and as much should never be the cause of death when uncomplicated. As well might it be said that subcutaneous wounds are physiological processes. The placental wound is aseptic and guarded by antiseptic safeguards; and so is a subcutaneous wound, only the protective agency is more powerful in the latter case than in the former.

A parturient woman at the beginning of labour has the uterus full of aseptic contents, and the walls of the vagina lying in apposition. She is in no more danger of absorbing putrefactive matter by way of the vagina than is a male by the urethra. When labour begins, the uterus contracts and the os is dilated without any communication being made with the external air. The liquor amnii is expelled without any air being admitted to supply its place, and in its absence the uterus is either closely contracted round the child, or lies loosely in apposition with the fœtal surface, according as the uterus is in a state of contraction or relaxation. As the child recedes from the interior of the mother, the uterus follows it closely, so that, when the whole fœtus is expelled, the uterus and vagina close immediately, and no air is allowed to enter. The contents of the uterine cavity have been removed as if by the most perfect of aspiratory methods. The uterine and vaginal walls are now in apposition, except where the placenta, cord, and clots separate them. These are removed in the same manner as the child. What is now the condition of affairs that has to be recovered from? The uterus contains a wound, or what is practically a wound, at the seat of attachment of the placenta. This wound is in a contractile cavity, and the secretion of the wound flows along the vagina, separating in its course the coapted vaginal walls, and finally becomes exposed to the air at a distance of several inches from its source. Lister, as well as the experience of most observers, have shown that mucous membranes are antiseptic, so that, in antiseptic language, we might say the uterine wound was protected by several inches of antiseptic mucous membrane, the antisepticity of which cannot be exhausted, as it is continually renewed by vital processes. Perfect drainage is secured not only by the position of the parts, but by the uterine contractions that are evoked by the presence of the intra-uterine secretion. While these conditions maintain, it is impossible that septic poisoning can invade the uterus in the face of the outflowing lochial stream and of the guardianship of the vaginal walls.

In spite of these admirable arrangements for the safe healing of the intra-uterine wound, fatal results do occur, and the exact reason why has always been a burning question with myself and others who are compelled to receive parturient women into a workhouse hospital, and to restore them to convalescence, in company with other similar cases, in a more or less confined space. I will exclude from my consideration difficult or instrumental cases, ruptured perineums, although my remarks, slightly modified, would apply to such cases, and confine myself to what I conceive to be the causes why simple labours "go wrong."

During labour it is evident nothing can enter from without except through digital examination and scientific exploration. Now, such examinations are more frequently made by medical men than by midwives; and in lying-in hospitals that are attended by a staff of doctors and students—enthusiasts in midwifery—it is very probable that this enthusiasm may, by incautious meddling with dirty fingers, poison the contents of the uterine cavity during labour. Midwives fortunately do not care for science, and hence the risks to natural cases are not so great in their hands as in those of medical men, who may not always be, surgically speaking, "cleanly."

Again, the placenta is allowed to come away naturally in the cases attended by midwives, but many medical men hasten its birth either by extraction or by forcible expression. By either of these methods, except much care be exercised, air is likely to enter, and the intentions of nature to be upset. Very often the medical man or student wishes to satisfy his curiosity after the expulsion of the placenta, and makes further digital examinations. The nurse rarely suffers from such scientific curiosity; and herein we have some of the reasons why in natural labour a nurse is often a safer attendant than a medical man.

After labour, the conditions necessary to convalescence are a non-poisonous atmosphere and clean surroundings; a means of receiving the lochia and of keeping the vulva clean; patency of the passage leading up to the placental seat; and, lastly, a contractile uterus.

In ordinary households, at least a year, and on an average about a year and a half, intervenes between each parturition. During that interval, the room and the bed are freed from any lochial discharge or from any germs that may have infected either after the last confinement. The risks of poisoned beds and of poisoned rooms that are so great in lying-in hospitals are not, therefore, undergone by private patients, even of the lowest kind. The poisonous effects of bad drains are not so dreadful in private houses as in large buildings, as a general rule, because of the difference in magnitude of the drainage system governing to a great

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extent the magnitude of the evils that arise from its defect. In order to make the lying-in hospital as safe as a private dwelling, its drainage should be periodically ascertained to be perfect. Papers moistened with acetate of lead are frequently used by me to test the atmosphere of the wards for twenty-four hours; and when anything untoward happens, I at once have recourse to them to ascertain that no drainage defects exist. With good drainage, any house that is a reasonably well-constructed and easily ventilated one, on a healthy site, may be made a successful lying-in hospital for as many cases as its capacity will justify, if the following axiom is rigorously and regularly acted upon:—*Everything in the lying-in wards must either be capable of being thoroughly washed, or must be regularly changed.*

In most hospitals the walls, the floor, the ceiling, the tables, and the chairs leave nothing to be desired in regard to cleanliness. It is the beds that are, I believe, the most frequent source of trouble in lying-in cases. In all maternity hospitals they have until lately been of a far too elaborate and expensive kind, so that it was a serious matter to cast them away. The walls have been washed, the rooms closed, the bed-clothes cleansed, but the *beds* have been used as they were, or after what was only a formal disinfection.

The proper kind of bed for a lying-in hospital is one made of new clean straw, retained in an easily washed sack of coarse "ticking." A double blanket will secure sufficient softness for the most fastidious, and then the usual sheets and mackintoshes of the lying-in bed. At the end of twenty-four hours this bed—the labour bed—is taken away, and the patient is transferred to the lying-in bed, another new straw bed, of larger dimensions than the labour bed. This the patient occupies for a week, when that bed is taken away, and she is transferred to the convalescent ward, where another new bed awaits her, which she occupies till her discharge from the hospital. This bed is then sent away also, and the straw of none of these three beds is ever allowed to re-enter the hospital. The "ticks," after being thoroughly washed, are refilled with fresh straw; the bed-clothes are also washed after each case, and so are the bed-frames.

The straw is, with us, used again in the medical wards whe never it is not perceptibly soiled, but it might be sold by lying-in-hospitals for bedding horses, or for other purposes. Two or three cases might be confined with safety on the same straw where intelligent supervision of a medical man is constant, but in hospitals where nurses have to manage the cases the rule must be absolute. During November last the women confined in the workhouse presented a succession of the dirtiest cases that I have ever met with. Many of them had foul genital ulcers which emitted a stench sufficient to poison some of the children. And yet the mothers did not suffer, nor were any signs of puerperal blood-poisoning manifested. The reason why such immunity existed was that the contents of the wards were continually changing. The new patient occupied the same point in space as the previous one, but was neither surrounded by the same air or the same bedding.

(*To be continued.*)

VOMITING OF A SWALLOWED COIN.—Dr. Pixley relates the case of a lady, aged seventeen (*Philadelphia Medical Reporter*, March 10), who swallowed a five-franc piece which she had put into her mouth. Seeing her three hours afterwards, he found that the coin was lodged at the cardiac orifice of the stomach, and caused great pain and vomiting. Dr. Pixley pushed the body with considerable force, by means of a probang, into the stomach. Vomiting of blood as well as the contents of the stomach at once followed, and recurred at intervals during eighteen days; loss of appetite and strength, and emaciation ensuing. The patient frequently remarked that she felt as if she could nearly vomit up the money, and suggested that she would be more likely to do this if the stomach were filled to repletion. She accordingly filled her stomach to its fullest repletion with pancake, so as to be able to try the experiment. This first attempt succeeded, the coin being ejected with such force as to knock out the two upper incisors, and to loosen a bicuspid. Large quantities of blood were thrown up, and the digestive power became greatly impaired. Vomiting of blood and pus showed that ulceration was present, and the patient suffered severely for many months; but eventually she quite recovered.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.

SOLID OVARIAN TUMOURS.

(Under the care of Mr. KNOWSLEY THORNTON.)

(*Concluded from page 358.*)

Case 8.—Removal of Solid Sarcomata of both Ovaries, with Cysts on their Surfaces, the two Tumours being grown together behind the Uterus.

(No. 275 in Ovariotomy Tables—not yet published.)

J. R. S., aged forty-nine, was admitted under my care in January, 1882.

History.—Family history good on both sides. Has enjoyed good health herself till the last two years. Two years ago noticed small lump in right side, like an egg; it has grown steadily, but much more rapidly in the last five weeks, during which the central masses have appeared. I had seen her ten days before admission, and was much struck with the rapid growth of some cyst-like projections from the upper parts of the tumour, which had taken place during these ten days.

Condition.—Not very healthy-looking; some set colour; no marked emaciation, but says that she has been wasting for last two years. The menses regular but scanty up to a year ago. Since that time menstruates every two or three months only.

I found in the abdomen a large irregular solid mass, with cystic projections at its upper part, and, from the way in which it surrounded the uterus in the pelvis, thought that it was very likely a group of uterine fibroids becoming cystic. As there could be no doubt about its rapid growth, and as it was hindering her from making her living as an upholsteress, I determined to explore the abdomen. I operated on January 14, 1882, and removed two solid ovarian tumours which had grown together into one mass behind the uterus, and both with cystic growths on their upper surfaces. The pedicle of that on the right side was infiltrated with sarcoma beyond the possibility of clear removal, and the tumour on the left side was wedged into the pelvic basin, and universally adherent, so that its removal was followed by very severe hæmorrhage. This was checked by the application of perchloride of iron to the whole of the bleeding surfaces, and then packing the pelvis with sponges. The tumours weighed seven pounds, and were both much of a size, and solid with the exception of the cysts projecting from their surfaces; these had dark contents, chiefly blood. Histologically the tumours were mixed sarcomata. The patient made a rapid recovery, without fever or trouble of any kind, and went out well on the twenty-fourth day after operation.

In the following August she came to show me a lump on the back of the head, which was causing her a good deal of pain. I feared it was a sarcoma, and probably growing from the skull. After my return from America, in October, I admitted her very ill, with the lump much increased, so that the head was elongated, and in shape like that of a newly born child. The mass was so soft that it suggested fluctuation, and on its surface there was a red sort of papilloma projecting. It seemed to me to be clearly a case of sarcoma of the skull, and I did not advise any interference; but as she begged hard for further advice, I transferred her to Professor Lister at King's College Hospital. Professor Lister agreed with me that no operation was advisable, but a nodule near the right ear shortly became so painful that it was removed, and the wound healed quickly and well. She died in the Hospital on November 29, death being preceded by symptoms of lung-mischief and delirium. A post-mortem was made, and the head tumour was found to involve the whole thickness of the skull and press upon the brain. There were tumours of similar structure on outer side of left thigh, and in abdominal parietes on same side. There were also deposits in the liver, kidneys, lungs, pre-vertebral glands, mediastinal and bronchial glands. The ovarian stumps are described as cicatricial patches, and it is worthy

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of special note that one was adherent to the jejunum and the other to the sigmoid flexure.

I have now given notes of all the solid tumours of the ovaries in my hospital practice, and have more briefly referred to those I have met with in my private practice. The total number of cases is ten, if we exclude one of those I have alluded to as having occurred in my private practice. I think it better to exclude this case as it belongs rather to the group we have already considered, "Papilloma-bearing Ovarian Cysts." I have now performed 338 ovariotomies, so that the ten cases give nearly 3 per cent. of solid tumours, a remarkably small proportion when we consider the structure of the ovary, and the variations of blood supply and pressure to which its stroma is subjected during the performance of its physiological functions. Small as the number of these cases is, they plainly show as a group certain common features.

In all the cases menstruation was irregular. In three the menses were entirely or almost entirely suppressed from the time the tumours were noticed, though in one of these cases only one ovary was affected; in four the menstruation was regular, but affected in quantity; and in another, though regular, the pain in the tumour at this time was so excessive that on the last occasion before the operation she almost died in collapse; in the other two cases the menstruation was very irregular—now scanty and almost suppressed, then violent and exhausting in amount. Of course, irregular menstruation is also met with in simple ovarian cases, but the rule with them is regularity. With the malignant cases the rule is, as we see, irregularity.

I do not think that pain is more common or more severe with the solid than with the simple cystic tumours; nor is the emaciation more rapid or more marked.

The differential diagnosis most frequently required in these cases is from uterine fibroids, and the irregular menstruation helps to mislead, but the facies is usually different, especially in colour; and whereas patients are usually inclined to be robust with fibroids, and are often fat (even when excessively blanched), extreme wasting, especially about the neck, breasts, and arms, is the rule with solid ovarian tumours.

I think it will ever remain impossible to formulate any precise rule as to the wisdom of operating or not operating in cases in which solid ovarian tumour or tumours can be pretty certainly diagnosed. My experience, not only in these particular cases, but in what I have seen in the practice of others, would lead me to the opinion that the immediate danger to the patient is greater than in ordinary ovariotomies, whether complicated or uncomplicated, and this is what one would expect when one considers that the patient's general constitutional condition is already depressed, and that frequently ligatures have to be applied on and among unhealthy tissues, portions of such tissue also having sometimes to be left behind more or less damaged, and with its nutrition impaired. My own ten cases illustrate this increased immediate mortality distinctly, for three out of the ten died from the operation—a mortality triple that of my whole series of cases, six times as great as that of my recent work, and thirty times as great as that of my simple cases, in which my mortality is *nil*.

If we now pass from the consideration of the immediate danger to the question of the chances of early recurrence, my experiences are not very encouraging. Of the seven cases which survived the operation, three were very ill and recovered with difficulty, four recovered rapidly and easily. Of the three, only one remains in good health, and had a child two years after the operation; one (Case 4), who was reported in good health eighteen months after the operation, is now suffering from recurrence in the abdomen; one third died, as I have stated, a few months after the operation, from pelvic recurrence. Of the four who made good recoveries, one died within the year from peritoneal recurrence, and the other three all died within the twelve months with diffuse sarcomata in various external and internal situations and in the glands. This rapid and general diffusion of sarcomata of the ovary after operations for their removal seems to me to make it extremely doubtful whether it is not a positive injustice and cruelty to the patient to operate at all, for their sufferings from the many tumours are undoubtedly greater than they would be from the ovarian growths left alone. Their lives are, it is true, prolonged for a few months, but the period of actual health is very short. Still, in Case 4, which appeared as hopeless as any case well could, the patient has enjoyed eighteen months of good health, much better than any she had enjoyed for years; and in the one really satisfactory case the patient not only remains well, but has become again a mother. No case could have looked more hopeless than this one did, and the tumour was of a kind in which one would have feared early recurrence. In considering the cases of patients doomed to speedy death if not operated upon, one such result as this out of ten comparative failures is not to be despised, and so I think I shall be inclined still to give the patient the chance of operation, unless there is such distinct evidence of spread of the disease into broad ligament or neighbouring parts that complete removal is out of the question.

In continuing the series of cases, I propose now to deal with the class Simple Dermoid Ovarian Tumours, as distinguished from those rarer malignant dermoids which I have described.

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Medical Times and Gazette.

SATURDAY, APRIL 7, 1883.

THE GOVERNMENT MEDICAL BILL.

The Government Bill "for the Consolidation and Amendment of the Law relating to Medical Practitioners," introduced in the House of Lords, stands for its second reading in that House on Thursday this week. But as it has only the ninth place on the business paper, it must be held doubtful whether it will be reached; and should it come on, it will do so too late to admit of our reporting the proceedings this week. As we anticipated, some parts of the Bill will be strenuously opposed. There is no longer any doubt about that; but we doubt whether any serious objection will be offered to the second reading. It seems more probable that what is good and desirable in the measure will meet with such general recognition, that all determined opposition to the objectionable parts will be reserved till the Bill is in committee. The measure unquestionably contains good as well as evil provisions, and calls for very careful and serious consideration. Great efforts are being made in some quarters to induce the profession to petition Parliament, without mentioning that any amendments are needed to make it acceptable. The members of the British Medical Association, and "all members of the profession who have

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the welfare of the public and of the profession at heart," are strongly urged to sign a petition to the House of Lords, praying that the Bill may become law, because "provision is therein made for improvement in the examination of candidates for the medical profession, and for the introduction of representatives elected by the registered medical practitioners residing in the United Kingdom of Great Britain and Ireland into the Medical Council." That is the whole of the petition. No matter what else it is proposed to enact by the Bill, so long as it contains those two provisions, medical practitioners are bidden to pray that it may pass. Now, no doubt the framers of the Bill fully intend that it shall make provision "for improvement in the examination of candidates for the medical profession," and believe that it does so in its present shape; but it is certain that, in the opinion of very many men of high ability and sound judgment, it only throws over, positively as regards the final professional examination for a licence to practise, and possibly as regards the previous ones, old and experienced examining bodies in favour of some brand-new boards of examiners. Regarded in the most favourable light this provision seems to be at the best a somewhat rash and, unnecessary experiment. As to the second of these two provisions of such paramount importance, if "the profession" really desire it above almost everything else, we are content, and more than content, that Government should grant the boon. We have never been able to believe that the Medical Council will be greatly strengthened in any way by the addition of a few "direct representatives" of the profession; but neither can we believe that their presence will do any harm. This provision of the new Bill will not meet with any opposition, we imagine; but at the same time we suspect that many members of the profession may, even if they are members of the British Medical Association, think that it is possible to pay too dearly for it. Whether medical men agree with us on these points or not, we trust they will not petition the Legislature in favour of the measure in question till they have had opportunities of thoroughly examining all its provisions, and of considering criticisms of it more close and thoughtful and less wholly laudatory than any that have yet been placed before them.

The first published document in opposition to some of the provisions of the Government measure came from the University of Dublin, and we placed that paper before the profession last week. Our present issue contains a petition against some parts of it from the King and Queen's College of Physicians in Ireland. But it is impossible for us to consider or publish in full all utterances of this character, and we propose now only to set forth some of the points dealt with in an able, carefully drawn-up, and temperate statement presented by the President and Vice-Presidents to the Council of the Royal College of Surgeons of England, and adopted by the Council, respecting the Bill. The Council, after careful consideration, feel bound to state that, in their opinion, "whilst some of the provisions of the Bill appear to be well adapted to bring about a consolidation of the present examining authorities in each division of the kingdom, and to provide for other requirements of home, colonial, and foreign practitioners, in relation to each other and to the public, there are other provisions which are open to grave objection, not merely because they would surely tend to diminish the influence of existing institutions of acknowledged experience, of long-established reputation, and of recognised utility, which are able and willing to do all that is essential to accomplish the improvements demanded, but also because the new authorities and powers proposed to be created by the Bill, for accomplishing the same ends, could not possibly realise better examinations, and therefore better results for medical education, for the medical profession, and for the public." The Council then proceed to state the conclusion at which they have arrived, first upon those provisions of the Bill which affect medical education and examinations, and the grant and registration of medical titles; and, secondly, upon various other provisions which relate to the general working of the proposed measures. As to the proposed three Medical Boards, after referring to the functions and duties it is proposed to give them, the Council say, "In the Bill it is proposed to incorporate these three elected Medical Boards, to give them an existence in perpetuity (Clause 9, Section 6), to enable them to acquire property, to empower them to receive fees, and to pay the Examiners and the expenses of the Final Examinations (Clause 38). It is further proposed—subject, no doubt, to the approval of the Medical Council and Privy Council—that these Boards may declare themselves recognised examining authorities for the earlier examinations (Clause 20, page 11, five words in line 3); although they (Clause 9, Section 9) may be in part composed of non-medical members. Against these several proposals the Council of the College of Surgeons energetically protest. It is the opinion of the Council that the functions of the Medical Boards, if they should be established, should be strictly limited to framing 'schemes' for the course of medical education, for the conduct of all the necessary professional examinations, both early and final, for the due certification of the results of such examinations, and for such general supervision of the examinations either by themselves or by appointed visitors, as would enable them to provide that such schemes were properly carried into effect—of course with power and duty to report to the medical authorities and to the Medical Council thereon. Such would be legitimate functions and duties of Medical Boards, elected by the constituted medical authorities, and placed, as it were, in mid-relationship between those authorities and the Medical Council. On the other hand, to endow these Medical Boards, elected by the medical authorities, with such independence and power as is contemplated in the Bill, would be to create, by the action of the already constituted medical authorities, new and unnecessary outside authorities, equal in influence to those authorities themselves: and, indeed, taken in connexion with other provisions in the Bill relating to the proposed sole qualifying medical title and its registration, to which further attention will be presently directed, superior to those authorities. In the opinion of the Council, the loss or diminution of privilege, position, and influence, in this way inflicted on the constituted medical authorities, would be accompanied by no commensurate advantage to the profession or to the public. The employment of such intermediaries for such purposes would yield no results better than those which are attainable by leaving such functions in the hands of the combined constituted authorities themselves."

The Council of the College then object to the provision that will give to a Board, on which they will have only the privilege of electing about once in five years one-fifth of the representatives, the power of declaring the competency of the Council as a "recognised authority" to conduct, or to appoint to conduct, the *earlier* examinations, which are now their own of right, and "as regards the final or qualifying examination, admitting that that is to be held under a scheme framed by the Board, according to which the College would have no security that it could *appoint* the surgical examiners, it would not pay those examiners, nor would it pay the expenses of the examinations, and so would lose practical interest and control over the character and completeness of this final examination—an examination for the holding of which it has been specially chartered, to which it attaches the deepest significance, in relation to its duty to

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itself and to the public, and which it guards with a strictness which is believed (by some of its critics) to be needlessly severe."

As regards medical titles and their registration, the Council observe:—"The sole qualifying examination being the final examination conducted under the scheme framed by the Medical Board for England, in which the surgical examiners would presumably be those acting for the Royal College of Surgeons, the *only qualifying title* obtainable by home practitioners, on and after the day on which the contemplated measure comes into operation, would be that of 'Licentiate of the Medical Council in Medicine, Surgery, and Midwifery' (Clause 27); and this is to be the only medical qualifying title which would after that date be entered upon the Medical Register in its first appropriate column of titles (Clause 29). The intention and effects of these proposals, at which the Council cannot help expressing both surprise and regret, would seem to be to exclude from the Register in future the title of M.R.C.S.E. as it is now granted, as well as other similar 'lowest' qualifications. At the same time, these proposals would admit, on the part of the Medical Council, a 'licensing' as well as a 'registering' function—a singular and unheard-of anomaly in regard to a body which is not itself to examine. It further seems to the Council that this exclusion of the lowest titles from the columns of the Register is intentionally encouraged or invited; for (under Clause 36) it is proposed that 'any of the medical authorities sending representatives to the Medical Board may, if it thinks it expedient to do so, admit *without further examination* any person who has passed a final examination under the Act to its lowest qualification;' in which case these lowest qualifications could not be registered in the column for 'higher medical titles' (Clause 27, page 13), which are defined to be such as 'in the judgment of the Medical Council appear to be granted on a substantially higher degree of knowledge or as a testimonial of higher distinction' (Clause 27, page 14)." The Council dwell at some length on this subject, pointing out that the College, and any other Institution which continued to grant "lowest" qualifications, would accordingly be placed in this dilemma, either to add to the examinations for their lower qualification something that would, in the judgment of the Medical Council, imply a substantially higher knowledge, or submit to the exclusion of the title from the Register; and the Council explain why they cannot acquiesce in either alternative. The Council also call attention to the fact that while it is asserted that the Bill is framed on the basis of the Report of the Royal Commission on the Medical Acts, yet the proposed non-registration of the lowest medical titles is not in accordance with paragraph 80 of that Report, which runs thus:—"We think that all titles now registrable, if recognised by the Medical Council, and all titles of a similar character hereafter recognised by the Medical Council, should be registrable." As regards various details in the working of the proposed Act, the Council of the College are content with offering some very brief criticisms. They hold that as the schemes framed by the Medical Boards will chiefly affect the education and examination of future general practitioners, and will therefore concern the corporations more seriously than the universities, the representatives of the former authorities should not be in a minority on the Board for England; they are not so on the Irish Board. They are of opinion—as, we imagine, will be the vast majority, to say the least, of the profession—that all the members of a Medical Board should be members of the medical profession; that it will not be wise or expedient to permit the same person to be a member of more than one Medical Board; and that the proposal which makes it possible for the Medical Council to be constituted entirely of laymen ought to be amended so as to insure the presence in the Council of some proportion, at any rate, of medical members. The Council of the College consider that it would be better to leave the control of the preliminary examinations and of the registration of medical students to the Medical Council or its delegates, as at present, instead of transferring the work to the Medical Boards; and that the Boards should refer their schemes, for consideration and comment, to the medical authorities, as well as to the Medical Council for approval; and, further, that the medical authorities ought to be given a right of appeal to the Medical Council and to the Privy Council in relation to those schemes. They think "the power of authorising persons to prosecute for offences under the Act should not be exercised by the Medical Boards, and preferably not by the constituent medical authorities (Clause 28, Section 5); but it would be better to be in the hands of the Medical Council and of the Public Prosecutors. Neither should the Medical Boards have the management of the election of the representatives proposed to be returned as members of the Medical Council by the resident registered practitioners of the three divisions of the kingdom (Clause 55); for such work would be quite unsuitable and distasteful to a Board specially elected for duties of a totally different character. The discontinuance of the existence of Branch Councils, implied in the Bill, need not lead to the transference of unsuitable duties to the proposed Medical Boards; for, under the name of 'Executive Committees,' Branch Councils might be retained and perform such functions." And, finally, the Council recommend that the proposal to levy on every practitioner already registered an annual registration fee should be abandoned.

We commend this statement of the Council of the College to the consideration of all thoughtful and unprejudiced practitioners. They have been told, and will no doubt be told again and again, that the existing medical authorities are interested in maintaining the present state of things, and are therefore bound to be hostile to any Medical Reform Bill; and it follows that the opinions of such bodies as the College of Physicians of London and the Council of the College of Surgeons of England upon the present Medical Bill are, and must be, so tainted with prejudice as to deprive them of all weight and value. But the profession will remember that the governing bodies of these medical corporations consist, for the most part at any rate, of men as able, as high-minded, as deeply interested for the welfare of the public and the profession, and at the least as well acquainted with the needs of the profession, as are any men anywhere else in the whole ranks of the profession. The opposition offered to the Bill has so far been very temperate: all are anxious that no man shall be admitted to practise the profession unless he has shown proof of competent knowledge of medicine, surgery, and midwifery; and we accept "direct representation," and hope for benefit from the reconstitution of the Medical Council: these and other parts of the measure will meet with little or no opposition. On the other hand, the Government will, we believe, be ready to consider impartially all reasonable amendments that may be proposed, and will prove by no means obstinately committed to the Bill as it is.

THE RELATIVE VALUE OF MILKS AS FOOD FOR INFANTS.

Milk analyses have hitherto been carried out mainly, if not solely, with a view to the detection of fraudulent dilution or removal of the fat, and for these purposes it has been sufficient to classify the solids as casein, fat, sugar, and salts, or even as fats and solids other than fat. In either case the nitrogenous constituents have been considered as casein alone.

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But there is another practical aspect of the question, that of infant feeding. It is well known that the fat, and still more the casein, of cows' milk is greatly in excess of what is found in human milk, but that cows' milk may, by dilution and the addition of sugar (preferably lactose), be reduced to a composition differing but little from that of human milk. Still, as daily experience teaches, there is a difference. Cows' milk, however treated, is less digestible, the casein appearing in the fæces, or, remaining as curds in the digestive canal, causing gastric disturbance. Does the casein exist in what may be termed *allotropic* forms, or are there other proteids which, existing in diverse proportions, give different characters to the mixtures? Unfortunately, the facts at our command are scanty and unsatisfactory, but the subject offers a fine field for investigation. Many chemists now recognise two proteids—casein, and an alkali albumen probably identical with serum albumen. Their reactions are somewhat different, for careful acidulation of the milk with acetic acid, followed by the passage through it of a stream of carbonic acid, will throw down the casein, leaving the albumen in solution, owing to the presence of the phosphates, whence it may be precipitated by heat or potassium ferrocyanide. Rennet, too, whether acid or neutralised, precipitates casein, and the coagulating ferment is, as Hammarsten has shown, quite distinct from pepsin. The albumen, being less easily coagulated, is more speedily and completely converted into a diffusible peptone by the pepsin than is the casein, and Dr. Husson, of Toul, has recently advanced the notion that the digestibility of milks and their suitability for infant feeding depends directly on the proportion which these proteids bear one to the other. According to Husson, there are, for every 100 parts of albumen in human milk, 122 of casein, in goats' 173, and in cows' 239; in other words, the more casein the less fitted for infant use. The figures given by Mr. A. W. Blyth differ widely from these, but show the same order: for each 100 parts of albumen he gives 155 of casein in asses', 358 in human, 484 in goats', and 557 in cows' milk, while Professor M. Foster gives the last as 838. Such astounding discrepancies deprive all present comparative analyses of value, and urgently call for the reopening of the whole question. The proportion between these bodies suggests, too, the idea of their relation, and certain facts seem to indicate that casein is a more highly specialised stage in the production of proteids. It is well known that the casein increases at the expense of the albumen when cows' milk is kept out of the body at a temperature of 35° C., and Dr. Vieth has noticed a loss in the "solids not fat" at lower temperatures. Dr. M. Foster states that the albumen is in excess whenever the action of the secreting cells is in any way disturbed, as at the commencement or close of a milking. Dr. Frankland, however, takes the same view as Dr. Husson, for the special feature of his process for the production of an artificial human milk is the precipitation and removal of a large part of the casein, leaving the albumen. We know that the percentages of proteids and fat in cows' milk differ at an early and a later period after calving, the fat diminishing as the casein increases, and that the "strippings" are richer in all solids, especially in fat, than the foremilk; but our knowledge of the composition of human milk is most defective, and will be so until, instead of examining a few grammes drawn off regardless of whether the infant has or has not been at the breast, we exhaust the full breasts of numerous women of different temperaments—for sensitive woman is a thousandfold more obnoxious to disturbing influences than that most stolid of animals, a cow. M. Tarnier, addressing the Academy of Medicine on the question of infant feeding, stated that in the Paris Maternity the mortality of the very young declined greatly when for the first six or eight weeks asses' milk was employed, to the sixth month cows' milk diluted, and afterwards pure cows' milk. M. Parrot reported like results with asses' milk in the treatment of syphilitic infants at the Hopital des Enfants Assistés. Of six fed exclusively on cows' milk, five died; of forty-two on goats', thirty-four succumbed; and of thirty-eight on asses', only ten—all other circumstances being the same. The belief in the virtues of asses' milk is as old as medicine itself, and goats' milk is popularly preferred to cows' in many countries; and it is well worth careful investigation whether the theory of M. Husson as to the relative proportions of casein and albumen in each, and the superiority of the latter, may not explain it, though his actual figures can scarcely be accepted as correct. If so, it would be another instance, like the communicability of tubercle, in which popular belief has anticipated scientific discovery.

THE WEEK.

TOPICS OF THE DAY.

As a result of the agitation on the subject of the blow-holes on the Thames Embankment, Dr. Neale's invention, called the "chemical lung," has been brought prominently forward. Some experiments were recently made with this method, the apparatus employed consisting of pieces of woollen material forming an open network, and suspended from the top of the room, the lower end resting in a solution of caustic soda. When in operation these "punkahs," as they are called, are swayed backward and forward, and the solution drawn up by the woollen tissue rapidly absorbs the carbonic acid, or sulphuretted hydrogen, from the air, and leaves it pure and comparatively cool. Before the test began, the air of the room selected was made tolerably bad by the gas-burners, and the presence of at least fifty persons, all the ordinary ventilation being purposely stopped; and, in addition to this, sulphur was burnt in the apartment until the point of semi-suffocation was nearly reached. The experiment then began by the punkahs being set in motion, and in ten minutes all trace of the sulphur had disappeared, and the thermometer showed a fall of seven degrees, the only sensible evidence of the process employed being that the air was not unlike that of a room recently whitewashed. Dr. Neale suggests that this process could be applied to the Underground Railway, and if attached to each train would, as an auxiliary to the existing ventilation, so purify the tunnels of smoke, heat, dust, carbonic acid, and sulphurous gas, as to render additional shafts unnecessary. He computes that the cost would not exceed one shilling per train journey, and that this extra cost would be more than met by an additional number of first-class passengers, who now avoid the underground lines on account of the state of their atmosphere. Several gentlemen present, including some medical men, expressed themselves well satisfied with the success of the experiment, and it was unanimously agreed that for hospitals and overcrowded rooms it offered great advantages.

The legislation on the subject of canal-boats is either not yet sufficiently stringent, or it is only imperfectly carried out; whichever it may be, some modification is undoubtedly necessary, since it is reported that during the past few weeks two registered canal-boats have been conveying small-pox with impunity to different parts of the country. In one case two children and a boatwoman were left at Leighton suffering from this disease, the boat continuing its course without disinfection of any kind, until subsequently another child suffering from the same malady was sent from it to Leicester. A few days later a doctor who was applied to pronounced another child in the cabin to be ill of the same complaint, but the boat still continued its journey. In the

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second case two children were left at Berkhampstead ill of small-pox, and the boat, with two other children still in the cabin, was allowed to move forward into Staffordshire.

The *Revue Scientifique* has lately published an article upon the often-debated subject—the terrible loss of life in India from snakes and wild beasts. Our contemporary gives a mass of statistics showing that as many as 20,000 deaths occur annually in India from snake-bites alone, and that since the year 1870 from one hundred and fifty to two hundred thousand persons have perished in this way. It is shown that India possesses more deadly snakes than any other country, and the bite of the cobra is often fatal within half an hour. In the year 1880, 212,776 serpents of all kinds were destroyed, and rewards amounting in all to 11,663 rupees were paid for their destruction. In the North-West Provinces and in Oude a body of Kanjars has been formed for the especial purpose of killing off the venomous reptiles of those districts. The men receive two rupees per month, and if a man is so fortunate as to destroy more than twenty snakes during that period, he is paid so much a head for all in excess of that number. In 1881 wild beasts caused the death of 2757 persons, as against 2810 in 1880, and the number of animals killed by them every year is enormous. During the year 1881, 1557 tigers and 3397 leopards were paid for as having been destroyed. Most of this information has already appeared from time to time in our pages, but it will well bear repetition, as increased publicity of the subject may help to stir up the Government of India to adopt some less ineffectual means of putting a stop to, or at any rate of lessening, this annual sacrifice of human life.

Mr. Robert Cousins, of the War Office, a member of that sect most appropriately termed the "Peculiar People," has again been charged with neglecting to provide medical assistance for one of his children recently deceased. It will be remembered that this person was found guilty of "manslaughter" by a coroner's jury, in January last, for allowing another of his children to die, without calling in medical aid to alleviate its sufferings, if not to prolong its life, but upon the case being sent up to the Old Bailey Sessions, the grand jury threw out the bill and he was liberated. Upon the present occasion the coroner's inquiry has again resulted in a verdict of "manslaughter"; but at the Lambeth Police-court the magistrate, referring to the previous case, decided to discharge the prisoner. Mr. Chance, however, raised the question as to whether Cousins was not liable to be proceeded against under another provision, namely, for neglecting to provide proper advice, whereby the child's life was endangered; and he directed that the attention of the Public Prosecutor should be called to the matter. It is to be hoped that this latter functionary will see his way to institute further proceedings upon the present occasion, since in this instance the offender is not a member of the uneducated portion of the community, but belongs to a class of society capable of appreciating the duties of parents towards their children. Even those who vote in these enlightened days for freedom of opinion will be constrained to admit that if a "Peculiar" adult is to be permitted to sacrifice his life through the eccentricity of his tenets, the lives of those of tender years should be as much as possible conserved until they are capable of electing whether they will be bound by the rules of common-sense or the contrary.

Public attention has been called upon many occasions of late to the helpless way in which ratepayers are handed over to the water companies of the metropolis. The following case goes still further to prove how monstrous are their powers and how remunerative their business. The workhouse of the Holborn Union in Farringdon-road, which has been closed for a period of nearly three years, is still charged with the old water-rate of £22 per annum, being the same amount as when it contained between 500 and 600 inmates. The property is the freehold of the parish of Clerkenwell, to whom the Union pay a rent of £400 per annum. The Guardians of the Holborn Union are desirous of giving up the possession of the building to Clerkenwell, but the Local Government Board will not allow them to do so until they first build a workhouse elsewhere for the accommodation of the indoor poor of the Union, and in the meanwhile the Union has to pay a water-rate for an uninhabited building without making use of the supply provided.

His Royal Highness the Duke of Albany, in his capacity of President of the Hospital for Consumption, Ventnor, has consented to take the chair at a public dinner to be held on the 18th inst., at Willis's Rooms, in aid of the funds of this charity. At the recent annual meeting of the governers of the Hospital it was stated that the receipts for the past year were £6047, whilst the expenditure had been £7749, unfortunately necessitating the sale of some of the Hospital's invested property. It was further announced that a notice had been received that a gentleman of the name of Jones, who had died lately, had bequeathed the residue of his estate to the Hospital, which is expected to yield an income of about £2000 a year. During the past year the number of in-patients under treatment was 633, a larger number than in any previous year.

There can be but one opinion as to the healthy influence of the national sports and pastimes of this country upon our youths and young men, but, without for one instant wishing to curtail the manliness and endurance of our games, the time would certainly seem to have arrived for insisting on some universally accepted change in the rules and laws of football. Whatever may be advanced to the contrary, it is evident from the numerous accidents, often very serious and not seldom fatal, almost daily recorded, that this game is now played with unnecessary and unjustifiable vehemence and recklessness. If not to the players themselves, it must to their relatives appear perfectly unnecessary that the risks of a football encounter should go so far as to endanger the very lives of the players. We are induced to pen these remarks on account of a shocking accident reported to have happened at Birkenhead on Saturday last. During a football match being played there, a young gentleman named Wilson, the son of a Liverpool merchant, was running with the ball, when he was "collared" by an opponent and thrown violently to the ground, falling on the back of his neck and injuring his spine. Paralysis of nearly the whole body immediately ensued, and he was removed to the Borough Hospital, where he expired the following night. At the inquest, held April 2, evidence was given by some of the players and by the umpire, proving that there was nothing in the play or the fall "to break any of the rules of the game," and the poor fellow who was so fatally hurt had expressly stated that the game was quite fair, and that he was more sorry for his comrade who had been the cause of his mishap than for himself. The Coroner observed to the jury that he had seen fractures of legs and arms, and dislocations without end, in the football field. The verdict was, of course, "Accidental death"; but though it may not be possible, short of forbidding the game, to prevent such "accidents" altogether, it must surely be possible to considerably lessen the liability of their occurrence.

On Saturday last the newly formed Metropolitan Asylums Board held its first meeting at the offices in Norfolk-street, Strand. It should be understood that the Board is composed of forty-five representatives nominated by the guardians of the London parishes or unions, and twelve nominated

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by the Local Government Board, and its term of office is three years. On Saturday last the whole business transacted had reference to the details connected with the working of the Board; thus, Mr. E. H. Galsworthy was unanimously re-elected as chairman, and Sir E. H. Currie as vice-chairman, and the various committees for the different asylums and hospitals were selected and approved by the meeting.

The scholarships in medicine and surgery recently founded by the Society of Apothecaries of London are each of the value of £100. They are tenable for two years, and are open to all medical students of a certain standing. The dates of the examinations for the respective scholarships, and other particulars, have not, however, yet been announced.

THE TOTAL ABOLITION OF VIVISECTION.

Mr. R. T. Reid's Bill for the Total Abolition of Vivisection came on for second reading in the House of Commons on Wednesday last. Mr. Reid, in moving the second reading, employed the ordinary statements and misstatements that with anti-vivisectionists serve for arguments. He would not say a word that could be twisted into a reflection on the body of medical practitioners; and then immediately went on to allege that medical men could not discharge their duty properly unless they had acquired some degree of insensibility to pain, and their familiarity with pain tended to deaden their sympathy with the suffering of animals. Mr. Reid, like many silly and unobservant persons, mistakes self-command in the presence of suffering for insensibility. Mr. George Russell's speech in support of the Bill was so intemperate, and so full of exaggerations, that it cannot but injure the cause he wished to advocate. Mr. Cartwright spoke very well and temperately in support of the Bill; and Mr. Lyon Playfair and the Home Secretary made somewhat brief but excellent speeches against it: Mr. Playfair stating clearly and forcibly the arguments in support of scientific experiments on the lower animals, and defending medical men from the charges so rashly made against their humanity; and Sir W. Harcourt supporting Mr. Playfair's statements, and setting forth the elaborate precautions taken to prevent any abuse of the powers retained under the present law. The debate was stopped in accordance with the rules of procedure on Wednesdays, and stands suspended. On the 3rd inst. the following letter on the subject of the Bill was addressed to the Home Secretary by the Presidents of the Royal Colleges of Physicians and of Surgeons:—

April 3, 1883.

Dear Sir William Harcourt,—At a meeting, yesterday, of the Association for the Advancement of Medicine by Research, we, as Presidents of the Royal Colleges of Physicians and of Surgeons, were requested to let you know that the almost unanimous feeling of the Fellows and Members of the two Colleges is strongly opposed to the Bill for the Abolition of Vivisection, which is to be brought in to the House of Commons to-morrow.

Believe us to be, dear Sir William, faithfully yours,

William Jenner,
President of the Royal College of Physicians.
T. Spencer Wells,
President of the Royal College of Surgeons.

UNIVERSITY OF EDINBURGH.

At the meeting of the Senatus Academicus, held on March 31, Dr. Argyll Robertson was appointed Lecturer on Diseases of the Eye in the Faculty of Medicine—the course of lectures to be delivered during the summer session. It was resolved to confer the honorary degree of Doctor of Laws (LL.D.) on William Tennant Gairdner, M.D., Professor of Practice of Physic in the University of Glasgow, and W. Crawford Williamson, Professor of Botany, Owens College, Manchester.

THE PATHOLOGY OF DIABETES.

The discussion of this subject, which had been determined upon by the Council of the Pathological Society, was commenced at the meeting of the Society on Tuesday last by Dr. Wilks, who, in a characteristic speech, gave a historical summary of the various lesions that have been held at one time or another to be the cause of the disease. He was followed by Dr. Ralfe, who confined his attention exclusively to acute diabetic coma, pointing out that the symptoms were really those of acute poisoning, and showing the close analogy that existed between the symptoms in acute yellow atrophy of the liver, in phosphorus poisoning, and acute diabetic coma. His remarks on the probable chemical changes in the blood which led to the so-called condition of acetonæmia were very valuable, and, indeed, constitute the only attempt at any advance in our knowledge. The other speakers all dealt with the pathological anatomy of the disease, Dr. Hale White treating only of the nervous centres, Dr. Finlay and Dr. Stephen Mackenzie discussing the appearances presented by all the viscera in a considerable number of cases. We think it may fairly be considered to be proved that the dilated perivascular lymph spaces and vacuolations described by Dr. Dickinson have no causal relationship with diabetes, and that the symptoms of acute diabetic coma have rarely, if ever, anything to do with fat embolism. None of these speakers had found any constant lesion, the alteration of the renal epithelium described by Dr. Stephen Mackenzie, which was the most frequent lesion found by him, was, in his opinion, probably the result of the disease. We were rather surprised that so little attention seemed to have been paid, during the post-mortem examinations from which the three gentlemen drew their statistics, to the condition of the sympathetic nervous system. We shall hope that some information as to its condition will be forthcoming when the discussion is resumed. The continuation of the debate was postponed till May 1, to meet the views of some speakers who would have been unable to be present had the meeting been held on April 17, as originally proposed. Pressure upon our space compels us to hold over our report of the meeting.

PROFESSOR GROSS.

In contradiction of the rumours that Professor Gross intends retiring from active practice, the veteran thus writes in the *Maryland Medical Journal*:—"Will you kindly correct an error which crept into 'Our New York Letter,' and thus save me from becoming an idle and useless man during the remainder of my life? I have not retired from practice, and have no such intention. As long as I have eyes to see, hands to work, and a brain to guide my actions, I cannot consent to lock up my experience, or to consign myself to *ennui* and obliviousness. I am determined to work to the end, whenever that may come."

TUBERCLE-BACILLI IN CHROMIC ACID PREPARATIONS.

Specimens of tubercle in various organs, preserved in chromate solution, are to be found in many pathological laboratories. Koch and Ehrlich have said that the staining of bacilli in tissues which have been preserved in solutions of that kind is not possible; but Dr. Veraguth, of Zürich, seems to have shown that this statement is not universally true. Portions of the specimens are placed for two or three days in a current of flowing water, and then re-hardened in spirits of wine. If the sections are made with the freezing microtome they must first be placed for twenty-four hours in water again, and then transferred to the gum solution. After being cut the sections must remain for *twenty-four* hours in absolute

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alcohol, and then stained in the watery solution of anilin and fuchsin for *forty-eight* hours; the decolourisation is then carried out with the nitric acid, and the groundwork composed of the normal tissues stained with methylen blue as in the ordinary method.

THE ARMY MEDICAL SCHOOL.

The forty-sixth session of the Army Medical School was opened on Monday, the 2nd inst. Fifteen surgeons on probation for the Army, and five for the Indian Medical Department, have entered for the present session. The opening address was to have been given by Professor Aitken, M.D., F.R.S., but, on account of his severe illness, it was read for him by his colleague, Professor de Chaumont. It dealt mainly with the medical histories of the Walcheren and Crimean campaigns, as showing the serious influence previous disease and hard service had upon the subsequent health of the men and their power of resisting insanitary conditions. This was exemplified by the breakdown of the men of the Walcheren expedition who had previously campaigned in the Peninsula, and of that portion of our Crimean army which had previously suffered in the occupation of Bulgaria. It was also pointed out that our disasters have arisen very largely from the state of unpreparedness which has prevailed, and the inadequate provision, in the first instance, of the necessary accommodation, *personnel*, transport, and appliances required for the proper treatment and removal of the sick and for the prevention of disease. We regret to learn the very serious illness of Professor Aitken. The class of Pathology will, in the meantime, be carried on by his recently appointed assistant, Surgeon-Major T. Lewis, M.B., whose reputation as a pathologist and original investigator is widely known.

THE PARIS WEEKLY RETURN.

The number of deaths for the twelfth week of 1883, terminating March 22, was 1316, and of these there were from typhoid fever 39, small-pox 9, measles 25, scarlatina 1, pertussis 9, diphtheria and croup 43, erysipelas 5, and puerperal infections 1. There were also 60 deaths from acute and tubercular meningitis, 306 from phthisis, 54 from acute bronchitis, 128 from pneumonia, 59 from infantile athrepsia (17 of the infants having been wholly or partially suckled), and 32 violent deaths. The number of deaths for the week greatly exceeds the mean of the last four weeks, 1184. The increased mortality is principally to be attributed to phthisis, the deaths from this disease, which during the last four weeks had attained a mean of 233, now mounting up to 306, being the first time so large a number of deaths from this cause has been registered. Among epidemic diseases there has been a slight increase of deaths from typhoid fever, measles, and diphtheria. The number of civil burials has increased gradually from 16 per cent. in April, 1881, to 23·83 per cent. in February, 1883. The births for the week amounted to 1395.

VICTORIA UNIVERSITY, MANCHESTER.

At a meeting of the University Court of the Victoria University, held on March 30, Vice-Chancellor Greenwood laid on the table the supplementary charter, dated March 20, 1883, enabling the University to confer degrees and distinctions in medicine and surgery. After some discussion it was resolved, on the motion of Dr. Ward, seconded by Mr. Oliver Heywood, that the Council be empowered and instructed to appoint external examiners in medicine and surgery for a limited period, and to appoint certain lecturers of the University to act as University examiners; also to prepare, after a report from the General Board of Studies, a statute or statutes and regulations relating to degrees in medicine and surgery for the consideration of the Court, and also to report of the subsequent appointment of external examiners in medicine and surgery, in accordance with the recommendation of the University Council. The Council were instructed to ascertain whether the University charter would allow of the same facilities that had been given to Owens College students being extended to the students of other colleges when those colleges sought admission to the University. The Council themselves are of opinion that such facilities should certainly be given.

PROPOSED VOLUNTEER ARMY HOSPITAL CORPS.

A movement to promote the formation of a Volunteer Hospital Corps in London, which we understand has been on foot for a few weeks, now promises to take a more definite shape, and to assume large proportions. It appears that it has occurred to some of the most enthusiastic of our young metropolitan surgeons, that it would be well that the whole body of the medical students in London should be trained in ambulance work, and attached as corps belonging to the different hospitals to local volunteer regiments. Were this carried out, it is hoped that two advantages of the first importance would be secured to the country and to the profession. In the first place, the Volunteers would be supplied with an arm of the service without which they would never be able to take the field. The condition of the regular Army itself, as regards the organisation of the transport and ambulance departments, is such as to be at this moment the subject of an official inquiry; and the Volunteers, from whom the regular Army might hope to draw in times of war an intelligent army hospital corps, do not possess even an attempt at such a department. It is true there are a few stretcher-bearers in the more fully equipped Volunteer regiments, but they belong to the ordinary rank and file of fighting-men, who are prepared to fall out and attend to their sick and wounded comrades. The Volunteer movement furnishes the most remarkable instance in our time of a great national organisation for the common good, and the force which it has produced is acknowledged to be worthy of the confidence of any commander. It is all the more disappointing to find that in the event of an invasion the want of a properly equipped field hospital would prevent the Volunteers from moving with expedition and confidence against the enemy—the truth of which statement will be frankly acknowledged by all intelligent Volunteer surgeons who have been in medical charge at sham fights and reviews. Nothing, therefore, could well have been more happily conceived, or be better timed, than the proposal to supply this want by the formation of the thousands of medical students and young practitioners of London and the provinces into a great ambulance service—skilful, enthusiastic, full of the enjoyment of wholesome exercise in times of peace, and ready for serious work in the event of war. The second advantage which will flow from this scheme, if it can be realised, is a professional one, namely, the effect of the training upon the student Volunteers themselves. The success of the Volunteer movement shows how popular with the youth of this country exercise is, even in the form which might be considered the least attractive of all—military drill. But, beyond this, there can be no doubt that the technical knowledge, and practical readiness and skill, which every intelligent member of a Volunteer Army Hospital Corps must acquire, will be of a kind to prove of great service to him in the practice of his profession—the immediate treatment of serious emergencies, the safe and easy conveyance of the sick and wounded, the organisation of relief on a large scale, which

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may be demanded of any practitioner in the event of a sudden epidemic. The movement is sure to be a popular one amongst students themselves; indeed, we understand that at Charing-cross Hospital, where the movement originated with Mr. Cantlie, a large proportion of the students are already far advanced in drill. It now remains for the leading members of the surgical part of the profession to show their appreciation of the national importance of the scheme, by giving it their hearty support.

CYSTIC DEGENERATION OF THE DECIDUA VERA.

THE pathology of the decidua is a subject which has only been studied in quite modern times. Until it was recognised that this structure was not an exudation or new formation, but simply the developed mucous membrane of the uterus, any understanding of its morbid states could never have been reached. Although a good deal has been done at it, still, as the subject is a new one, our knowledge is probably very incomplete. Hydrorrhœa gravidarum has been attributed to catarrhal inflammation of the decidua. Croupous or diphtheritic endometritis, and sloughing endometritis, have been placed among the diseases embraced under the term "puerperal fever." A chronic hypertrophic, and a polypous decidual endometritis, have also been described. In endometritis of the non-pregnant uterus, blocking of the gland-ducts, and dilatation of the glands by retained secretion, is a not infrequent change. But this far more rarely affects the decidua of pregnancy. Hegar is, we believe, the only author who describes it. A case is recorded by Dr. Carl Breus, of Vienna, in a recent number of the *Archiv für Gynäkologie*. In his case the patient, aged twenty-nine, aborted during the third month of pregnancy. She had had four children, all living. The uterine contents came away entire, and the mass looked at first sight as if it were an ovum in which cystic degeneration of the chorion was commencing. It was about the size of the fist, and was studded over its whole periphery with little bladders about the size of a hempseed. When opened, the fœtus, with its amnion, chorion, and decidua reflexa, were found within it, all normal in structure. The external membrane was therefore identified as the decidua vera. Its outer surface was, as mentioned, studded with small thin-walled cysts. Microscopic examination showed the decidual membrane to be infiltrated with small cell-elements, from the presence of which the inflammatory nature of the disease was inferred. An epithelial lining to the cysts could not be demonstrated; they seemed to be filled with a colloid matter, which Dr. Breus supposes had been formed by degeneration of the glandular epithelium once lining the cysts. He remarks that, as nothing whatever is known about the etiology, the symptoms, or the treatment of this disease, its only practical importance at present is that it is one of the conditions which may cause abortion.

ANDERSON'S COLLEGE DISPENSARY, GLASGOW.

THE fifth annual meeting of the subscribers to Anderson's College Dispensary took place on Wednesday, the 28th ult., when the report stated that during the year 4480 visits had been made, of which 1080 were new cases. The total number of consultations in the various branches of the Dispensary was 10,810, of which number 8936 were new patients. At the beginning of the past year the Dispensary was burdened with a debt of £84 18s. 11d., but shortly after the report was issued, Dr. Young, of Kelly, generously forwarded a cheque for the amount. The Dispensary, being freed from debt, is able this year to show a balance in its favour of £34 19s., which is most satisfactory. The distinctive and peculiar feature of this charity consists in th visitation of patients at their own homes by the students attending the College; and, in addition to its own work, the Dispensary undertook the visitation of the pensioners on the outdoor fund of the Association for the Relief of Incurables for Glasgow and the West of Scotland.

THE REIGATE AND REDHILL COTTAGE HOSPITAL.

THE sixteenth annual report of the Committee of the Reigate and Redhill Cottage Hospital for the year 1881-82 shows that this busy and useful little charity is still as ably administered as formerly. Since its first institution it has deservedly held a high reputation amongst cottage hospitals, and this is so widespread that inquiries are received from time to time by the Committee from all parts of the kingdom respecting its construction and management. As an indication of its economical management, it will be sufficient to remark that the sum of £69 was awarded to it by the Metropolitan Hospital Fund—an indication that the small cost of its maintenance was rightly appreciated by the Distribution Committee of the Fund. The medical staff of the Hospital consists of Drs. Walters and Stone, and Messrs. Berridge and Ewen, who, in their conjoint report for the year under notice, remark that the number of cases under treatment has been greater than in any previous year, whilst the results obtained will bear favourable comparison with those of any preceding year. Twenty-four operations were performed during the period, including three amputations, and two operations for strangulated hernia, all of which were successful, whilst the mortality for the year was happily extremely small.

KOCH AND SPINA ON THE BACILLUS TUBERCULOSIS.

DR. SPINA, who is assistant to Professor Stricker, of Vienna, and who has worked in his laboratory for thirteen years, recently publised a work on the pathology of tubercle, dealing with the same ground that Koch has so brilliantly worked at. The conclusions at which Spina arrived are diametrically opposed to those of Koch, who, in a recent number of the *Deutsche Medicinische Wochenschrift*, has replied in a vehement tone, not only to the objections of the investigations of Spina, but to those of every other observer whose inferences are at variance with his own conclusions. It may be well to place before our readers, from the *Wiener Medicinische Wochenschrift*, No. 11, a short *resumé* of the principal points of contention between these two pathologists of Berlin and Vienna. 1. Koch maintains that the bacilli are invariably present in tuberculosis, and are distinguished from all other bacilli by the oft-mentioned reaction. Spina finds in tuberculosis of the lungs different kinds of bacteria, but he never finds bacteria in those organs to which the atmospheric air has not had access. He further denies that there is anything characteristic in the colour-reaction of the bacteria found in the lungs. 2. Koch cultivates the bacilli through several generations, and believes that they have characteristic forms of growth. Spina brings no cultivation experiments forward; but he finds that the septic bacteria assume forms of growth similar to those described by Koch. 3. Koch inoculates with bacilli from his pure cultivations, and produces characteristic tuberculosis; he thereby insures provision against mistakes arising from the assumption of a spontaneous tuberculosis or tuberculosis originating through other infective agents. Since Spina does not cultivate bacilli, he can neither confirm nor combat the above views. He, however, recalls the old experiments in which inoculations with quite indifferent substances were alleged to have caused tuberculosis. From No. 12 of the same journal we learn that Professor

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Stricker has taken up arms in defence of Spina's observations. Stricker, it would appear, watched Spina's experiments throughout, and wished to share the responsibility of the publication of the work. As is well known, Stricker is opposed to the doctrine of the contagiousness of tubercle, and has stated that artificial tuberculosis may be produced by inoculations with substances having apparently no specific influence. Stricker referred at the meeting to the fact, discovered by Spina, that septic bacteria also stain with Koch's reagents. The accuracy of the discovery is warranted by Stricker himself; and it is held to be destructive of the main argument advanced by Koch in favour of the specific characters of the tubercle-bacillus. With the existence of such wide discrepancies in observations coming from such apparently good sources, our readers cannot fail to see the necessity of adopting, as we have frequently pointed out, a position of scientific watching and waiting ere they fully accept even the most obvious doctrines of modern bacterial pathology. The researches and conclusions of the eminent pathologist of Berlin will, however, require much more than the eloquent rhetoric of Stricker to bring about their overthrow.

THE PORT OF LONDON SANITARY AUTHORITY.

On February 15 last, Dr. Collingridge, Medical Officer of Health for the Port of London, presented his half-yearly report to December 31, 1882. At the outset of this he remarks that although the number of vessels inspected during the period is smaller than that of the previous half-year, the actual sanitary work has continued, and is still continuing steadily to increase. Owners and captains are, as mentioned in a former report, at all times willing to receive the suggestions of the Port Medical Officer, and the representatives of foreign powers are no less anxious to co-operate; as an instance of this, it is mentioned that in the case of an Austrian vessel in which the forecastle was found to be in an abnormally defective condition, the recommendations for improvement were met with the answer that, being under the Austrian flag, the Authority was powerless to enforce compliance with its requests. This being undoubtedly the case, the matter was reported to the Austrian Consul, who eventually ordered extensive repairs to be carried out before the vessel left the dock. With respect to the more important functions of the Port Sanitary Authority, viz., the prevention of the importation of epidemic diseases, it would appear from the report that the work in this direction during the six months under notice was fortunately only limited. A case of small-pox was removed at Gravesend to the hospital-ship *Rhin*, from a vessel arriving from Newcastle, also a case of typhoid fever from the ss. *Capella*. The very serious epidemic of small-pox at the Cape of Good Hope caused much anxiety on account of the large amount of shipping constantly arriving from the colony, and it was, therefore, deemed advisable to address a special circular-letter to the principal companies and shipowners engaged in the South African trade. In each case an assurance was given that every possible assistance would be rendered to the Port Sanitary Authority, and owing to timely information communicated by Messrs. Donald Currie and Co., in two instances small-pox patients were removed from the *Drummond Castle* and *Kinfauns Castle* at Gravesend, and the vessels fumigated before entering the docks. During October, Dr. Collingridge says, the Metropolitan Asylums Board's small-pox vessels were removed from their very objectionable moorings at Deptford, and placed opposite Purfleet, in Long Reach. This, he thinks, is a very much better position, though they must of necessity be a source of danger to the training-ship *Cornwall*. So far as the vessels themselves are concerned, the distance is doubtless more than sufficient to prevent any possibility of infection; but everything will of course depend upon the extent to which Purfleet is used as a station for visitors, officers, and patients, and the arrangements for communication with the ships. We have previously referred to the extension of jurisdiction conferred upon the Port of London by Treasury Warrant of October last; from Teddington Lock to Gravesend the limits remain unchanged, but below Gravesend the whole river is embraced, up to Trinity high-water mark, as far down as an imaginary line drawn from the north-east extremity of the Isle of Grain to the pilot mark at the mouth of Havengore Creek, and includes all rivers and creeks within the limits specified.

THE PATHOLOGY OF ERYSIPELAS.

In our issue for February 24, page 219, we were able to give our readers a brief outline of some noteworthy observations on the minute pathology of erysipelas by Fehleisen. As the subject is of so much importance we propose to give a fuller account, for which we are indebted to the *Centralblatt für Klin. Medisin*, No. 11. The presence of the micrococcus was demonstrated in every one of the thirteen cases examined; small pieces of skin were excised for the purpose, and the micro-organism (generally arranged in chains) was detected in the lymphatic vessels and spaces, but never in the bloodvessels. The microzymes were identical with those figured by Koch in his photographs. The next investigations of Fehleisen were attempts to cultivate the organism outside the body. After frequent failures when the fresh contents of the erysipelatoid vesicles were employed, Fehleisen succeeded in breeding the micrococcus when the freshly excised pieces of skin were inoculated on the gelatine preparation. After the second day small white points appeared and gradually increased. These consisted of nothing but micrococci, which increased and multiplied further when inoculated into fresh gelatine preparations. Fehleisen has found similar organisms in connexion with other pathological processes, but which never behaved in the same manner as regards the pure cultivation in gelatine. Experiments were also made on rabbits. Seven animals were inoculated on the tip of the ear, with the result that in six well-marked erysipelas was developed; in one case the ear was amputated, and on examination the chains of micrococci were detected in the lymphatic vessels. In addition to the experiments on animals, vaccinations were practised on various affections of the human subject, on the principle that an attack of erysipelas has often cured such diseases as cutaneous tumours, lupus, carcinoma. In six cases of this sort erysipelas was induced by the micrococci from an artificial cultivation, and ran a typical course to a favourable termination in every instance. The beneficial therapeutical effects were marked in nearly all the examples. Experiments on disinfection were likewise made: these went to show that a 3 per cent. solution of carbolic acid, acting for forty-five seconds, rendered the organisms incapable of further cultivation; and the same effect was produced by a solution of corrosive sublimate in fifteen seconds. Fehleisen has thus worked at the subject from many points, and with great success.

THE TERM "MICROBE."

In relation to the origin of this convenient term, M. Pasteur states (*Revue Scientifique*, March 17) that it was first employed by Sédillot in the *Comptes Rendus* of the Académie des Sciences of 1878 (t. lxxxviii., page 634), he having consulted Littré as to its adoption. In two notes which Littré addressed to Sédillot on the subject, and which are now republished, he states that he regards *microbe* and *microbie* as very good words, preferring the

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former as the shorter, and reserving the substantive feminine *microbie* as the designation of the condition of the *microbe*. "It is very true," he adds, "that *μικρόβιος* and *μακρόβιος* signify in *grécité* short and long life; but we have not here to do with *grécité* properly so called, but with the employment which our scientific language makes of the Greek radicles. Now, the Greek tongue has *βίος* life, *βιοῦν* to live, *βιους* living, the radicle of which may very well figure under the form *be* or *bie*, in the sense of living in *aérobie*, *anaérobie*, *microbe*. My view is not to reply to criticism, and to leave the word to defend itself, which without doubt it will be able to do."

A PUBLIC meeting has been held in Edinburgh for the purpose of considering what steps should be taken, in view of the approaching tercentenary of the University, to raise the balance necessary to complete the new buildings for the medical school. Lord Provost Harrison, who presided, stated that for every purpose a sum of £100,000 would be required. A number of resolutions in conformity with the objects of the meeting were passed; and subscriptions of £4000 by the Duke of Buccleuch, and of £2000 by the Earl of Rosebery, were intimated by Sir Alexander Grant, Principal of the University.

DR. J. H. BALFOUR, late Professor of Botany in the University of Edinburgh, has intimated his resignation of the office of Assessor in the University Court for the General Council, on account of continued ill-health.

THE winter session of Anderson's College, Glasgow, was brought to a close on Friday, the 30th ult., by the presentation of prizes and certificates of merit to the students. The professors in the various classes spoke approvingly of the progress made by the students under their charge; and the general impression conveyed seemed to indicate an amount of hard work and keen competition among the students far above the standard of previous years.

THE annual general meeting of the Glasgow Ear Hospital was held on the 28th ult. The report states that the number o patients had steadily increased, and last year there were 835 new cases as compared with 789 in the previous year—an increase of nearly 6 per cent. Thirty-nine patients were operated upon under chloroform, and were subsequently treated in the wards. Twelve cases were operated on without the use of any anæsthetic in the outdoor department. During the year 667 patients were cured, 82 improved, 17 incurable (including 10 deaf-mute children), 39 not treated, and 30 under treatment. Of the whole number (835) 530 were males and 305 females.

IT is stated that Dr. Lyon Playfair has accepted the c] : hip of the Endowed Schools Commission, and consequently will, in a few days, resign his seat in the House of Commons.

WE are requested by the Committee to state that the public presentation of the subscription-portrait of Mr. Ernest Hart, by Mr. Frank Holl, R.A., will be made at Grosvenor House, on Tuesday, the 10th inst., at 5 p.m.; His Grace the Duke of Westminster, K.G., in the chair.

MEDICAL PRACTITIONERS IN RUSSIAN POLAND.—According to the last statistical report there were 675 medical practitioners in Poland, 98 per cent. of these practising in towns, and only 2 per cent. in rural districts. In the town of Warsaw alone there are 308 practitioners, while in 1874 there were only 206.—*Petersb. Med. Woch.*, March 24.

THE MEDICAL ACT AMENDMENT BILL, 1883 (H. L.).

THE Council of the Royal College of Surgeons of England directs the attention of the Fellows and Members of the College to the following(a) as some of the results of the above-named Bill if it become law, viz.:—

1. That on and after January 1, 1885, the diploma of Member of the College will not be recognised as a "qualifying" title for the purpose of registration.
2. That the present Members of the College, although they would still be registered by their title, would be liable to be brought into disadvantageous comparison with persons registered as possessing the proposed new title of "Licentiate of the Medical Council in Medicine, Surgery, and Midwifery," since the latter might claim that the title of Member of the College, having been discredited by its non-recognition as a "qualifying" title, was inferior to their own.
3. That there is no *guarantee* that the College would be appointed to carry on the surgical part of the examination for the required licence to practise; and beyond the small privilege of electing, about once in five years, one-fifth of the representatives of the Medical Board for England, the College would have no control over the efficiency of the final "qualifying" examination.
4. That power would be taken by Clause 38 of the Bill to levy on every practitioner already registered a vexatious annual tax, the non-payment of which would involve the liability to removal of his name from the Register.

Should the Fellows and Members of the College, after perusal of the foregoing statements respecting some of the probable results of the proposed legislation, be of opinion that such results will be detrimental, not only to their interests, but also to the welfare of the public, and will even endanger the existence of the College itself, they will, without doubt, exercise all the influence they possess, whether by petition to Parliament or otherwise, to prevent the Medical Act Amendment Bill from becoming law in its present form. The Council does not propose to offer any opposition to those parts of the Bill which relate to the direct representation of the medical profession in the Medical Council.

The King and Queen's College of Physicians in Ireland offer the following observations on the measure now before the House of Lords:—

"The College have very carefully considered this Bill, presented by the Lord Privy Seal, for the consolidation and amendment of the law relating to medical practitioners. It is to be noted that now, for the first time, a measure is proposed, not only for the amendment, but also for the codification of the existing law.

"The most important provisions of the Bill are those which relate to—(*a*) The formation of Medical Boards for each division of the United Kingdom. (*b*) The centralisation of licensing power in the Medical Council, and the consequent abolition of a similar power hitherto vested in the medical authorities. (*c*) The reconstruction of the Medical Council, and enlargement of its powers. (*d*) The requirement of evidence of competency in medicine, surgery, and midwifery, as a title to registration.

"The College approve the proposal to introduce direct representatives of the profession into the Medical Council (Clause 14), and to grant the Council additional powers of a mandatory nature on matters relating to education and examination. Further, the title to registration required in Clause 3, namely, evidence of the competency of the candidate in medicine, surgery, and midwifery, has the warmest support of the College.

"The provisions of the measure, however, altogether fail to met the acknowledged existing evils in medical education and examination, and will be fatal to the welfare and even the existence of this and other medical corporations.

"Because of abuses which exist, in which they had no participation, this College respectfully protest against being summarily deprived of their ancient right to grant licences

(a) A *full* statement of the objections of the Council to the Bill may be obtained by any Fellow or Member of the College on application to the Secretary.

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qualifying to practise medicine and midwifery, and of the privilege which they have enjoyed since the Medical Act, 1858, of the direct registration of their Licentiates—a privilege which they can be shown to be using well and wisely. The College are of opinion that this right and this privilege should be respected in any Act now to be passed, and that their vested interests should be fully protected.

"The College are willing to accept coadjutor examiners, on the terms proposed by Professor Huxley in his memorandum subjoined to the Report of the Medical Acts Commissioners, on condition of the College retaining their right to direct registration of their licences. Professor Huxley's proposal is, that 'if any examining body satisfies the Medical Council or other State authority that it requires full and efficient instruction and examination in the three branches of medicine, surgery, and midwifery, and if it admits a certain number of coadjutor examiners appointed by the State authority, the certificate of that examining body shall give admission to the Medical Register.' The College agree with Professor Huxley in thinking that, 'while the adoption of this proposal would secure a practically uniform minimum standard of examination, it would leave free play to the individuality of the various existing, or future, universities and medical corporations; that the revenues of such bodies, in so far as they are derived from medical examinations, would thenceforth increase or diminish in the ratio of their deserts; that a really efficient inspection of the examinations would be secured, and that no one could come upon the Register without a complete qualification.'

"In case this proposal is adopted, the College are of opinion that it is essential that the Bill should provide for a compulsory conjoint examination between the Colleges of Physicians and Surgeons in each part of the United Kingdom.

"The College further object to the proposed formation of the Medical Council, in so far as they are deprived of direct representation upon it. The College see no reason for limiting the number of members of the Council to eighteen, and are strongly of opinion that the medical authorities, with certain few exceptions, should be directly represented as heretofore, particularly as the new Council will be entrusted with powers of a more ample and mandatory character, and will include direct representatives of the profession at large.

"As to the establishment of medical boards in each part of the United Kingdom, the College consider that, should a qualifying examination under such boards be deemed advisable, they should not be bodies corporate, but merely examining and superintendent boards."

After these preliminary observations, the College submit a series of remarks on the clauses of the Bill.

MEDICAL MATTERS IN PARLIAMENT.

House of Commons—Thursday, March 29.

The Payment of Wages Bill.—This Bill, the object of which is to prohibit, or at the least greatly restrict, the payment of workmen's wages in public-houses, was read a second time, without any serious opposition.

Friday, March 30.

Cattle Plague in Egypt.—In reply to questions put by Dr. Cameron, Sir A. Hayter said that two outbreaks of cattle plague occurred among the cattle sent from India. In the first outbreak thirty-six were affected, and of these ten died and twenty-six were killed and buried. No details had been received about the second outbreak. It was not true that the road to Kassassin had become infected through the diseased cattle having been driven forth to die; and cattle were sent to Cairo by rail, instead of by road, simply to insure their arriving in good conditicn for issue to the troops. There was not a single case of rinderpest or cattle plague throughout the campaign among the cattle destined for the use of the English troops.

Monday, April 2.

Epidemics in Donegal.—In reply to Mr. O'Brien, Mr. Trevelyan said that the Medical Inspector of the Local Government Board reported a week ago that, having heard there was an outbreak of diphtheria and scarlet fever in Iverdore parish, he went there to make special personal inquiry; there was no diphtheria, and there was scarlet fever in two families only. Of these families only one was poor, and in this case medical attendance was not asked for till two children had died. When asked for it was at once given. Poor-law relief was offered, but declined. With regard to the other place referred to (Glencolumbkille), the Medical Inspector had made a very full and careful report. The prevailing affections were bronchitis and pneumonia, and there was not a single case of fever or other contagious disease; and only two families out of nine, when children were ill, would have any claim on charitable relief.

FROM ABROAD.

Results of British and American Ovariotomy.

In the *New York Med. Journal* for December is a paper speculating on the causes why ovariotomy, and indeed laparotomy in general, is far from being so successful an operation in America as in Great Britain. It is naturally denied that this arises from any lack of skill on the part of the American operators; for dexterity, precision, and celerity, coupled with readiness in emergencies, are strong points with American surgeons that have never been questioned. In a recent discussion on the subject, Dr. Kimball, while alluding to the effects of climate, stated that patients in the course of preparation for the operation were not usually in so favourable a state as regarded their cutaneous functions as he had observed like patients in Great Britain.

"Dr. Kimball's observation," says the writer of the article we are quoting from, "was very much to the point. But suppose, instead of climatic, we say meteorological. It is well known that, in New York at least, there is a period of several weeks in mid-winter when women are especially prone to pelvic inflammatory affections. This is often strikingly shown in the marked prevalence of puerperal fever during that period, as well as in the temporary aggravation of chronic pelvic inflammations apart from childbearing. It would be interesting to ascertain if our mortality after ovariotomy is not greater then than during the same length of time at other portions of the year.

"Another conjecture that found expression was, that British women, having a less sensitive nervous system than their American sisters, and being more stolid, as it was somewhat ungallantly phrased, were better fitted to cope with the shock of such a serious operation. To this, complimentary as it is to the mental make-up of our countrywomen, two objections occur to us. 1. We know of no evidence that other grave operations are better borne by the British than by the Americans. 2. Foreign observers—notably Brown-Séquard—have been struck with the capability of Americans to survive great losses of blood. The theory that mental culture necessarily implies physical degeneracy is, in our opinion, utterly groundless. But, setting these considerations aside, it should not be forgotten that a very large proportion of the women who undergo ovariotomy in this country, especially in the great Eastern cities, are of foreign birth.

"Another element in the question seems to us worthy of some attention. It appears not unlikely that in Great Britain, a compact country, women with ovarian tumours of whatever sort are likely to betake themselves to the experienced metropolitan ovariotomists, since the latter are easy of access; whereas in this country, owing to its vast territorial extent, many of the simpler and more promising cases fall into the hands of surgeons who, although ready at any time to undertake an ordinary ovariotomy, and perfectly competent to do it well, yet shrink from performing the operation on patients in whom specially unfavourable conditions are recognised, and send them to the large towns. It may be, then, on this account that our better-known ovariotomists, from whose experience our statistics are mainly made up, get an undue proportion of unpromising cases; while British operators of the same class, having a larger number of ordinary cases to deal with, are able to make a better showing. It would be useless to enter upon any comparison of different methods in the operation—the use of Listerism in its various degrees; the adoption or rejection of drainage; the employment of this, that, or the

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other way of dealing with the stump—for amongst the British operators whose results challenge our admiration, as well as among our own less fortunate ovariotomists, all these peculiarities are found in use. They seem, indeed, to stand in no constant relation with the results attained. Whatever may turn out to be the real solution of the question, it is well that it has so thoroughly engaged the attention of our leading gynæcologists, and we think that there is ample ground for hope that it will be cleared up within a reasonable period."

Removal of an Immense Vesical Calculus.

In the *New York Medical Journal* for February 17, Dr. Howe, Professor of Clinical Surgery at Bellevue Hospital Medical College, relates a remarkable, and in some respects unique, case of removal of a vesical calculus from the bladder of a lad aged sixteen. The patient was admitted October 23, and a stone of very large dimensions was found occupying the bladder, and although its extraction by the perineum seemed very improbable, yet an incision was made down to the stone in the hope of acting upon it by the lithotrite. Finding that all action of this kind was impossible, a supra-pubic incision was made, and the bladder was found to be firmly contracted around an enormous stone, which was removed with great difficulty by manipulation directed simultaneously through the opening in the perineum and that in the abdomen. The stone measured three inches in its longest diameter, and two inches and a quarter in its transverse diameter. The weight was found to be 3541 grains. On analysis, Prof. Doremus found it to consist of a mass of nuclei of oxalate of lime, with five surrounding layers of phosphates. The edges of the wound in the abdomen were closed by means of silk sutures, leaving a space of half an inch for drainage, but no sutures were applied to the perineal wound of the bladder. The patient was ordered a teaspoonful of the United States solution of morphine every two or three hours, until the respirations came down to thirteen. "In all operations," Dr. Howe observes, "where the peritoneal cavity has been opened, designedly or by accident, I have been in the habit of administering almost as much morphine as if the patient already had peritoneal inflammation. I am inclined to the opinion that peritonitis may often be averted by this treatment." Four weeks after the date of the operation, the wound of the abdomen had entirely healed, all the urine passing by the natural channel. A few days later he left the hospital quite well. "From a careful study of this case," Dr. Howe observes, "and from an examination of the records of the extraction of large calculi through the perineum and rectum, I am convinced that the supra-pubic operation is the only safe one. The stone can be removed without lacerating any important organs. Free drainage can be kept up through a perineal opening, as well as through the lower extremity of the abdominal incision, thus reducing to a minimum the danger arising from urinary infiltration and peritonitis."

Dr. Howe thus alludes to the extraordinary size of the calculus:—"It is the largest calculus ever found in the bladder of a patient at so early an age as sixteen. Larger stones have occasionally been found in the adult bladder, before and after death, but they are of extreme rarity, and there are no cases that I can find on record of recovery taking place after their removal. The extraction of large calculi has always been attended with great mortality. The tables given by Crosse in an analysis of 704 cases afford a very clear illustration of this fact. He found that when the stone weighed from two to three ounces the proportion of deaths was 1 in 2·18; from three to four ounces, 1 in 1·57; and from four to five ounces (the largest found), 1 in 1·66. In view of these statements, the successful removal of a calculus weighing over eight ounces avoirdupois must be regarded as excellent."

Advice Gratis.—"The little boy of my *concierge* having fallen ill, I inquired about him of his father, and learned that he was attended by a doctor who lived a long way off, while there is one who resides on the premises. Expressing my surprise at this, 'Well, what to do?' replied the porter, 'M—— is perhaps a good doctor, but I have no confidence in him.' 'How so?' 'Why, you see,' replied the *concierge*, lowering his voice, 'He gives advice gratis.'"—*Lyon Méd.*

GENERAL CORRESPONDENCE.

OVARIOTOMY STATISTICS.

Letter from Mr. Lawson Tait.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have just seen Mr. Spencer Wells's communication in your columns, in which he characterises as false a statement made by me that he "had gone on for twenty years operating on hundreds of cases with a mortality of 25 per cent." The facts are that between February, 1858, and February, 1878, Mr. Wells operated 892 times; and, according to his own tables, of these cases 220 died, giving a mortality of 24·66. This is substantially a mortality of 25 per cent., but there are three cases which, in my opinion, ought to be included as deaths in these tables, and they would bring the mortality of Mr. Spencer Wells's twenty-five years' practice absolutely to 25 per cent. I am, &c.,

March 17. Lawson Tait.

AUTHOR WANTED.

Letter from Dr. P. M. Braidwood.

[To the Editor of the Medical Times and Gazette.]

Sir,—A few days ago I got here a letter from the Secretary of the "Instituto Medico Valenciano" (Spain), stating that he had received an essay with the title "Are Diseases of the Heart, Phthisis, and Insanity, more frequent at present, etc.?" and that an honour had been awarded this essay; but the author had omitted to enclose his name and address: he therefore asked me to make this public. I hope you will kindly insert this in your next issue, and if any author who has competed will forward me his motto I will advise him (if he be the successful candidate) to whom to apply for the prize. I am, &c.,

Liverpool, April 2. P. M. Braidwood.

Convallaria Maïalis.—Dr. Beverly Robinson, Professor of Clinical Medicine at the Bellvue Medical College, communicates to the *New York Medical Record*, February 10, a note on the results of the trials which he has made of the convallaria in a considerable number of cases of chronic cardiac disease. He recognises it as a cardiac tonic of considerable value, the effects of which approximate to those of cafein and digitalis, possessing an appreciable stimulating effect upon cardiac power. When the fluid extract of the root is given in doses of from five to ten drops every two or three hours to patients in whom cardiac incompetence is already apparent, in view of the rational symptoms of dyspnœa, oppression, præcordial pain, and palpitations, it will aid in diminishing these in a notable degree. When we have, in addition, the ordinary physical signs of cardiac disorder—such as weak, rapid, and irregular pulse; tumultuous, unequal heart-beats, with a blowing murmur at one or other orifice; œdema, with more or less serous effusion into the large cavities—we may remark a certain amount of benefit arising from its use: the pulse becomes stronger and more regular, the heart-sounds acquire additional force, and the painful palpitations disappear. Dyspnœa is often favourably modified, and the respiration becomes slower and deeper. Anasarca is little influenced, and the urine is scarcely increased in quantity. The stomach usually accommodates itself well to the use of the drug. Dr. Robinson states that while it diminishes the intense dyspnœa of asthma, and quiets palpitation in a remarkable manner, he has not found the convallaria restore the rhythmic action to the crippled heart in a degree sufficient to regard it as a co-equal substitute of digitalis, nor is he convinced that it equals digitalis in adding to cardiac contractility. It has, however, apparently one very great advantage over digitalis, viz., that it has in the above doses none of the cumulative effects or poisonous action in man which are produced in the lower animals. It is greatly inferior to cafein where considerable diuretic effects are desired; but it seems to be somewhat more of an invigorator of cardiac power, and is much less variable in its action than cafein. Convallaria also seems to be more readily accepted by a sensitive stomach than either cafein or digitalis.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 27.

W. S. SAVORY, F.R.S., Vice-President, in the Chair.

THIS meeting was one of great interest, at which the occurrence of scurvy among young children, as the result of artificial feeding, was discussed. The subject was introduced by papers from Mr. Page and Dr. Barlow, in which cases of great pathological interest were given. Dr. Hale White's paper (read at a former meeting) was again given in abstract, and discussed. The following are the abstracts of the papers :—

ON CASES DESCRIBED AS "ACUTE RICKETS" (COMBINATION OF RICKETS AND SCURVY). BY THOMAS BARLOW, M.D., F.R.C.P., ETC.

The paper is a contribution to the study of a disease occurring in young children, of which several cases have been recorded in recent German and English medical literature, but of which, with one exception, no account of the morbid anatomy has hitherto been given. The writer first narrates a typical case, then gives an analysis of the principal symptoms observed in the recorded cases and in other cases of his own, then the results of some post-mortem examinations, and finally discusses the etiology and affinities of the disease. The typical case is given in full detail. The boy, aged fifteen months, was of a pale, sallow complexion, fat, but flabby. His rectal temperature was 101°; there was no nervous or visceral disease, except that the liver was larger than normal. He was continually moaning, and when approached and touched screamed violently. The dominant symptoms were in the limbs; the right wrist was dropped, and the left thigh continually drawn up; the ribs were beaded, but there was no grooving of the thorax; the left thigh and leg were tightly swollen, assuming a cylindrical shape; the epiphyses of the knees were enlarged, and there was a tendency to knock-knee. There was profuse sweating about the head. The boy was a first child, born slightly before term, and seemed vigorous for the first six weeks, during which time he had his mother's milk; but since its failing he had been deprived of fresh food, his diet consisting of the various infant-foods of Nestlé, Robb, etc. The child sat up well, and stood with assistance at thirteen months old, but five weeks ago he ceased to do either, the left leg and ankle being swollen, and the child shrieking if approached. He was taken to an eminent bone-setter, who said that one of the bones of the spine was out, and a presumed operation to set it right was performed; but as no explanation was given of the swollen wrist, dropped right hand, and condition of left thigh, further opinion was taken. The child was obviously the subject of moderate rickets, and the opinion was formed that under the periosteum of the left femur and tibia there was an effusion of blood, and that the extreme tenseness of the limb was due to blood extravasation in the deeper muscular layers, with the serum filtered into the more superficial parts of the limb, and the view was held that the boy was suffering from the supervention of scurvy on rickets, though with no sponginess of the gums. The treatment suggested was to surround the whole of the left lower limb and the right leg with wet compresses, which had been thoroughly wrung out, surrounded with dry cloths closely applied. A complete change in diet was made, to the juice of raw beef sweetened a little, cow's milk, strained gruel, barley-water, and orange-juice. It was ordered that the boy's crib should be placed near the fire, and the window opened wide for free play of fresh air. A great change occurred during the treatment. He was quieter, and took his fresh food greedily, had healthy evacuations, and the tension of the left lower limb was less. The improvement was progressive. The urine became clear and free from albumen, and from excess of phosphates. The swellings of the wrist and lower limbs subsided, and at the end of a fortnight he made slight efforts to raise himself and move his limbs about. At the end of a month gentle shampooing with oil, and douches of tepid and then cold water, were commenced. No change was made in diet except substitution of beef-tea for raw-meat juice, and a small piece of underdone meat in muslin to suck. His medicine was one, and then two, teaspoonfuls of cod-liver oil daily, and an occasional powder of rhubarb and soda. Within eight weeks he got on his knees, and could stand with a little support. He was of a ruddy colour, and his skin and muscles felt firm. The author then gives an analysis of the principal symptoms in thirty cases, of which nineteen have been published (principally in Germany), the majority under the name of "acute rickets," and one under that of "infantile scurvy." The first English case was under the care of Mr. Thomas Smith at the Hospital for Sick Children, described under the provisional title of "hæmorrhagic periostitis." Other cases had been described by Dr. Gee as "osteal or periosteal cachexia," and two by Dr. Cheadle, in which spongy gums were a marked feature, for which and other reasons Dr. Cheadle held them to be a combination of rickets and scurvy. The ten cases of the author lead him to substantially the same conclusion. The author then gives an analysis of the important symptoms, the post-mortem appearances, the etiology and affinities of the disease with the ordinary form of rickets, congenital syphilis, etc. The evidence shows the ordinary form of rickets to be present in a considerable number of the cases, though in some the symptoms were very slight. It shows also that there is no affinity with acute periostitis, hæmophilia, or purpura. The parallelism of the disease with scurvy is shown both on anatomical and clinical grounds, and after giving a summary of the diet adopted in the recorded cases, the author comes to the conclusion that the characteristic features of the so-called acute rickets are really due to "scurvy."

SUBPERIOSTEAL HÆMORRHAGE, PROBABLY SCORBUTIC, OF THREE LONG BONES IN A RICKETY INFANT. BY HERBERT W. PAGE, M.A., M.C. CANTAB., F.R.C.S. ENG., ETC.

The author records the case of an infant, aged nine months, extremely wasted, pale and ill, who was sent to him by Dr. Taylor, of Willesden, and who presented enormous enlargement of the shafts of the left femur and tibia, and of the upper third of the right tibia also. The swelling had been coming on and gradually increasing for about a month. The neighbouring joints were not affected, and there was no superficial sign of inflammation. Beading of the ribs and rickety enlargement of one radius led to the belief that the condition was in some way due to rickets, and this supposition was also based on the fact that the child had from birth been fed for three weeks on Swiss milk, and after that almost entirely on Nestlé's and Savory's foods. There was no history of syphilis, and in the absence of general fluctuation no certain diagnosis was made. A trocar and canula passed at one point in the thigh, where there was doubtful fluctuation, gave exit to a few drops of sanguineous fluid, the bone being found bare. Incisions were therefore made through the periosteum of both thigh and leg, and large blood-clots, which had to be broken up with the finger before any part of them could be removed, were found lying around the shafts, the periosteum being stripped up therefrom throughout their entire length. Being now properly fed, the child, whose recovery had seemed well-nigh hopeless, began at once to improve: the blood-clots were gradually expelled, there was little or no suppuration, the wounds healed; and when seen three months afterwards, the affected bones had resumed their normal size, and the periosteum its natural position in contact with the shafts. There is no hæmorrhagic diathesis in the family. The author refers to the difficulties in diagnosis presented by this case, especially in the absence of fluctuation, which was doubtless due to blood-clot being tightly packed between periosteum and bone. He is now inclined to regard the disease as scorbutic rather than rickety, and the hæmorrhage as the more essential element of the pathological condition than inflammation of the periosteum. The child had been reared on scurvy diet. Periostitis is almost unknown, even in the worst cases of rickets. There was no sign of inflammation either in the neighbouring joints or in the skin, and it is, moreover, noteworthy that both periosteum and bones have survived the attack. Such could hardly have been the issue of an acute hæmorrhagic periostitis, even though the hæmorrhage, as a local blood-letting, might have conduced to the safety of the periosteum. He refers to other cases, of which, indeed, there is only one definite

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example on record, in support of this doctrine. A case was recorded by Mr. Thomas Smith in vol. xxvii. of the *Pathological Society's Transactions* as "Hæmorrhagic Periostitis of the Shafts of several Long Bones, with Separation of Epiphyses," where after death the shafts were found surrounded by blood-clots underneath the periosteum, and in which there were numerous hæmorrhages in the muscles also, with a large hæmorrhage in one lung—hæmorrhages, in fact, like those ordinarily seen in scurvy. In one of three cases recorded by Dr. Cheadle of "Scurvy supervening on Rickets in Young Children," in addition to bleeding gums, and other usual signs of scurvy, there were "hard swellings deeply seated in the flesh of each thigh, and the shafts of the long bones felt enlarged and swollen." The author has little doubt that in that case also the enlargement was due to subperiosteal hæmorrhage. The child had been fed on a scurvy diet, and the state of the gums very clearly told what unnatural agents had been at work. In his own case the diet was a distinctly scurvy diet, lacking every kind of fresh food, and he trusts that the record of it may lead to a surer diagnosis and better treatment in other cases where the absence of swollen and bleeding gums deprives us of an all-important clue to the nature of the malady.

A Case of Scurvy with Dilatation of the Heart and Retinal Hæmorrhages. By W. Hale White, M.D., etc.

Out of about twenty cases which were examined at the *Dreadnought* Hospital, only one presented retinal hæmorrhages, and that fell under the author's care. The patient was admitted on November 13, 1882. He had left Calcutta four months and a half ago, and whilst there had had dysentery. On admission he was very sallow, and evidently a severe case. There was swelling of the gums and also the usual bruise-like swellings about the body. The apex-beat was in the fifth space one inch outside the nipple line, the area of cardiac dulness was increased, there was in the third left intercostal space a loud systolic murmur, the first sound at the apex was muffled, and arterial murmurs were present in the neck. Pulse was weak and almost thready. In the right eye there were two large hæmorrhages, one above and one below the disc; they were striated at the margin, white in the centre. The blood showed only 40·5 per cent. of the normal number of white corpuscles, and only 20 per cent. of the normal quantity of hæmoglobin. The patient remained in the hospital a fortnight, and was treated with lime-juice and put on full diet. He steadily improved: the retinal hæmorrhages became less distinct; the red corpuscles increased to 63 per cent. of normal, and the hæmoglobin to 35 per cent.; the basic systolic murmur disappeared, but the apex-beat remained in the same position. It was pointed out that this case presented the following points of interest:—Firstly, the influence of the previous dysentery in making the attack of scurvy severe, which severity was evidenced by the marked blood-changes; secondly, the presence of retinal hæmorrhages, a very unusual occurrence as compared with other anæmic diseases, and which was to be explained by the fact that scurvy as seen nowadays was not severe enough to produce retinal hæmorrhages; and thirdly, the dilatation of the heart: it was shown that this is the only recorded example of this condition in scurvy, and that, considering the close alliance of this disease to other anæmic diseases in which it was known that the heart was fatty, it was presumed that here also this was the cause of the dilatation.

Dr. Stephen Mackenzie remarked that the case described by Mr. Herbert Page, and the careful paper by Dr. Barlow, were of great importance; for they would help to remove some of the obscurities besetting a difficult subject, and, by pointing out the causation of the disease, lead to measures for its prevention. Owing to the kindness of his colleague, Mr. Waren Tay, he had had the opportunity of making post-mortem examinations of two cases, under the latter's care, of a similar nature to those described in the papers. The first was a child, which had suffered much from diarrhœa with offensive stools, and had a large abdomen. When six months old it had a swelling of the knee. It had previously had a black lump come on the gums, and a bruise-like patch on one arm. Just before death another hæmorrhage appeared on the outer aspect of the right arm. At the necropsy there were found hæmorrhage between the bone and periosteum of several of the long bones, hæmorrhage into the gums, and hæmorrhage beneath the periosteum of the ribs, with thickening of the costal cartilages—no doubt of a rickety nature. (Specimens and a drawing were shown illustrating these changes in the ribs.) The second case was that of a child eight months old, which came under observation for a swelling in the region of the left knee-joint of some two months' duration. The swelling appeared to consist of thickening of the lower end of the femur, being situated above the joint, which was not apparently involved. The limb hung helplessly as if paralysed. It was thought that the swelling was connected with the epiphysis, and to be of the nature of others seen recently, and to which Dr. Barlow had drawn Mr. Tay's attention as the syphilitic periostitis described by Parrot. On this hypothesis iodide of potassium was given in one-grain doses three times a day. After two doses there was ecchymosis of both eyelids; but the medicine was persevered with without further hæmorrhages occurring when seen a week later. The case was shown at the Hunterian Society, and the question raised whether the hæmorrhages were due to the iodide. It was discontinued, but the orbital ecchymosis remained, the gums became discoloured, and some ecchymosis appeared on the ears; none elsewhere. Some swellings were also noticed on the tibia and fibula. The child fell into a state of marasmus, and died. At the post-mortem examination, hæmorrhages were found beneath the periosteum of some of the long bones, into the substance of some muscles, beneath the gums, and into the lungs, beneath the peritoneum, in the intestines, and in the kidneys. On opening the thorax a most remarkable appearance was presented after the viscera were removed. In the position of each rib was a long black streak, and when these were cut into each rib was found to shell out, being almost completely separated from its periosteum by blood. There was an appearance of commencing tuberculosis of the peritoneum (microscopic specimens of which, and of hæmorrhages into the lung, he showed), but he was inclined to regard the tuberculosis as not essentially connected with the disease, but engrafted upon it. Both these children had been fed with artificial foods. In one it was stated the child had taken plenty of what in London passes under the name of milk, but it had never had meat or potatoes. These cases appeared to agree in all respects with Dr. Barlow's and Mr. Page's cases. He thought the condition of hæmorrhage beneath the gum of importance, for this might be present without any sponginess, the hæmorrhage appearing in the position of the erupting teeth. There was only one remark in Dr. Barlow's paper which he would venture to criticise, and that was his statement that the condition had no analogy with purpura. Purpura he regarded as a symptom only, indicative of something else, and it was seen that in the case he had narrated there had been hæmorrhages externally and internally, so that it could not be separated from what would be termed by some purpura hæmorrhagica. With reference to Dr. Hale White's case, he wished to make a remark as to the retinal hæmorrhages. He had examined a good many cases of scurvy at the Greenwich Hospital, but Dr. White's case was the only one in which he had seen hæmorrhages into the retina. He thought Dr. White's explanation of its occurrence in his case, that it was due to the degree of anæmia present, correct; for when retinal hæmorrhages occurred from anæmia, the corpuscular deficiency he had found, from a number of cases, was always below 50 per cent. In cases of severe hæmatemesis, when the corpuscles fell to between 40 to 50 per cent., he had found hæmorrhages, and in idiopathic or progressive pernicious anæmia the corpuscular richness was much lower than this.

Mr. Macnamara said that to those familiar with practice in tropical countries retinal hæmorrhages were not so uncommon as would appear from Dr. White's paper. He had frequently seen them, as also hæmorrhages from the intestine due to dysenteric ulceration, in natives after attacks of intermittent fever, as the accompaniment of a scorbutic condition which not infrequently supervened. He considered the cases related as scorbutic; it was important to note that periostitis did not supervene in these cases. It was probable, he thought, that such subperiosteal hæmorrhage might occasionally be the cause of the suppurative periostitis found in children. The relation of rickets to syphilis was incidentally raised, and he had no doubt that the mal-assimilation leading to rickets might be set up by inherited syphilis. These pathological changes might thus be a combination of syphilis, rickets, and scurvy.

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Mr. R. W. Parker said that the authors had referred to some of the difficulties which attend the acceptance of a scorbutic origin for the lesions described by them. There was, however, another to which allusion had not been made, viz., this: the extreme rarity of scurvy, although the plan of feeding children (characterised by Mr. Page as a "scurvy diet") is exceedingly common in all classes of the community, and is especially prevalent amongst the poorest classes, among whom the unhygienic conditions, so strongly insisted on by authors as largely contributing to the occurrence of scurvy, are superadded. At the present time, not only in London, but in the country and abroad, this "scurvy diet" is extensively used, and has been used for years past, and yet how little scurvy has resulted! He was aware that young people are supposed to enjoy some special immunity from scurvy, when subjected to those influences which are known to produce it; he believed that in some of the outbreaks which have occurred on board ship, the boys have escaped when the rest of the crew have suffered severely. In Paris, also, after the siege in 1870-71, it is especially recorded that the young escaped, while scurvy was very prevalent among the adult population. On the other hand, observers have recorded outbreaks of scurvy among children; especially may be mentioned the outbreaks which have from time to time occurred in the foundling hospitals in Russia: here, however, the scorbutic manifestations were identical with those usually seen in adults (foremost among which were the sponginess of the gums and the putrid odour of the breath). If therefore the cases related this evening really are scurvy, it must be admitted that the lesions were of a very unusual character. They were unusual in their sporadic occurrence, unusual in their marked localisation, unusual in their rapid outbreak and rapid and complete recovery. The authors mention that their patients were well a month or five weeks before the disease came on. The absence of putrescence was also a very unusual feature, as well as the condition of the effused blood. In Mr. Page's case the blood was firmly clotted. Now, in typical scurvy it is generally found to have undergone changes which are even appreciable to the naked eye. Many authors refer to the bone lesions; but all regard them as late in their occurrence, and as due to the pre-existing cachexia, which in these cases seems not to have been very marked. Whether we shall be able to abolish the term "acute rickets," as suggested by Dr. Barlow, he could not say; his own experience gave him at least three post-mortem examinations, in which the condition of the long bones—extreme softness, flexibility, and marked curvature of the shaft—with the well-known rickety changes at the epiphyseal junction (a specimen of which was handed round for inspection) appeared to be well met by the term "acute rickets," and for which the term "scurvy rickets" would be quite inapplicable.

Mr. John Morgan quite remembered Mr. Smith's case, as he was assisting in the out-patient department at the time. He thought the case identical with those related by Dr. Barlow. The fracture had taken place below the line of the epiphysis, and appeared due to the vascular changes and extravasation in the medulla. He quite thought the scorbutic origin of the disease had been established; the disease differed from congenital syphilis in not being symmetrical.

Dr. Drewitt remarked on the well-known antiscorbutic properties of milk. Seeing how many young children were fed and throve on condensed milk, he suggested that a large supply should always be taken out, in addition to lime-juice, on occasions when the outbreak of scurvy was to be feared.

The President remarked on the different views held as to the pathology of acute periostitis and ostitis. In Mr. Page's case, although the periosteum was entirely detached, there had been no exfoliation of the shaft of the exposed bone—a favourable issue which could hardly have been expected had the bone, as well as the periosteum, been acutely inflamed.

Dr. Barlow, in reply, said that frequently in the cases in which the gums were affected, the condition present was not sponginess, but localised ecchymoses in the sites of the oncoming teeth, without there being any actual swelling of the gum. In one of his cases there was ecchymosis in both eyelids and a temporary slight proptosis of one eye. The hæmorrhage along the ribs referred to by Dr. Mackenzie had occurred in one of his own cases. The same condition of rib had been described by Poupart in the seventeenth century, and also by Dr. Godechen, in adults. Probably the stripping up of the periosteum and partial death of the ribs accounted for occasional occurrence of fractures. The minute visceral hæmorrhages, described by Dr. Mackenzie, were a distinct addition to knowledge. Dr. Barlow had seen minute hæmorrhages on the parietal pleura in one case; in two other cases there occurred respectively hæmorrhages in the lung and in the spleen, but these hæmorrhages were of moderate size. In regard to tuberculosis, it had been present, though localised in one lung, in one of his cases. He was not disposed to attach importance to it, because tubercle so often supervened on the marasmus of children. He quite concurred that purpura, as a separate disease, should be eliminated from our nosology, and be regarded solely as a symptom due to different causes, or at all events associated with different diseases. The reason he had referred to it as one of the conditions to be discriminated from the disease in question was, that occasionally patients the subjects of purpura affecting the lower limbs had along with the outburst of a number of small hæmorrhages in the skin a very decided swelling of the leg, which, for anything he knew, might be due to deep hæmorrhage and effusion. This condition of limb simulated slightly the disease under consideration, but it only lasted a few days, and was not attended with the pain and cachexia which were strongly marked in the cases narrated. With regard to Mr. Macnamara's suggestion that subperiosteal hæmorrhage might occasionally go on to suppuration, he was reluctant to express an opinion. He had not seen such an event. In one of his cases there was for a few days a spot of fluctuation just above the epiphysis of the femur, but he had not liked to interfere, seeing that, from his post-mortem experiences, some serum had been found infiltrating the superficial parts, whilst there was blood in the deeper portions of the limb. At all events, in this case the fluctuating spot soon subsided spontaneously. In another of his cases not included in the table there was a little suppuration in the soft parts of the thigh, but this was so exceptional that, in the absence of a post-mortem examination, he had hesitated as to including it with the others. It was certainly remarkable, considering the extensive interference with vascular supply, that the bone-shafts did not suffer more. He presumed that nutrition must go on in the neighbourhood of the epiphyses, and also that probably the blood-clot round the shaft slowly organised. At all events, it was clear that the tendency of the cases, when not fatal from extreme cachexia or intercurrent disease, was towards slow, but ultimately complete, recovery. Dr. Barlow agreed that syphilis was one of the many causes of rickets, but had been unable to prove that syphilis was concerned in the production of subperiosteal hæmorrhage. Dr. Barlow admitted the force of Mr. Parker's objection, that these cases were few in number, although the supposed etiological conditions existed to a very wide extent, but believed that this difficulty could be partly, if not entirely, met. Probably a minor degree of scurvy was more prevalent amongst the children of the civil population than was generally supposed. Dr. Cheadle had suggested that many cases of stomatitis were really scorbutic, and it was certain that some cases of stomatitis could be cured without chlorate of potash and with antiscorbutics. It seemed important to recognise the possibility of scurvy without sponginess of gums. The possibility of this had been suggested many years ago by Dr. Buzzard. With regard to the infantile cases, Dr. Barlow thought that some might easily be passed over as cases of bad rickets in which the extreme fretfulness of the children prevented a complete examination. In regard to diet, he wished to point out that not only in two of his cases in the table, but in two others not included, there had been a remarkable aversion on the part of the children to meat and vegetables. Thus, one girl, aged four years, screamed directly any vegetables were brought into the room, and would not even use a spoon which had the least particle of greens or potatoes adhering to it. Another girl tried to make herself sick directly meat and vegetables were brought to her; and a boy, also aged four years, cried and vomited when such food was presented to him. Individual dislikes of this kind might account for the occurrence of scurvy in one member of a family. Dr. Cheadle had shown that amongst the children of the London poor, the bread-and-butter diet, with the exclusion of milk, was a fertile cause of rickets, but that scurvy was generally warded off by the use of potatoes. If from any cause potatoes

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were omitted, scurvy would probably appear sooner or later. It was hardly correct to say that scurvy did not occur in young people. In the Foundling Hospital at St. Petersburg, Dr. de Mertans had seen a great deal of it in children of two years and upwards. Probably if the occasional non-implication of the gums were recognised, many other cases would be observed. Great pain in the limbs, with swelling and contraction, occurred in many of the foundlings suffering from scurvy at St. Petersburg, as recorded by Dr. de Mertans; and Dr. Barlow could not agree with Mr. Parker that involvement of the limbs was a late symptom of scurvy, for even in the adult cases a deep aching of the limbs was often an early occurrence. The objection raised, that the firm blood-clot found in his cases negatived scurvy, was not a valid one, for Lind had specially noted that in some of his adult cases the blood was found post-mortem firmly coagulated; and he had found the same result from numerous phlebotomies on scorbutic patients. Also the objection with regard to the absence of putrescence in Dr. Barlow's cases was not a valid one. Putrid smell during life really depended on the amount of gum affection. If there was much swelling of gums, and especially if there was much bleeding, then there would be a putrid smell; and such, in fact, had been the case in a few of the examples tabulated where these conditions existed, but not otherwise. As to any special putrescence after death, that also appears, from Lind's observations, to be by no means essential. In the post-mortem examinations made by him he states that he never perceived any unusual marks of putrefaction. Dr. Barlow thought the difficulty of explaining why the disease should seem to affect certain children, and not others, who, so far as was known, were subject to the same conditions, was not greater than the difficulty of explaining many of the curious facts of adult scurvy. It was, for example, difficult to understand why a ship's crew should for a long period be subject to given food conditions without getting scurvy, and then suddenly develope it; and it was also difficult to understand why the majority of a crew should suffer, and certain men, apparently subject to the same conditions, should escape. He presumed that in children, as well as in adults, the element of idiosyncrasy probably played a part, in scurvy as in every other disease. The study of scurvy showed that the causes producing it were cumulative, and that there was a certain amount of what one might call vital resistance, which varied with each individual. Dr. Barlow was not prepared, without consideration, to give an opinion on the specimen shown by Mr. Parker, but doubted whether the clinical history would be found to correspond with those described as "acute rickets" by the German writers, who were most careful to discriminate between this disease and severe rickets, of which he imagined Mr. Parker's specimen must be an example. Dr. Barlow agreed with Mr. Morgan that his specimens showed considerable vascularity of the medulla in the shafts of the long bones. There was also extreme rarefaction of the trabecular structure; in fact, one of the specimens shown was a mere shell of bone, the interior of the shaft having simply dropped out. But it was to be remembered that to some extent these characters belonged to rickets also, and it was difficult to apportion how much was rickety and how much scorbutic. He attributed the fractures just below the junction with the epiphysis to the fact that in that situation in rickety bone the ossified trabeculæ were loose and brittle, so that when the periosteum had been detached, and the bone was left unsupported, it broke with very slight movement. The late Dr. Black used to treat his cases at the *Dreadnought* with milk alone. It was certainly the fact that in a few of the cases tabulated the disease appeared in children who were taking cow's milk. But in some of these it was in minute quantity, and in some of the others it was excessively diluted, and the children were suffering from severe diarrhœa. With respect to condensed milk, valuable as Dr. Barlow thought it to be, it was certainly not protective against scurvy when given alone. Some fresh food was absolutely necessary.

Mr. Page said his case was interesting as confirming, and being confirmed by, Dr. Barlow's more elaborate paper. He had cut down on the swellings because the friends of the child were anxious that something should be done; but, in the light of subsequent events, it seemed probable that the measures which Dr. Barlow had adopted would have proved equally satisfactory. Immense relief was afforded by the incision, and that at once. The result could hardly have been better whatever treatment had been adopted; there was hardly any suppuration from first to last. He agreed with the President that the necrosis which followed on periostitis betokened an ostitis as well, and depended on it. It was certainly difficult to say why the same diet led to rickets in one child and to scurvy in another. In his own case the rickets was not a marked feature, though the child had been ill brought up from the time of its birth.

Dr. Hale White, in reply, only wished to correct a slight error into which he had fallen. On reference to Dr. Buzzard's article in "Reynolds' System of Medicine," a case of dilatation of the heart was mentioned, but it differed from his own case in that it did not cause any appreciable symptoms during life, whereas his own did, and they were rightly diagnosed.

THE ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

Monday, March 5.

Joseph Walker, M.D., President, in the Chair.

Mr. Boyd Wallis showed some models illustrating the treatment of epuloid growths by means of electrolysis. In one case, that of a lady who had obstinately refused to submit to any operation with the knife, an epulis of six years' growth and of considerable size, springing from the back of the upper jaw, had been removed by this means; the treatment, however, extended over six months. Another softer and more vascular growth had been completely destroyed by electrolysis in six sittings.

Mr. J. S. Turner exhibited models of the mouth of the girl whose body was found, packed in a box, at a carriers' office in St. Luke's about two months ago; he showed also her lower jaw. There was at first some doubt as to the girl's age, owing to the fact that on the right side of the upper jaw there were what were thought to be three permanent molars. The first of these was, however, a temporary tooth, and the second bicuspid, which it was thought had been removed to relieve overcrowding, had been retarded in its eruption. In the lower jaw there were two temporary molars remaining; the canines were all fully in position, and so were the upper anterior bicuspids. Taking everything into consideration, he thought the girl must have been about fourteen or fifteen years of age.

The case gave rise to some discussion, in which Messrs. Charles Tomes, Coleman, and Hutchinson took part.

Dr. J. C. Thorowgood then read a paper on "Therapeutic Agents for the promotion of Osseous Development." He pointed out that the composition of the bones and the teeth was practically identical, the latter having only a larger proportion of inorganic matter. The analysis showed that a considerable quantity of mineral food was required for the nutrition of these tissues. The mere administration of the necessary lime-salts was, however, by no means the only thing to be considered in striving to improve osseous development; thus, in rickets, with an evident deficiency of lime in the bones, there was an elimination of from four to six times the normal amount of lime-salts in the urine, showing that the fault was in the process of assimilation. For the dentist, the most serious condition in children was one of acid dyspepsia: the child's breath had a sour smell; tongue furred, with red papillæ showing through; appetite often voracious, and bowels confined or irregular. To give a big-bellied, pale-faced child in this condition phosphate of lime and iron would only make him more uncomfortable; but give him alkaline aperients, regulate his diet, cutting off excess of starch and sugar,—order exercise, salt-water baths, etc., and then administer the specific remedies indicated. Of these the most useful were the soluble hypophosphite of lime and the chloride of calcium; either of these might be given in doses of two or three grains in glycerine and water. The lacto-phosphate of lime was also a valuable remedy. Diet was most important. The child must be taught to eat slowly; brown bread and Scotch oatmeal would suit some children, and "seconds" flour was preferable to the "best white." By this line of treatment the child would be brought into a condition in which the dental surgeon could work on the decayed molars with some prospect of his work remain-

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ing a lasting proof of his skill. In conclusion, Dr. Thorowgood made some remarks on the subject of infant feeding.

An interesting discussion followed, during which it was pointed out that, owing to the early development of the teeth, and the fact that when once formed they did not alter appreciably, treatment intended to improve their condition could best be effected through the mother, so as to influence the child during the periods of pregnancy and lactation.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology, at a meeting of the Board of Examiners on the 2nd inst., and when eligible will be admitted to the pass examination, viz.:—

Baigent, William, student of the Newcastle School.
Barwise, Sidney, of the Birmingham School.
Bury, F. Charles, of the Manchester School.
Davenport, A. Frederick, of the Edinburgh School.
Emery, F. William, of the Birmingham School.
Fitch, C. Dennis, of the Birmingham School.
Gandevia, N. Bamarji, of the Bombay School.
Gilchrist, T. Casper, of the Manchester School.
Graham, H. Henry, of the Toronto School.
Humphry, Ernest, of St. Bartholomew's Hospital.
Jones, T. Joseph, of the Edinburgh School.
Knowles, F. Joseph, of the Liverpool School.
Milner, E. Taylor, of the Manchester School.
Richards, Robert, of the Manchester School.
Sunder, C. Edward, of University College Hospital.
Wild, R. Briggs, of the Manchester School.
Woodbury, McGaw, of the New York School.

Five candidates were referred for three months and one for six months. The following gentlemen passed on the 3rd inst., viz.:—

Aubrey, A. Reuben, student of the Bristol School.
Burnett, Reuben, of the Manchester School.
Buxton, Edward, of the Liverpool School.
Cottam, F. H. Warburton, of the Manchester School.
Craston, C. Anthony, of the Manchester School.
Ellison, Joseph, of the Leeds School.
Featherstone, W. B., of the Birmingham School.
Henshaw, W. Henry, of the Manchester School.
Herbert, Herbert, of the Leeds School.
Hill, A. William, of the Birmingham School.
Ingle, A. Clarkson, of the Cambridge School.
Lennon, Patrick, of the Manchester School.
Pocock, H. James, of the Bristol School.
Proud, Frederick, of the Newcastle School.
Sidebotham, Harold, of the Manchester School.
Strangham, John, of the Newcastle School.
Street, Ashton, of the Leeds School.
Thompson, J. Hilton, of the Manchester School.
Thornton, Edward, of the Cambridge School.
Watts, E. H. Richmond, of the Cambridge School.
Williams, L. Henry, of the Bristol School.

Three candidates were referred. The following gentlemen passed on the 4th inst., viz.:—

Adams, G. Wheatley, student of the Manchester School.
Crosby, Robert, of the Newcastle School.
Goodmorn, T. Herbert, of the Charing-cross Hospital.
Harrison, S. Hope, of the Birmingham School.
Hemming, C. P. Karl, of the London Hospital.
Hollings, C. Edward, of the Manchester School.
Jeaffreson, J. Leslie, of St. Bartholomew's Hospital.
Lister, Joseph J., of the Cambridge School.
Martland, Thomas, of the Manchester School.
Maudsley, H. Sydney, of the Cambridge School.
Mumford, A. Alex., of the Manchester School.
Nuttall, Frank, of the Manchester School.
Platt, H. Thomas, of the Newcastle School.
Postlethaite, Frank, of St. Bartholomew's Hospital.
Rowell, George, of Guy's Hospital.
Russell, G. Herbert, of St. Bartholomew's Hospital.
Smith, A. Henry, of the Manchester School.
Tomkins, A. John, of the Bristol School.
Tonks, Henry, of the London Hospital.
Wells, James, of the Manchester School.
Yeoman, Charles, of the Cambridge School.

Three candidates were referred for three months.

The Primary or Anatomical and Physiological Examinations for the diploma of Membership of the College were commenced on Friday last, the 30th ult., when 223 candidates presented themselves, against 232 at the corresponding period last year. The following questions on Anatomy were submitted to the candidates at the written examination, when they were required to answer four, and not more than that number, out of the six questions, between the hours of one and three o'clock, viz.:—1. Describe the dissection by which you would expose the genio-hyo-glossus muscle. 2. Describe the os magnum. 3. Describe the course, relations, and tributaries of the innominate veins. 4. Give the dissection required to expose the tendon of the peroneus longus in the sole of the foot. 5. Enumerate in their relative positions the muscles which are in contact with the capsular ligament of the hip-joint. Name those muscles which rotate the femur outwards and those which rotate it inwards. 6. Describe the fascia transversalis. The following were the questions on Physiology, to be answered between four and six o'clock the same day, viz.:—1. What is the composition of the blood? State the uses of its various constituents. 2. Classify food-stuffs in the order of their value as heat-producers. Give your reasons for the order in which you place them. 3. Describe the structure of lymphoid tissue, and state where it occurs. 4. Describe the act of deglutition. 5. Explain the mechanism of ordinary inspiration and expiration. 6. Describe the formation and uses of the placenta.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 29:—

Berkley, Ernest James Gibson, Terrace-road, Hackney.
Davy, Thomas George, 21, Milman-street, W.C.
Floyer, Frederick Anthony, St. Thomas's Hospital.
Knight, Edward, Riverdale, Leatherhead.
Mitchell, Walter Frederick, St. Bartholomew's Hospital.
Vann, Alfred Mason, Grove House, Durham.

The following gentleman also on the same day passed his Primary Professional Examination:—

Williams, George Forbes Crawford, St. Thomas's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

HITCHCOCK, CHARLES KNIGHT, M.A., M.D. Cantab.—Resident Medical Superintendent of the York Lunatic Asylum, Bootham, *vice* H. C. Gill, deceased.

BIRTHS.

BARCROFT.—On March 31, at Melville Hospital, Chatham, the wife of Surgeon Barcroft, R.N., of a daughter.

BARROW.—On April 1, at 9, Herbert-terrace, Herbert-road, Shooter's Hill, Kent, the wife of Surgeon H. J. Waller Barrow, A.M.D., of a son.

CLARKE.—On March 28, at Twickenham, the wife of R. Ashmore Clarke, L.R.C.S., of a son, stillborn.

FIRTH.—On March 19, at St. Giles' Plain, Norwich, the wife of Eustace Firth, M.B., of a daughter.

INKSTER.—On March 30, at Fulwood-road, Sheffield, the wife of S. Macaulay Inkster, M.D., of a daughter.

MATCHAM.—On March 19, at 13, Gladstone-street, S.E., the wife of Dr. Matcham, of a daughter.

PARKINSON.—On April 1, at Fairlynch, Matheson-road, West Kensington, the wife of George William Parkinson, M.R.C.S., of a daughter.

PIZEY.—On April 1, at Rydal Villa, Clevedon, Somerset, the wife of G. P. Pizey, L.R.C.P., M.R.C.S., of a son.

PLATT.—On March 30, at 4, Upton Villas, Kilburn, the wife of William H. Platt, L.R.C.P., of a son.

POWELL.—On March 23, at Elm Cottage, Beckenham, the wife of H. A. Powell, M.A., M.R.C.S., of a daughter.

RYAN.—On March 26, at Emly, Tipperary, the wife of Charles E. Ryan, M.D., of a daughter.

SHAW.—On March 22, at Alexandria, the wife of Surgeon-Major John Alexander Shaw, M.D., F.R.C.S., Army Medical Department, of a son, stillborn.

WALLACE.—On March 30, at 94, Cazenove-road, Upper Clapton, the wife of Frederick Wallace, L.R.C.P., prematurely of a daughter, stillborn.

MARRIAGES.

BOTT—WOLSTENHOLME.—On March 29, at Wells-street, W., William Gibson Bott, L.R.C.P., M.R.C.S., of 61, Kennington-park-road, to Camilla Anne Kirkman, widow of Thomas Wolstenholme, of Kennington.

COMBE—MARSHALL.—On March 28, at Westbourne-park, W., Frederick Orloff Combe, M.B., to Emily Arabella, younger daughter of William Marshall, of Kildare-terrace, Bayswater.

HOLLIES—BAKER.—On March 31, at Windsor, George Hollies, B.A. Cantab., L.R.C.P., of Wellington, Salop, to Nellie, second daughter of Thomas Baker, formerly of Barton, Cambridgeshire.

INGLIS—BROWN.—On April 2, at Camden-square, N.W., Thomas Inglis, F.R.C.P. Edin., of the Minster Yard, Lincoln, to Margaret, daughter of the late Dr. J. Brown, of Wooler, Northumberland.

MCCALLUM—SYMINGTON.—On April 3, at Newcastle-on-Tyne, Colin McCallum, M.B., C.M. Edin., Anstruther, Fife, to Maud, elder daughter of the late William Symington, A.R.I.N.A., F.R.G.S.

NINNIS—SUTTON.—On March 28, at Streatham, Belgrave Ninnis, M.D., Fleet-Surgeon R.N., to Ada Jane, elder daughter of the late James Sutton, Esq., of Pembroke House, Streatham.

VLIELAND—MILLEN.—On March 28, at Faversham, Charles James Vlieland, M.R.C.S., of St. Thomas's, Exeter, to Alice Edith, elder daughter of W. Millen, of Syndale Valley, Faversham.

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WAGHORN—BLENCOWE.—On March 29, at Brockley, Henry Waghorn, Surgeon-Major A.M.D., to Matilda, third daughter of William Blencowe, of St. James's, Brockley.

DEATHS.

BANNISTER, HENRY POWELL, M.R.C.S., etc., late of Vauxhall-bridge-road, S.W., at Dudley House, Deal, on March 27, aged 57.

DAVIDSON, A., M.D., Inspector-General of Hospitals, at Cheltenham, on March 31, in his 86th year.

FULLER, THOMAS WARBERTON, M.B., eldest son of Thomas Fuller, M.D., of New Shoreham, on March 30, aged 27.

GULLY, JAMES MANBY, M.D., formerly of Great Malvern, on March 27, aged 75.

HAINWORTH, JOHN, F.R.C.S., L.S.A., at Queen's-road, Edmonton, on March 29, aged 79.

MANBY, HERBERT LYNSEY, M.R.C.S., of Brewood, Staffordshire, at Wolverhampton, on April 1, in his 28th year.

MOUTRAY, CHARLES DRUMMOND, M.B., at Ashburnham, Shacklewell-green, Dalston, on March 28, aged 32.

QUARTLEY, FRANCIS CECIL, M.R.C.S., at 54, Lancaster-road North, Finsbury-park, on March 28, aged 35.

RUSSELL, GEORGE IRELAND, M.D., F.R.C.S., at 39, The Terrace, Gravesend, on March 30, in his 86th year.

SWAIN, PAUL WILLIAM, F.R.C.S., J.P., at Penlee Cottage, Stoke, Devonport, on March 24, aged 74.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

CHICHESTER INFIRMARY.—House-Surgeon and Secretary. Salary £100 per annum, with board, washing, and lodging. Candidates must possess both a medical and a surgical qualification obtained in the United Kingdom, and be duly registered. Applications, with testimonials, to be sent to the Secretary, on or before April 7. The election will take place on April 19.

EAST SUSSEX, HASTINGS, AND ST. LEONARDS INFIRMARY, HASTINGS.—Assistant-Surgeon. (*For particulars see Advertisement.*)

LINCOLN COUNTY HOSPITAL.—House-Surgeon. Salary £100 per annum, with board, lodging, and washing. Candidates must be Members or Licentiates of one of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, and Licentiates of the Apothecaries' Company, or of one of the Royal Colleges of Physicians, or graduates in medicine of one of the Universities of Great Britain or Ireland, and duly registered under the Medical Act, under forty years of age, and unmarried. Testimonials as to qualifications and character to be sent to the Secretary on or before April 23.

LIVERPOOL ROYAL INFIRMARY.—Resident Medical Officer. Salary £100 per annum, with board, lodging, and washing. Candidates' names must be on the Medical Register of Great Britain, and they must possess at least one medical and one surgical diploma, licence, or degree recognised by the Medical Council, and be unmarried. Applications, with testimonials, to be sent to the Chairman of the Committee on or before April 25.

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, WELBECK-STREET, W.—Assistant-Physician. (*For particulars see Advertisement.*)

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

St. Austell Union.—Mr. Edward S. White has resigned the Fourth District: area 3080; population 1753; salary £16 per annum.

APPOINTMENTS.

Chipping Norton Union.—Thomas O'Kelly, M.D. Queen's Univ. Dub., L.R.C.S. Edin., to the Second District.

Martley Union.—Henry Horton, M.R.C.S. Eng., L.S.A., to the Knightwick District.

Walsingham Union.—Alfred W. F. Whitlock, L.R.C.S. Edin., L.R.C.P. Edin., to the Wells District.

THE LONDON HOSPITAL MEDICAL COLLEGE.—The Medical and Surgical Scholarships and the Duckworth Nelson Prize for Medicine and Surgery have this year been awarded as follows:—Medical Scholarship, Mr. A. T. Schofield; Honourable Certificate, Mr. P. C. McD. Howse. Surgical Scholarship, Mr. P. C. McD. Howse; Honourable Certificate, Mr. O. C. Jones. Duckworth Nelson Prize, Mr. P. C. McD. Howse; Honourable Certificate, Mr. A. T. Schofield.

ST. JOHN AMBULANCE ASSOCIATION.—At a meeting of the Central Executive Committee, held on Friday, at St. John's Gate, Clerkenwell, Colonel Sir Henry Loch, K.C.B., Commissioner of Woods and Forests, in the chair, it was reported that at a recent inspection of the Egyptian Artillery at Cairo by General Sir Evelyn Wood, the men went through a demonstration of the stretcher drill of the St. John Ambulance Association, which had been introduced by the commanding officer, Colonel F. Duncan, R.A., Deputy Chairman of the Association. The demonstration was subsequently repeated in the presence of the Khedive, who expressed himself as greatly pleased with the men's progress.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 31, 1883.

BIRTHS.

Births of Boys, 1345; Girls, 1369; Total, 2714.
Corrected weekly average in the 10 years 1873-82, 2693·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	1089	1059	2148
Weekly average of the ten years 1873-82, corrected to increased population ...	954·7	981·0	1935·7
Deaths of people aged 80 and upwards ...	...	...	111

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	5	1	3	5	...	4	...	1
North ...	906947	...	4	5	1	10	...	7	1	1
Central ...	282288	...	10	5	2	1	1	4	...	...
East	692788	...	23	13	3	6	1	4	...	1
South	1265927	...	16	5	3	21	1	7	1	1
Total	3816483	...	58	29	12	43	3	26	1	3

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·45 in.
Mean temperature	39°
Highest point of thermometer	55°
Lowest point of thermometer	21°
Mean dew-point temperature	29°
General direction of wind	Variable.
Whole amount of rain in the week	0·09 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 31, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending Mar. 31.	Deaths Registered during the week ending Mar. 31.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.). Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values.	Temp. of Air (Cent.). Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	Rain Fall. In Centimetres.
London	3955614	2714	2148	28·3	56·7	24·7	39·6	3·7	0·09	0·23
Brighton	111962	69	63	29·5	50·3	28·0	37·2	2·9	0·12	0·30
Portsmouth ...	131478	75	65	25·8	...	...	...	...	...	...
Norwich	89612	66	43	25·0	...	...	...	...	...	...
Plymouth	74977	54	45	31·3	55·0	27·0	40·6	4·8	0·01	0·03
Bristol	212779	143	104	25·5	52·6	25·0	38·2	3·4	0·27	0·69
Wolverhampton .	77557	54	52	35·0	52·1	22·0	34·0	1·1	0·29	0·74
Birmingham ...	414846	301	270	34·0	...	...	...	...	0·13	0·33
Leicester	129483	127	87	35·1	53·8	24·8	37·2	2·9	0·13	0·33
Nottingham ...	199349	164	112	29·3	55·6	23·5	35·6	2·0	0·21	0·53
Derby	85574	81	48	29·3	...	...	...	...	...	...
Birkenhead ...	88700	57	44	25·9	...	...	...	...	...	...
Liverpool	566758	416	330	30·4	...	...	...	...	...	...
Bolton	107862	75	65	31·4	...	...	...	...	...	...
Manchester ...	339252	255	259	39·8	...	...	...	...	...	...
Salford	190465	147	98	26·8	...	...	...	...	...	...
Oldham	119071	87	79	34·6	...	...	...	...	...	...
Blackburn	108460	68	72	34·6	...	...	...	...	...	...
Preston	98564	81	63	33·4	...	...	...	...	...	...
Huddersfield ...	84701	48	42	25·9	...	...	...	...	...	...
Halifax	75591	52	52	35·9	...	...	...	...	...	...
Bradford	204907	110	83	21·1	51·2	25·6	35·7	2·0	0·16	0·41
Leeds	321611	230	144	23·4	53·0	27·0	36·3	2·9	0·21	0·53
Sheffield	295497	251	166	29·3	...	...	...	...	...	...
Hull	176296	145	102	30·2	53·1	25·0	36·8	2·7	0·16	0·41
Sunderland ...	121117	105	72	31·0	50·0	26·0	34·5	1·9	0·21	0·53
Newcastle	149464	131	75	26·2	...	...	...	...	...	...
Cardiff	90033	96	43	24·9	...	...	...	...	...	...
For 28 towns ...	8630975	6231	4836	29·2	56·7	23·0	36·8	2·7	0·12	0·30
Edinburgh	235946	136	94	20·8	49·6	24·9	37·6	3·1	0·27	0·69
Glasgow	515589	424	309	36·3	47·3	25·5	37·3	2·9	0·37	0·94
Dublin	349385	219	288	43·0	50·6	26·1	39·7	4·3	0·23	0·58

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·56 in. The lowest reading was 29·07 in. on Monday afternoon, and the highest 30·02 in. on Wednesday evening.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Temperance Appellations.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Even a "Printer's Devil" is open to the allurements of flattery; at least, I suppose so, as otherwise he would surely have availed himself of the advantage that your correspondent "D." gave him when he said that "viaduct" was not old Latin at all; but what printer's devil could be expected to criticise a letter which implied, however indirectly, that he was a gentleman? I apprehend that *aquabib* is not old Latin, not even post-classical, and I must say that I do not feel quite clear as to its formation. I should think *aquam bibens* would be more correct than *aquæ bibor*, which would mean a tippler or drunkard of water, an appellation which few would care to adopt when they knew its meaning. According to my reading, *aquapot* would probably be a more correct rendering, as *poto* means "I drink to excess," and those who drank nothing but water might fairly be said to drink it to excess. I am, &c., X.

Dr. Williams.—Just now the mortality amongst the aged and infirm is very remarkable, as may be seen on reference to the daily obituary in the *Times*. In Shakespeare's *Much Ado about Nothing*, Don Pedro, in addressing Benedick, a young Lord of Padua, says, "Good morrow, Benedick. Why! what's the matter, that you have such a *February* face, so full of frost, of storm, and cloudiness?"

Cap and Gown.—A petition is being got up and generally signed by the students of the Edinburgh University, asking permission to wear cap and gown.

Adulteration Outside the Act.—At the Edinburgh Police-court, a grocer, of the Grassmarket, was charged, under the Food and Drugs Act, with selling one pound of mustard not of the nature, substance, and quality demanded. The mustard in question was taken from a tin labelled "Colman's mustard," which had printed on the wrapper, "Take notice, this preparation is an admixture of pure mustard with farina and choice condiments." After hearing the witnesses on both sides, the Sheriff said it was clearly in evidence that the mixture of flour which the mustard in question contained (about 10 per cent.) was not injurious to health. He was bound also to hold that the mustard was not fraudulently mixed with the flour in order to conceal the inferior quality and to increase its bulk. He therefore found the accused not guilty, and allowed his expenses.

Erizensis, Dulwich College.—Dr. Joseph Allen graduated M.D. St. Andrews in April, 1754. He accompanied Lord Anson in his celebrated voyage round the globe, and on his return was chosen Master of your College, which appointment he retained for thirty years. There is a portrait of him by G. Romney, engraved by C. Townley; but surely there is some account of him to be found in the papers, etc., of Dulwich College?

Sewage Pollution.—The Ribble Fishery Board has served notices upon the local authorities at Accrington, Great Harwood, and other places, giving them notice, under the Rivers' Pollution Act, to discontinue, within two months, emptying sewage into the river.

Services deservedly Recognised.—The authorities have gracefully conferred the medal for Egypt on the nurses who took part in the Egyptian expedition. These ladies rendered valuable services in the hospitals at Ismailia, Alexandria, and on board the *Carthage*, and were engaged night and day in their arduous duties.

Nox.—The Hospital Saturday collections at Birmingham have been fixed to take place on the 28th inst.

Official Approval.—Mr. J. J. Hanley, Local Government Board Inspector for the district, attended the last meeting of the Birmingham Board of Guardians, and stated that, from an inspection of the workhouse and the Marston Green Homes, he found both places were conducted in a very satisfactory manner. He complimented the Guardians on the lenient spirit in which they gave outdoor relief, and defended the principle, when judiciously put in practice, of administering indoor relief.

French Brandy.—In a recent return of the French Minister of Agriculture on the wines of 1882, it appears that the vineyards of the two Charentes, which alone supply the genuine wine brandy, are irretrievably ruined. These two departments, which were devoted almost wholly to grape-culture, gave 311 million gallons of wine in 1875. Last year they only gave one-eighth of that quantity, being a falling-off of 273 million gallons, and the quality was execrable. The condition of Charente proper, which produced the true cognac, is even worse, for the vintage—if it can still be called so—only gave the twenty-second part of the yield of 1875, and the ravages of the phylloxera are each successive year going from bad to worse. In fact, the peat has now utterly destroyed throughout France nearly two million acres of vineyards.

Open Spaces, Manchester.—A new playground in Piercy-street, Oldham-road, belonging to the Corporation, has been opened to the public. Means of amusement are provided for the youth of both sexes—swings, see-saws, and a well-arranged ball-court. The arrangement is somewhat of an experiment, to see whether the additional means of recreation provided in this as compared with other playgrounds in the city will induce the children to frequent the ground in large numbers.

The Bolingbroke Pay Hospital.—A balance of £263 odd has been handed over to this institution as the result of the fancy dress ball held at the Albert Hall on February 6 for the benefit of the Hospital.

Infant Mortality, King's Norton.—Mr. Hollinshead, Medical Officer of Health, in his annual report, remarks:—"In reference to infant mortality, the percentage under one year was, and would to a certain extent always be, excessive, and the sanitary authority could do little to lessen it, as the deaths were not, as a rule, due to diseases of an infectious nature, but mainly dependent upon defective nutrition, and influenced by diet and general management. The only means of lessening the rate of infant mortality was by educating parents concerning the diet and general management of their offspring."

Intense Cold at Nice.—Letters report that the recent snowstorm and cold were unusually severe. The cold was so intense that the water-pipes in some of the villas froze and burst—an occurrence almost unheard of on the Riviera. Such extraordinary weather has not been known before at Nice for nearly fifty years.

Sanitary Directions by Doctors to their Patients.—A contemporary, writing on "the sanitary condition of houses in the country," after suggesting the best means to increase a knowledge of sanitary principles among all classes of dwellers in the various provincial towns, where comparatively little is known on this important question—namely, by simple and popular lectures, treating of the main principles of sanitary science in connexion with houses—adds, "Then there are the medical men, who should point out to their patients how to keep in health as well as to cure them when they are ill. They will always in this world have plenty of patients, and medical men should take every opportunity of pointing out the main sanitary principles that comes in their way. The improvement of the sanitary arrangements of our country houses, great or small, is clearly a matter of pressing importance."

Alleged "Inefficient and Spendthrift Policy."—At the last meeting of the Salford Board of Guardians notice was given of the following motion:—"That, in the opinion of this Board, it is necessary to reverse the inefficient and spendthrift policy pursued in organising the union infirmary."

W. Cordwell P.—The main provision in Mr. Reid's Anti-Vivisection Bill lies in the fulness and severity of its prohibitions:—"It shall not be lawful to subject any animal to vivisection; that is to say, to perform on any live animal, with or without anæsthetics, any experiment or demonstration for any medical, physiological, or scientific purpose. Any person performing or taking part in any such experiment or demonstration will be liable for the first offence to a penalty not exceeding £50, and for a second or subsequent offence he may be fined £100 or imprisonment for three months."

Small-pox.—It has been reported to the Rowley Regis Local Board that the parish was now free from small-pox, and it was decided to dispense with the services of the nurses at the Infectious Diseases Hospital.

Benefactors.—The building committee has selected designs for the proposed new infirmary at Stratford, which is to be erected at a cost of £6000. This sum has been generously given for the purpose by a lady and gentleman residing in the neighbourhood. The same donors lately gave £4000 to the Stratford Nursing Home.

Illicit Spirits.—The magistrates at Hanley have inflicted one fine of £200 and two fines of £100 each upon three persons, the first two of whom are women, for making illicit whisky on an extensive scale.

Milk Adulteration: Milk "in Transit" a Fatal Objection to the Prosecution.—A farmer, of Langhall, was summoned before the Birkenhead County magistrates for having sold to Inspector Walker a quantity of milk, which, on being analysed, was found to be adulterated with 8 per cent. of water. The inspector took in transit a sample from a tankard of milk belonging to the defendant. The sample was put into a bottle, labelled and sealed, and taken to the analyst. For the defence several objections to the proceedings were urged, one of which was, that according to the Act of Parliament the sample of milk ought to have been taken at the place and during the time of delivery, and not whilst in transit. The magistrates held this objection to be fatal, and dismissed the summons.

Girls Employed in Factories.—The humane spirit which has animated our legislation in regulating the employment of young persons of both sexes in our factories is to be further exemplified by the Bill which Mr. Broadhurst has introduced into the House of Commons to amend the Factory and Workshops Act of 1875. The Bill provides that, "in any part of a factory or workshop in which there is carried on the forging, stamping, rolling, or hammering of iron or steel for the manufacture of nails, screws, nuts, or bolts, no girl under the age of fourteen years shall be employed."

A New Winter Resort.—It is stated that Nice and Mentone are likely to be rivalled by the discovery of a new winter resort in Austria. The name of the place is Appazia, which new Mecca for pulmonary patients lies within an hour's ride by stage from Fiume, in a small bay protected by high mountains against easterly, northerly, and westerly winds, and sheltered against the sirocco by the island of Veglia on the south. The administration of the Austrian Southern Railway is already erecting a large hotel at Appazia, which may be reached from Vienna in fourteen hours.

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G. L. L.—The new coroner's "Croydon district" of the county of Surrey, recently made, embraces a large area, in which Croydon and Reading are the principal towns. The inquests in Croydon have hitherto been held by Mr. W. Carter, but he has now taken what may be called the home district—Camberwell, Walworth, Kennington, etc.

The Sale of Diseased Meat: How the Act is Evaded.—Dr. Sedgwick Saunders, the Medical Officer of Health of the City of London, lately called the attention of the City Commissioners of Sewers to the sale of diseased meat, previously condemned by the sanitary officers, within a few yards of the Central Meat Market, and asked the Court again to protest to the local authority of the district, and so avoid the possible alternative of a direct appeal to the President of the Local Government Board. The matter was referred to the Sanitary Committee.

Malaria: Italy.—A project has been prepared for making the malaria regions in Italy healthy. For this purpose a map has been drawn out, which shows plainly the desolation of the Neapolitan provinces. The malaria regions are divided into three classes, namely, weak, serious, and most serious. Thirteen provinces are classified as having weak malaria, twenty-nine as serious, and twenty-one as most dangerous. The new project will give to the Government the right of expropriating territories lying in the region of the most serious malaria, contiguous to the lines of railway for a distance of 200 metres on each side, unless the proprietors have themselves undertaken the work of improvement. For ten years from the passing of the law, prizes and indemnifications will be granted to anyone in the circle of malaria who makes a plantation of eucalyptus trees. The Government provinces and communes are also authorised to grant subsidies. All proposals relating to sanitary works will be examined by an executive committee.

Quarantine Regulations in Natal.—The question of relaxing these regulations was referred to a medical board at Durban, and they have advised the strict enforcement of quarantine until twenty-one days after the convalescence of the last patient in or near Capetown. As fresh cases have broken out in the suburbs there is no prospect of communication being restored between Capetown and Durban for some time to come.

Compulsory Notification of Infectious Diseases.—The Medical Officer of Health of Crewe, in his last report on the sanitary condition of the town during the past year, referring to two cases of small-pox which had recently occurred, expresses regret that it was not compulsory for persons to report these cases, and said they were not friends to the community who would hoard up in privacy cases of this virulent disease until they became powerless to prevent an epidemic. The report produced an animated discussion at the meeting of the Guardians, one of the members stating that in one of the cases notice had been given to the authorities directly the disease manifested itself. This was denied.

Emigration.—No less than 279,336 inhabitants of these islands left our shores during 1882. This shows an increase of 20,774 on the previous year, and the increase is chiefly made up of persons of English and Scotch nationality. The *Statist* draws attention to the fact that the Irish contribution is losing its former proportion to the whole. For example, in 1880, of every 100 emigrants, 41 were Irish, 10 Scotch, and 49 English; while last year only 30 were Irish, 12 Scotch, and 58 English. The loss of population amounted to about half the gain by excess of births over deaths. One peculiar feature of the emigration from England is that nearly three adult males go away for every adult female, a disproportion which has never disclosed itself in the emigrants from Ireland; but, on the other hand, the movement of whole families is far more common on this side of the Channel than on the other.

COMMUNICATIONS have been received from—

The Honorary Secretary of the Medical Society of London; Mr. J. Chatto, London; The Honorary Secretary of the Royal Medical and Chirurgical Society of London; Mr. Lawson Tait, Birmingham; The Registrar of the Apothecaries' Hall, London; Sir E. Lechmere, London; Dr. Crichton Browne, London; Dr. C. Mercier, Dartford; Dr. Willoughby, London; Dr. J. W. Moore, Dublin; Mr. F. W. Rudler, London; Dr. A. T. Thomson, Glasgow; Mr. W. W. Reeves, London; The Registrar-General for Scotland, Edinburgh; The Sanitary Commissioner for the Punjaub, Lahore; The Secretary of the Clinical Society, London; The Secretary of the Royal Institution of Great Britain, London; The Directors of the Nineteenth Century Building Society, London; Mr. Samuel Owen, London; The Warden of the London Hospital Medical College, London; Mr. Noble Smith, London; The Honorary Secretary of the Poor-Law Medical Officers' Association, London.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Medical Temperance Journal—Ophthalmic Review—L'Impartialité Médicale—Revue Mensuelle de Laryngologie, etc.—National Anti-Compulsory Vaccination Reporter—Monthly Homœopathic Review—Archives Générales de Médecine—Glasgow Medical Journal—Journal of Nervous and Mental Disease—Indian Medical Gazette—Lavos de Hipocrates—The Philanthropist—Edinburgh Medical Journal—Italian Times, March 31—The Veterinarian—Birmingham Medical Review—The Analyst.

BOOKS, ETC., RECEIVED—

Tables to Illustrate Dr. McKendrick's Lectures on Physiological Discovery—Manuel des Injections par Bourneville et Bricon—Annual Report of the Willard Asylum for the Insane for the Year 1882—Dr. G. Beck's Therapeutischer Almanach—Domestic Poisons, by William Thomson, F.R.S. Edin., F.C.S., etc.—Hunterian Oration, by T. Spencer Wells—Clinical Lectures on Diseases of the Urinary Organs, by Sir Henry Thompson—On the Pathology of Bronchitis, etc., by D. J. Hamilton, M.B., F.R.C.S., F.R.S.—Report of the Derbyshire Lunatic Asylum—Observations on the Majority Report of the Select Committee of the House of Commons on the Contagious Diseases Acts, 1882—L'Electrotonus des Nerfs Moteurs et Sensitifs chez l'Homme, par Armand de Watteville—History of Rome, parts 1 and 2, by Victor Drury—The Life and Work of Saint Paul, by F. W. Farrar, D.D., part 15—Transactions of the Obstetrical Society of London, vol. xxiv.—Englisches Conversationsbuch für Pharmaceuten, von Dr. Th. D. Burry—Report on the Health, Sanitary Condition, etc., of Kensington from February 25 to March 24—Annual Report of the Staffordshire County Lunatic Asylum, Burntwood, near Lichfield, for 1882—Report of the North London or University College Hospital for the Year 1882—Annual Report of the Vigilance Association for the Defence of Personal Rights, etc.

APPOINTMENTS FOR THE WEEK.

April 7. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Mr. A. Geikie, "On Geographical Evolution."

9. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Medical Society of London, 8½ p.m. Dr. Cullimore, "On the Use of the Moxa in Chronic Affections of the Spinal Cord." Dr. Gilbart Smith, "On Two Cases of Pancreatic Disease." Dr. de Watteville will show a New Method of producing Light for Medical Purposes.

10. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

Anthropological Institute (4, St. Martin's-place, W.C.), 8 p.m. Dr. J. G. Garson, "On the Osteology of the Ancient Inhabitants of the Orkney Islands."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. Arthur Barker, "On Nævus of the Rectum, proving Fatal, in an Adult, from Hæmorrhage." Mr. Harrison Cripps, "On some Points connected with Local Recurrence of Malignant Diseases."

11. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

Hunterian Society (London Institution) (Council Meeting, 7½ p.m.), 8 p.m. The President (Mr. Rivington), "On a Case of Removal of Loose Cartilage from Knee-joint." Dr. J. Herbert Stowers, "Observations upon the Nature and Treatment of Infantile Eczema."

Royal Microscopical Society, 8 p.m. Mr. M. Morris and Dr. G. C. Henderson, "On the Life-History of the Ringworm Fungus (*Trichophyton tonsurans*)." Mr. G. C. Matthews, "Notes on the Red Fungus of Barley."

12. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Dr. Waldstein, "On the Art of Pheidias."

13. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Clinical Society of London, 8½ p.m. Dr. Semon, "On a Case of Removal by Internal Operation of a Pin from the Larynx, in which it had been impacted for thirteen months, and had caused Anchylosis of the Left Crico-arytænoid Articulation." Dr. Whipham, "On Two Cases of Enteric Fever accompanied by an Erythematous Eruption resembling that of Scarlatina." Mr. B. Both, "On a Case of Lateral Curvature of the Spine, illustrating its Treatment without the use of Mechanical Supports." Mr. Page, "On a Case of Tabetic Arthropathy, in which the Tarsal Bones of both Feet were involved." Mr. Barker will exhibit a Case of Subperiosteal Amputation at the Hip-joint.

Royal Institution (Council Meeting, 8 p.m.), 9 p.m. Dr. Waldstein, "On the Influence of Athletic Games on Greek Art."

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ORIGINAL LECTURES.

GULSTONIAN LECTURES ON STERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London.

By J. MATTHEWS DUNCAN, M.D., F.R.C.P.L.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, etc.

LECTURE II., PART IV.—ITS THEORY OR CAUSATION.

EXCLUDING some remarks as to the influence of marriage in causing sterility in woman, we have shown chiefly the influence of age in its production. Marking out by statistical evidence certain ages as peculiarly affected with sterility, we find at these same ages, in a proportion above the average, excessive families, pluriparity, weakly or idiotic children, etc., and not only in exaggerated proportion, but combined one with another. It is, therefore, reasonable to describe the sterile ages as ages of imperfect reproduction, and to associate or identify with sterility the conditions of excessive production, pluriparity, etc., which are demonstrated to have alliance with it. In other words, sterility, excessive families, and pluriparity are alternatives one of another, and almost certainly own the same general causes.

I know no cause of sterility or of its allies, excessive production, pluriparity, abortion, etc., that can be compared with age in extent and power. In discussing the cure of sterility, I shall allude to various minor causes which may operate in individual cases, but have no extensive influence. But there are causes which probably have a great place in the production of this condition whose action is only believed, not demonstrated. Such are bad general health, cold, and heat. The influence of bad general health is well observed in plants, but I know no good evidence of it in woman other than the testimony of medical practitioners. The influence of cold and of heat on sterility has been much studied, and attempts have been made to get additional light on the matter by collecting observations of their influence on the age of commencement and cessation of menstruation. The subject divides itself into two portions: first, the influence of cold and heat on women breeding in their native lands; second, the same influence as exerted on women born in cold climates and transported to hot, or born in hot climates and transported to cold. But the data obtained are, in my opinion, quite insufficient for any reasoning being securely based. The hearsay evidence also requires scrutiny. We often hear, for example, of a girl, say of eleven, bearing a child in India, and this is held as proof of early fecundity there. We rarely hear of the same occurrence in this country; and the reason of this alleged greater frequency in India may be not earlier fecundity there, but earlier exposure of a large number of girls to the risk of becoming pregnant.

There are several important subjects, more or less closely bearing on our inquiry, which I pass by with mention only. Among these is the influence of cold and of heat on the commencement and stoppage of menstruation—an influence regarding which it is scarcely, by the statistical evidence, made probable that cold retards the appearance and hastens the stoppage, though many considerations support this view. Another is the generally accredited influence of nursing in delaying the return of menstruation and the recurrence of pregnancy. Regarding these matters, Roberton has made valuable remarks, and collected many, though insufficient, observations. The great subject of interbreeding in its production of sterility I also pass over. The evidence regarding it is very bulky, and requires most careful sifting. In plants and animals the demonstration of this injurious influence of interbreeding in producing imperfection of offspring and sterility is copiously illustrated, and may be said to be well made out; but it is not so in the case of man. Yet, in the case of man, there is a most extensive, though not universal, consensus of intelligent opinion that interbreeding has the same general influence as in plants and animals, and to the entertainment of this view the strong analogy of plants and animals lends powerful encouragement. The injurious influence in man, indeed, probably acts after birth, for there is accumulating evidence that peculiar diseases, specially of the eyes, affect, by preference, the offspring of near relations.

"The evil consequences," says Darwin, "of long-continued close interbreeding are not so easily recognised as the good effects from crossing, for the deterioration is gradual. Nevertheless, it is the general opinion of those who have had most experience, especially with animals which propagate quickly, that evil does inevitably follow sooner or later, but at different rates with different animals. No doubt a false belief may unduly prevail, like a superstition; yet it is difficult to suppose that so many acute and original observers have all been deceived at the expense of much cost and trouble. . . . The loss of fertility, when it occurs, seems never to be absolute, but only relative, to animals of the same blood; so that this sterility is, to a certain extent, analogous with that of self-impotent plants which cannot be fertilised by their own pollen, but are perfectly fertile with pollen of any other plant of the same species. The fact of infertility of this peculiar nature being one of the results of long-continued interbreeding, shows that interbreeding does not act merely by combining and augmenting various morbid tendencies common to both parents; for animals with such tendencies, if not at the time actually ill, can generally propagate their kind. Although offspring descended from the nearest blood relations are not necessarily deteriorated in structure, yet some authors believe that they are eminently liable to malformations; and this is not improbable, as everything which lessens the vital powers acts in this manner. Instances of this kind have been recorded in the case of pigs, bloodhounds, and some other animals." "In the case of man," he elsewhere remarks, "the question whether evil follows from close interbreeding will probably never be answered by direct evidence, as he propagates his kind so slowly, and cannot be subjected to experiment; but the almost universal practice of all races at all times of avoiding closely related marriages is an argument of considerable weight, and whatever conclusion we arrive at in regard to the higher animals may be safely extended to man."

Leaving several minor or little-known causes of sterility to be mentioned in the next lecture, I now turn to other matters in its history which throw light on its theory, and there are two worthy of great consideration. These are the well-known association of dysmenorrhœa with sterility, and the state of sexual appetite and sexual pleasure in sterile women.

Menstruation, when natural or healthy, is attended with no pain, and with little or no disturbance of general health. When there is pain or considerable disturbance of health, the condition is called dysmenorrhœa, and it is plain that the term covers a wide and ill-defined field of disorder and disease. It is with dysmenorrhœa, as thus vaguely defined, that sterility is prevalently believed to be very frequently associated; and there can, in my opinion, be no doubt of the truth of the general belief.

There is a kind of dysmenorrhœa, regarding which I would enter into more details. It is called spasmodic, being regarded as a neurosis characterised by painful uterine spasms, which may be described as having no known object in view. It is often called mechanical or obstructive—terms implying a theory of its cause, and implying also that the spasms are, so to speak, intended for the expulsion of the menstrual fluid accumulating in the uterine cavity and distending it. There is no good evidence of the mechanical obstruction, nor of the accumulation of menstrual fluid, nor of the dilatation of the uterine cavity, nor of the use of the painful uterine contractions; and as all admit the presence of these contractions or painful spasms, I shall call this kind of dysmenorrhœa spasmodic. It is a kind of dysmenorrhœa that is gradually, and I think justly, restricting to itself alone this term—the only real, positive, recognisable uterine dysmenorrhœa, or the dysmenorrhœa proper.

It is of this dysmenorrhœa proper that I am now to speak, and it is known by the following characters. It may occur at any time during the flow of menses, sometimes even before it begins; and in cases of amenorrhœa it may occur at the time of the menstrual molimen. In the very great majority of cases it occurs on the first or second day of the flow, and it is generally severer when the flow is scanty than

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when it is copious. The pain is constant or in pangs; and the pangs may be more or less distinct—in other words, the intermissions of the pain may be more or less complete. The frequency of the pangs varies, five to ten in an hour being common. The pain is rarely accompanied by bearing down, strangury, or tenesmus. It varies in severity, rising occasionally to the intensest agony, with cold sweats, vomiting, and other symptoms of prostration or collapse. Suffering from it the patient rolls about and groans, and the restlessness is not that of fever, but of griping pain. It may last only a few minutes, but generally it goes on for hours, the number of hours rarely exceeding four or five. It rarely returns during the current menstrual period. It is generally aggravated by marriage. In women who suffer from this disease there is a super-sensitive condition of the interior of the body of the uterus, and, I think, especially of the internal os uteri, this condition being tested by the contact of a uterine probe or sound.

In making inquiries as to the connexion of this dysmenorrhœa proper with sterility, I have frequently, but not always, satisfied myself of the presence of all of these characters. Particularly, I have not classed with this dysmenorrhœa any case in which the severe pain lasted more than a day. In all inquiries as to pain, there is, owing to the indefiniteness of language and the tendency of patients to exaggerate or make light of their troubles, extreme insecurity of statistical statements. I have tried to avoid being misled in 332 cases which I have, during the last five years, taken down in my notes. These 332 cases were all absolutely sterile—that is, all women who had had an abortion or a child are excluded. Of these 332 married women, 159 suffered from spasmodic dysmenorrhœa, or nearly half. It is a most grave fault in my argument that I unfortunately cannot give the frequency of dysmenorrhœa among the fertile. But I can meantime only declare the importance of the omission, and express my belief, in accord with universal professional opinion, that among the fertile dysmenorrhœa is comparatively uncommon. The connexion of a neurosis of this kind with sterility cannot be unimportant, and I cannot leave the subject without expressing my belief of the association of it with abortion and miscarriage also.

Other mutually allied neurotic conditions demand full consideration—namely, sexual appetite or desire, and sexual pleasure or satisfaction of the appetite by coitus. In investigating the matter, great difficulties are met with from the delicate nature of the inquiry, the difficulty of making sure that the patient understands clearly what is the question to be answered, and the impossibility of finding words of well-defined meaning, or of the same meaning in different mouths. But these difficulties are not insuperable, and error is lessened by relying on a large number of concurring observations.

Sexual desire and pleasure have to be considered separately, because, though they are naturally found combined in the same case, they are far from being invariably so. A woman with healthy sexual organs may have sexual desire and no pleasure, or even the reverse, and she may have no desire and yet have pleasure. Although pregnancy and childbearing are natural consequences of sexual desire and pleasure, there is little or no connexion between the latter and the wish to bear children. The desire for offspring may be intense while there is neither desire nor pleasure, and the desire to avoid pregnancy may be intense while there is desire and pleasure. Desire and pleasure may be excessive, furious, overpowering, without bringing the female into the class of maniacs. They may be temporary, healthy, and moderate; they may be absent or null. Instead of sexual desire there may be sexual aversion; and instead of sexual pleasure there may be only feelings of disturbance or pain. Instead of sexual desire there may be intense sexual antipathy; and instead of sexual pleasure there may be severe suffering, even agony, in coitus.

The variations of desire are chiefly on the positive side, greater or less. Desire may be absent. From the zero or indifferent condition there is, however, not rarely observed a rise into aversion or antipathy, and this, in married women, without any feeling regarding the husband other than affectionate. It is well known that desire may be fostered at special times by various stimulants of passion; but, apart from such occasions, it may be increased or diminished or annihilated. This is a general belief, and I have frequently had spontaneous testimony of individuals to the same effect. The influence of society and its amusements, of diet, of special kinds of reading, of association with males, is well known and recognised in the increase of sexual desire; and the influence of the opposite conditions, of a truly ascetic life, is equally certain. Desire may, during the childbearing period of life, undergo great changes without any apparent cause—at one time, and it may be for years, being positive; at another time absent or negative.

Sexual pleasure must not be regarded as in all respects like sexual desire, and requires separate description. Its variations are chiefly on the positive side. It may be absent. Its variations on the negative side are, however, most remarkable. There may be slight or very great suffering, or the intensest agony; and this is often accompanied by more or less active involuntary local sphincteric resistance to penetration, called vaginismus. But the words pain and agony are here used in a quite extraordinary and misleading way. There is no pain such as that of the infliction of a wound or contusion, or that of toothache or neuralgia. There may, indeed, be in cases of diseased sexual organs common pain of the kinds mentioned, caused by sexual congress, but of such pain we are not here speaking.

All kinds of pain or discomfort in coitus are often nowadays classed as dyspareunia, but I think the word may be well restricted to the condition I am describing; or the condition may be called simple dyspareunia, and there is no common pain in simple dyspareunia. It has an analogue in disgust, but dyspareunia rises to far higher degrees than disgust. As sexual pleasure rises in intensity above all other kinds of pleasure, so dyspareunia reaches degrees exceeding those of the intensest disgust. The disgust of a child is often painfully intense, its resistance to tasting and swallowing involuntary and powerful, and often followed by vomiting the matter whether tasted or not; and as all this is not common pain in tasting and swallowing, so dyspareunia is not pain in sexual connexion. Sexual pleasure and dyspareunia differ from gustatory pleasure and disgust in this, that while the former are one in kind and in all degrees excited by the same cause, the latter are various in kind and elicited by different substances in each case. Pleasure, then, may vary from the intensest to mere indifference; and simple dyspareunia may rise from mere indifference to the highest degree, with sphincteric resistance to penetration, opisthotonos, and a state almost of insensibility.

Pleasure is probably not directly increased by the causes of increase of desire, but the increase of desire is probably a cause of increase of pleasure, as hunger enhances the pleasures of taste. Pleasure is increased by continence, and diminished, or annulled, or converted into slight dyspareunia by over-indulgence. Sexual pleasure may vary without apparent cause, disappearing for short periods or for years, and reappearing with the same appearance of caprice. Pleasure is frequently absent at marriage, and gradually developed during the continuance of that state. If it is slight at marriage, then coitus will be painful, the common and not simple dyspareunic pain overpowering the pleasure and preventing it.

Describing the lower animals in this respect, we guess by aid of analogy; but the analogy is so strong as to endow the guess with a high degree of assurance, reaching nearly to certainty. We may be sure that animals, generally, feel sexual desire, and that this sexual desire occurs normally or naturally only in connexion with fecundity. In many domestic, or otherwise well-known, animals there is sexual desire only in the rutting season, and at other times not only an absence of sexual desire, but a positive sexual antipathy. A bitch not in heat will angrily resist any attempt at sexual approach by the male, while quite ready for any other kind of play. Of sexual pleasure in females lower animals we know very little, but we may be sure it exists. Of its existence in males we have abundant evidence, and we may thence argue that it exists in females. Nothing is commoner in dogs than what may be called masturbation. This kind of sexual pleasure is generally believed to be increased by confinement, and the evidence afforded by zoological collections is held to be good.

I know nothing regarding the connexion of sexual pleasure in animals with fertility or sterility, but we have the testimony of Darwin to the presence, in animals that are confined, of sexual desire, sometimes in excessive degree; sexual indulgence being held as evidence of sexual desire; and that sexual excess is often connected with sterility. "Monkeys

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says he, in the Nine-Year Report from the Zoological Gardens, "are stated to unite most freely, but during this period, though many individuals were kept, there were only seven births." Elsewhere he says, that "although many of the Felidæ breed readily in the Zoological Gardens, yet conception by no means always follows union. In the Nine-Year Report various species are specified which were observed to couple seventy-three times, and no doubt this must have passed many times unnoticed; yet from the seventy-three unions only fifteen births ensued." In many animals under confinement there is no coupling, and this may be assumed to indicate absence of desire in female as well as male.

It is an almost universal opinion that in woman desire and pleasure are in every case present, or are in every case called forth by the proper stimulants. The opinion is founded on experience, and it is, no doubt, nearly true; but the exceptions to the rule are numerous and important. It is also a popular opinion that desire and pleasure are essential elements in fecundity, and in cases of rape followed by pregnancy, that consequence has been made ground of defence against the charge. Great authors, among whom is Ambrose Paré, recommend the excitement by dalliance of great desire, as a remedy of sterility.

I think it is very nearly certain that desire and pleasure in due or moderate degree are very important aids to, or predisposing causes of, fecundity, not on account of their own proper attractiveness, but on account of some connexion between them and the perfection of other parts of the complicated proceedings which result in fecundation. But this is only a firmly held opinion, for I can give no conclusive evidence or proof of it; and this absence of proof diminishes greatly the value of my observations on the absence of desire and pleasure in the sterile. The want most acutely felt here is a knowledge of the state, in this respect, of the fertile. In producing evidence as to the sterile, I shall assume that sexual desire and pleasure are very rarely absent in the fertile. Excess of sexual desire is probably unfavourable to fertility. It is recognised chiefly by excessive indulgence in sexual pleasure, and is observed in the weak and ill-conditioned, in imbeciles and idiots, as it is also in animals under confinement. Excessive indulgence in sexual pleasure is also probably unfavourable to fertility, or a cause of sterility; and it probably is specially influential in the young, as it may also be in prostitutes. In these circumstances the births of females are, on good grounds, believed to be far above the ordinary average, in proportion to males.

Masturbation in females is an unnatural and generally excessive indulgence in artificial sexual pleasure. It has always appeared to me to affect especially children and young women of weak mind. I have often been struck by the smallness or imperfect development of the external parts in young women who masturbate, and I have not rarely observed what appeared excessively high development of sexual desire in women who had imperfection or absence of internal genital organs. In one, dissection revealed the presence of ovaries and Fallopian tubes only. Some confirmation of these views may be found in cases such as that of Campbell,(a) in which a woman addicted to masturbation had never menstruated, and had imperfectly developed genital organs; she had, however, also a dermoid cyst of the ovary. Aran(b) has a case, of what he describes as frightful excess of masturbation, in a young woman dying of phthisis, whose uterus and appendages were found to be very imperfectly developed. Kussmaul(c) mentions the concurrence of masturbation and nymphomania with imperfect development of the uterus and the genital organs; and Joulin(d) refers to a case of Vaddington's where absence of uterus and exaggerated sexual appetite were combined.

Entire absence of desire and pleasure, or of one of them, or the presence of intense sexual antipathy and dyspareunia, are not necessarily causes of sterility. It is not at all rare for women to be pregnant and bear healthy children who aver in the distinctest manner not only absence of desire and pleasure, but presence of the opposite conditions. But the following statistics make it highly probable that absence of desire and pleasure and the presence of their opposites are powerful influences favourable to sterility. The statistics do not indicate what was occasionally found, namely, that desire was present while pleasure was absent; or, in other cases, that desire was absent while pleasure was present. The cases observed were all in women absolutely sterile, of whom the great majority consulted me regarding the sterility. Among 191 sterile wives desire was absent in 39, or in about 1 in 4. Among 196 of the same sterile wives pleasure was absent in 62, or in about 1 in 3. The figures show that many sterile wives had desire but no pleasure. They do not show, what nevertheless is true, that some had pleasure who had no desire.

I have a strong impression, derived from all I know and have observed, which I may express theoretically, that while in healthy normal women there is abundance of sexual or reproductive energy for fertility and all its accompaniments, in many sterile or relatively sterile women there is deficiency, which may be exhibited in one or another, or in all the ordinary evidences of reproductive energy, and that excess or deficiency in one department may be associated with deficiency or excess in another. It would seem that in women of deficient reproductive energy, excess in one department might be compensated by deficiency in another, and *vice versâ*, there being only a limited store of the original energy. In illustration, a remarkable class of cases may be cited, which I shall sufficiently describe by stating generally the chief points in one:—A robust healthy woman is married at eighteen; she bears three children and has four miscarriages before she has passed twenty-three years of age. Up to the birth of her last child, and for five years subsequently, she experiences no sexual desire, and has no pleasure. Five years after her last pregnancy she almost suddenly comes to have intense desire and pleasure, but remains sterile for four additional years before she seeks a cure of her sterility. Fertility present, while desire and pleasure are absent; sterility present, while desire and pleasure are present.

TABLE XXIII.—*Case-book Table of Desire and Pleasure in Sterile Women.*

Age at marriage.	Number.	Desire.			Pleasure.		
		Present.	Absent.	No note.	Present.	Absent.	No note.
Fifteen to nineteen ...	59	18	4	37	15	8	36
Twenty to twenty-four ...	220	78	18	124	69	27	124
Twenty-five to twenty-nine	134	35	12	87	31	18	85
Thirty to thirty-four ...	59	16	3	40	14	5	40
Thirty-five to thirty-nine...	23	3	1	19	3	3	17
Forty to forty-five	9	2	1	6	2	1	6

(a) "Memoir on Extra-uterine Gestation," page 30.
(b) "Leçons Cliniques sur les Maladies de l'Utérus," page 89.
(c) "Von dem Mangel, etc., der Gebärmutter," S. 74.
(d) "Accouchements," page 188.

TREATMENT OF WARTS.—M. Vidal employs the following procedure, especially when the lesion is placed on the hands:—Having spread a layer of black soap on a piece of flannel, he binds this kind of plaster over the part, so as to keep it *in situ* during the night, and, if possible, during the day also. After a few nights' repetition of such application, the wart becomes softened or dissolved, and it now only requires to be scraped to secure its complete disappearance.—*Jour. de Méd. Prat.*, February.

THE FORESTS OF EUROPE.—According to a recent work by Herr Donner, Director of the Forest Department in Germany, the woods and forests of the different European States occupy the following superficies:—Russia, 39·2 per cent.; Norway, 31·1; Austria, 30·5; Sweden, 29·5; Hungary, 26·7; Germany, 25·6; Italy, 22·9; Switzerland, 19·4; Roumania, 17; France, 15·8; Belgium, 15·1; Greece, 10·4; Spain, 9; Holland, 5·8; Denmark, 4; Great Britain, 3·2 per cent.—*Revue Scientifique*, March 10.

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ORIGINAL COMMUNICATIONS.

PRACTICAL NOTES ON THE ORDINARY DISEASES OF INDIA,

ESPECIALLY THOSE PREVALENT IN BENGAL.

By NORMAN CHEVERS, C.I.E., M.D.

PERNICIOUS TYPES OF REMITTENT FEVER.

(*Continued from page 367.*)

Terai Fever.

Cases of this deadly Pernicious Remittent have generally been seen at Hill Stations, and in the Plains immediately below them, in persons who have become fever-stricken while passing through the jungly *terai*—that water-logged belt of soil, overcharged with decomposing vegetable matter, which renders the foot of every hill in every country more or less insalubrious; but which, as it is seen stretching in miles of the wildest and rankest vegetation at the foot of the Himalayas, engenders malarious poison in its most concentrated virulence. It is considered that the *terai* is most insalubrious from the middle of March until the middle of November. Residents in the Hill Stations are also liable to attacks, especially those whom sport, occupation, or duty lead downwards within reach of the poison.

Having written very fully upon the habits of Malaria in my work on "The Means of Preserving the Health of European Soldiers in India," I say little in these pages on that important point. I may merely state here that all authorities have held that it is especially dangerous *to sleep* while crossing the *terai*; and I may mention, as a suggestive hint to the investigators of the habits of the *Bacillus malariæ*, that Kenneth Mackinnon says that where a person is exposed to high malarious influence, "the use of a gauze veil or mosquito curtains is worthy of notice."

Before quinine came into use, and early in our occupation of the Hill Stations, when the roads through the *terai* were bad and narrow, Terai Fever was very prevalent and deadly. Allan Webb(a) says that it killed the very letter-carriers, in their passage through the jungle at the foot of the Hills. And Macgregor wrote that individuals seized with fever in the *terai* below Almorah seldom or never recovered.

The fever of Indian *terais* and hill jungles of the greatest density is now Remittent of the most aggravated intensity, with a strong tendency to various pernicious complications. Its type has varied at different times and in different localities.

Those who observed the disease soon after our occupation of the Hill Stations agree in describing it as Remittent Fever. Writing in 1843, Dr. Macdonald described jungle or *terai* fever as "Bilious Remittent." Dr. Kenneth Mackinnon (1847) classed it with the "Paroxysmal Remittent." No Indian Fever displays so marked a tendency to deadly Pernicious complication as this does. In treating of *Terai* Fever (as he saw it, probably, cir. 1855), Mr. Hare writes that, as an instance, he may mention the Residency Surgeon of Nepaul. He passed through the *terai* incautiously, and died on his arrival at Benares, in a state of blue collapse very similar to Cholera. Mr. Hare describes as the worst case he ever saw, that of Assistant-Surgeon W., a strong, active man, and celebrated for the fatigue he could undergo in shooting.(b) Dr. W. was delayed for one night in the Terai at the foot of the Nynee Tal Hills; and, on his arrival at Simla, had all the symptoms of delirium tremens, so much so, that many thought, though he was a strict water-drinker, that he was suffering from intemperance. This strong, healthy young man, from a few hours' exposure, became blue and livid; he staggered when he attempted to stand, his hand and tongue were tremulous, his eye dull, and, though he moved about, he seemed unconscious of what he was doing, and he died after some days with coma.

(a) "Pathologica Indica," page °213.

(b) I saw Dr. W. shortly before he left Calcutta on his fatal journey. He appeared to be a very healthy man; but it is noteworthy that Indian sportsmen, however vigorous they may be in appearance, not unfrequently succumb to attacks of fever and of other diseases,—snipe-shooting and tiger-killing in swamps and jungles having implanted malarious influence in their systems, thus impairing their power of resisting and sustaining the attacks of acute disease.

Kenneth Mackinnon, writing some years before this case occurred, cites Watson's Lectures to the following effect:—"You will sometimes find a state resembling delirium tremens left after subsidence of acute inflammation of the parts within the cranium, and requiring the treatment of delirium tremens." Mackinnon says—"Dr. Watson might, I think, have added, this state is particularly apt to those addicted to the use of spirits." Dr. Morehead gives a case (20, page 79) of this description; but doubtless there was no such causation in the case of Dr. W., a man thoroughly well known and universally valued in the Service. The pernicious character of his case was evidently attributable to exhausted innervation, due to the presence in the system of an overwhelming dose of malarious poison.

Dr. John Sullivan, whose admirably graphic description of Pernicious Fever in Havana is cited by Aitkin,(c) would class the case of the Residency Surgeon of Nepaul as *febris p. algida*; that of Dr. W. appears to have partaken of the characters of both *febris p. algida* and *febris p. comatosa*, in both of which "malaria directly attacks nerve-power." There can be no question that the great fatigue and exposure of the journey often precipitates exhaustion. This doubtless occurred in the terribly rapid case of an esteemed lady, whose forced journey, straight through from Darjeeling to Calcutta, would have greatly tried a robust constitution. As I have already mentioned, I saw Dr. W. in Calcutta (it was before the railway extended to Benares) a short time before his death. He must therefore have had a most trying palkee journey. Upon this point Dr. Sullivan says that "like other Pernicious Fevers, the Comatose form especially attacks those who, after a long residence in a marshy district, remove into another free from malaria." So Macgregor observed, more than forty years ago, that, "provided the traveller does not expose himself, when in the *terai*, to the direct rays of the sun, the miasma does not immediately produce its bad effects; but, after the person reaches Bareilly, Moradabad, or other stations in Rohilcund, he is seized with jungle fever, and quickly falls a victim to it." In like manner Sullivan writes of *Comatose Pernicious Fever*. "Insolation is occasionally a most powerful cause. A man who leaves a marshy district and travels a long way, exposed to a burning sun, is very subject to an attack of malarious apoplexy." My late honoured friend, Sir John Forsyth, lately told me that officers travelling from the Nerbudda Valley across the hills to Bombay, used to be struck down by this deadly fever with the same pernicious complications.

Dr. Sullivan found in Comatose Pernicious Fever no marked distinctive brain lesions. The pia mater was somewhat injected, the cerebral substance redder than usual, and there was some serum in the ventricles.

Allan Webb describes,(d) under the designation of "Hill Colic," what was, in 1840, "a very fatal and also a very common disease at Simla," which was clearly *Algide Pernicious Fever*. Natives were the subjects of this malady. The seizure was always sudden, characterised by great pain in the bowels, which caused the patient to roll on the ground, and to keep the hands firmly pressed upon the abdomen. The expression of face was anxious and peculiar, the eyes sunk, the skin cold or cool, the tongue cool, the urine arrested, no stools. The symptoms of congestion increased; pulse was lost; the belly became hard, tender, and swollen. The patient's shrieks were converted into low moans. No blood could be obtained by venesection, and the patient died; the mind and muscular powers keeping their force unimpaired to the last. Sometimes there was vomiting, and occasionally spasms, as in cholera; perspiration rarely occurred till the last, and then it was cold. Dr. Webb says that the post-mortem appearances were not uniform, but that the following were most characteristic:—Head and chest healthy. Mucous membrane of the stomach dotted all over with sooty-looking black points and streaks, and coated with thick ropy mucus. Duodenum presented patches of ecchymosis. Mesentery redder than natural; a vivid red line at its junction with the intestine; ileum congested, of a dark red colour; mucous lining softened; no lymph effused; upper part filled more or less with black sooty secretion, without a trace of bile, perfectly inodorous, and very like the black vomit of yellow fever. There was less of this in the lower portion. The outside of the cæcum had a puckered-up appearance;

(c) Vol. i., page 438.

(d) *Transactions of Medical and Physical Society of Calcutta*, vol. viii., part 2, page 296. 1842.

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its mucous surface was slightly eroded. The bladder contained a small quantity of dark-coloured urine. Spleen enlarged; liver congested; abdominal veins distended with dark tarry blood, without any attempt at coagulation. The general appearance was that of robust health; muscles finely developed. The prognosis was favourable when reaction was fully and early set up, if stools could be procured, and the secretion of urine restored. When, however, reaction was long in setting in, "*it was followed by severe fever, with determination to the head,*(e) and to the mucous surfaces of the bowels, etc." If seen early, the disease might terminate favourably in twenty-four hours; when prolonged beyond this time without relief, it was generally fatal. Even if the patient did recover, the subsequent debility was great, and the convalescence was protracted.

Mr. Hare writes:(f)—"In what is called Hæmorrhagic Dysentery, described well by Dr. Raleigh in Calcutta, and of which I had numerous cases in Burmah, during the extreme congestion of the portal system in this algid fever (for, in reality, it is that disease, and not Dysentery) the blood at length oozes from the gorged mesentery, through the coats of the bowel, and the patient dies, passing pints of pure dark blood which will not coagulate, and his skin is like ice to the touch." Mr. Hare gives the case of an officer serving in Burmah, who, being known to dread the climate and its discomforts, and being a stout, tall, athletic young man, was supposed to have nothing the matter with him, and was suspected of wishing to get away from his regiment. He was found lying in bed, quite sensible, but his face and lips were blue, his breath was cool, and his hand felt like a dead man's. He lingered for some days in the same cold state; at last the blood found vent from the bowels, and he died with profuse hæmorrhage. In such cases there is no general ulceration of the intestine, but a general oozing of blood from the mucous surface throughout to the anus.

Dr. Sullivan insists that "between Pernicious Choleraic Fever and Asiatic Cholera it is almost impossible to diagnose." A middle-aged Mohammedan, very well set and muscular, but of worn appearance, was brought to my jail hospital at Chittagong wildly maniacal. For many hours his fury and strength were perfectly astonishing. Until he could be put under restraint his chief efforts were to escape, scrambling up walls and tearing heavy doors from their hinges. He became suddenly collapsed, as if exhausted by his rage. He appeared to be in the algid stage of cholera, *except that there was neither purging nor vomiting*. He sank in a few hours. The only remarkable post-mortem appearance was that the mucous surface of the small intestine, otherwise empty, was marked throughout its course by a defined streak of thick, greenish-black, tarry fluid, about an inch and a half wide.

This case, much as it resembled one of algide cholera, appears to have resulted from shock produced by an overwhelming dose of fever-poison operating at a moment when the nervous system was prostrate from inanition and fatigue. I feel very little doubt that, had I been able to examine the poor fellow more carefully than I could during the stage of frenzied excitement, I should have found that he was in strong fever.

We are told by William Fergusson that it often happened to a well-seasoned soldier, mounting the night guard in perfect health, to be seized with furious delirium while standing sentry; and, when carried back to his barracks on Monk's Hill, to expire in all the horrors of the black vomit.

I think it clear that Dr. Webb's cases of algide pernicious fever and this case of the Mohammedan are links in a chain which connects the disease that must next engage our attention—*Choleraic Pernicious Fever*—with true Algide Cholera. Dr. Geddes made early mention of this type of pernicious fever.(g) He observes, "In some instances" [of fever] "the evacuations have presented the characteristic appearance of the egesta of Epidemic Cholera. In several of these cases the countenance too has become shrunk, and the patient has assumed somewhat of the peculiar features of this disease." I had one solitary distinct case of this kind many years ago in my cholera ward in Calcutta. The man had strong fever, with rice-water cholera stools. I pointed it out to the students as a case nearly resembling those of pernicious fever described by American writers. I more frequently met with cases in which a short, but very marked stage of collapse was suddenly followed by strong reactional fever. I now seem to see the livid, sunken countenance of a handsome young European, as he was brought through the door of my ward to a bed, where I was standing ready to receive him. He passed a rice-water stool, the characteristic appearance of which I well recollect, because its odour was so peculiarly offensive that I felt much nauseated when I examined it. He was cold when he came in, but was in strong fever before I left the ward. I very lately heard of a case of this kind in a young gentleman who recently died, as it was considered, of cholera, in Calcutta. I need scarcely say that, in ordinary cases of Asiatic cholera, rice-water stools occur only during the stage of collapse.

Sir Joseph Fayrer says, "An attack, beginning with symptoms of fever, may end with cholera, or *vice versâ*. And even recently, such an epidemic was devastating Amritsur in the Punjab." He cites Mr. Anodochurn Kastogiri, a learned Bengali physician and graduate of Calcutta, who says that ancient Hindoo authors mention symptoms of cholera as being prominent in a certain type of fever called *jewarutishar*, literally, fever with excessive diarrhœa.

There are many Indian localities—such as the forest jungles of Chittagong, which were considered as imperilling the life of any European who ventured into them—where, although the malarial poison does not appear to be so extremely concentrated and deadly as that of the great Himalayan *terai*, is very dangerous. Remittent Fever, far more "*pucca*," *i.e.*, severe and obstinate, than ordinary Remittent, but not usually characterised by pernicious tendency, frequently attacks surveying officers, elephant catchers, and hunters. I have seen a good deal of this type of fever, in both its ardent and its congestive forms: there being severe head complication in the former, and troublesome abdominal congestion, especially hepatic, in the latter. Taken early, this remittent is usually amenable to quinine.(h)

In the present day we hear far less of Pernicious Terai Fever than we formerly did. Travellers are prepared with quinine against it; the roads are more open and better; transit is quicker; night journeying at the worst season is avoided. Large tracts of *terai* are now under tea cultivation; the European planters being liable to intermittent fever. It may be that the type of disease is mitigated; still, as long as virgin forest remains, men will venture into it, and get Remittent Fever of grave character, which Indian physicians must be prepared to treat with a full knowledge of the history of Terai Fever in its deadliest forms.(i)

(*To be continued.*)

(e) The italics are mine.—N. C. (f) *Loc. citat.*, page 42.
(g) "Clinical Researches into the Diseases of India," page 128.

(i) Drs. Campbell and Mackinnon speak of the Mechis, an aboriginal Mongolian flesh-eating race, who cultivate small holdings in the Terai, who live in perfect security in parts of the forest which, at some seasons, it would be certain death for any other person to visit. The Dangurs, of the Chota Nagpore Hills, also a strong aboriginal race, appear to enjoy a like immunity.

(h) My late friend Dr. Allan Webb described a fever, of which he saw cases at Simla in 1840, as a "modified" "malignant" typhus. Perusal of his account of this disease (*Transactions of the Medical and Physical Society of Calcutta*, vol. viii., part 2, page 277, and "Pathologia Indica," page *218) shows that these were probably cases of Mahamurree, as "in the worst cases brought to hospital, buboes were met with both in the groin and axilla." Webb considered it likely that the two fevers were identical.

MILITARY MUSIC FOR SICK SOLDIERS.—The military bands will, as in preceding years, play in the different parks and public gardens of Paris. This year, by order of the Military Commandant of Paris, the band of one of the regiments will repair one day every week to the three military hospitals, the Gros-Caillou, the Val-de-Grâce, and the Saint-Martin, in order to play before the patients. This has been determined in consequence of the requests of the medical officers of these hospitals, in the hope that the pleasure derived by the sick soldiers from the military music will exert a favourable influence on their recovery and hasten their convalescence. As there is no convalescent asylum attached to the military hospitals, the patients who have recovered are obliged to remain there during all their convalescence; and a request is about to be addressed to the Municipality that such patients may be sent to the asylum at Vincennes, the Minister of War paying a subvention and sending a military band to play three times a week.—*Union Méd.*, March 20.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GLASGOW OPHTHALMIC INSTITUTION.

FROM DR. WOLFE'S CLINIQUE.

(Reported by Dr. A. T. Thomson.)

Abscess of Eyelid of Eleven Months' standing, simulating Tumour of the Orbit.

James, aged eleven months, was first brought to the Institution when about a month old, with a swelling situated deeply in the upper part of the right orbit. The mother was desired to show the child again, but she did not come back until the end of January of the present year, when the whole of the eye was found in the condition represented in the figure, as taken from a photograph.

The infant is highly scrofulous, presenting several scars about the angle of the lower jaw and neck of the same side. There is a swelling involving the whole of the upper lid, pushing the eyebrow upwards, and presenting an appearance as if starting from the roof of the orbit, the upper lashes and the edge of the lid being everted, and the lower portion of the conjunctiva protruding and hardened by long exposure.

On elevating the lid by means of a speculum the eyeball was seen to be retracted within the orbit, but otherwise healthy. The swelling was hard and somewhat elastic, but without fluctuation. According to the mother's statement, the swelling has been progressing since the birth of the child; but for a considerable time it remained stationary until a fortnight ago, when it began to enlarge rapidly, and reached the size above represented.

Operation.—Without interfering with the neighbouring parts, Dr. Wolfe introduced ligatures through the eyelid. By means of these he completely everted the lid, and made a puncture into the upper conjunctival *cul-de-sac*, when a large quantity of greenish-looking pus escaped. The incision was enlarged for the purpose of exploration. Nothing was, however, discovered but indurated tissue, the result of prolonged inflammation.

Dr. Wolfe considers this to be either a scrofulous abscess springing from the roof of the orbit, and ultimately distending the eyelid, or it may have been originally a cyst which had become disintegrated by a suppurating process. Since evacuation of the pus the lid has continued to contract, but there still remained an hypertrophied mass behind the lower border of the upper lid, which was dissected in order to reduce the lid permanently to its normal size. Owing to the seat of the swelling, the amount of indurated tissue, and the length of time these abscesses take in coming to the surface, the differential diagnosis between deep abscesses of the orbit and tumours of that region is very difficult, and in consequence of this difficulty the reputation of some eminent surgeons has suffered either by hasty or too positive diagnosis: for swellings have been pronounced to be tumours requiring enucleation of the eyeball, which have turned out to be abscesses curable by puncture; and, on the other hand, a mistaken diagnosis may also become disastrous when delay involves disorganisation of a healthy eye.

Gunshot Accident, causing Fracture of Bone and Choroido-Retinitis—Bullet lodged in Orbit.

J. W., aged twenty-eight, furnaceman, applied at the Glasgow Ophthalmic Institution on December 13, 1882, complaining of loss of vision of the right eye.

History.—About six weeks previously he met with an accident when out shooting: whilst he was stooping, his companion, who was standing about two feet on his right, accidentally shot him, the ball striking him on the right brow. There was considerable bleeding at the time. The wound was dressed with water-dressing, and almost healed, but there was always a slight discharge from it.

On examination, clots of blood were seen in the aqueous chamber, but the condition of the fundus could not be well ascertained. With regard to the appearance of the parts, there was noticed a fulness on the brow, a small fistulous opening situated an inch on the external side from the supra-orbital notch, and a slight sanious discharge from the wound.

Dr. Wolfe pronounced the case to be a gunshot wound with a foreign body lodged in it, which, he said, would account sufficiently for the fistula; and on introducing a probe into the wound he detected loose bone, of which two pieces were removed, and one piece being partially attached to the periosteum, was dissected off; and he maintained that the bullet which shivered the bone was still there, although undetected. The patient was kept in the house, and linseed-meal poultices regularly applied. The wound was probed from time to time, and, ultimately, two pieces of lead were detected; they were dislodged, and removed by means of a small scoop. The two pieces together weighed thirty-eight

grains; singly, the spiral-shaped piece weighed twenty-three grains, and the semicircular piece fifteen grains.

The wound has completely healed since the removal of the foreign bodies, the hæmorrhage has cleared away, and the fundus is perfectly visible, showing that the deep structures have suffered from choroido-retinitis, with detachment of the retina. The detachment is of such a form that it is not remediable by any course of treatment.

Conical revolver-balls generally melt, and may be broken when coming in contact with any hard body, such as bone, as happened in this case, the weapon being a small revolver and the ball conical.

Spasm of Eyelids and Ciliary Muscles with intense Pain, caused by Exposure to Electric Light.

As it is commonly believed that electric light is a harmless agent to the sight, the following case is worthy of record:—

A. B., aged twenty-five years, electrician, applied at the Ophthalmic Institution, on December 8, 1882, complaining of "excruciating pain" in both eyes, and inability to open the lids.

History.—He is employed in regulating electric lamps, and always while so employed his eyes are protected with deep-blue spectacles. On the evening of the 7th he was hurriedly sent off to supply light to a spirit-shop, where the gas had become frozen, and in his hurry he forgot to take with him his eye-protectors. About three hours after stopping his work, violent pain came on in both eyes, but more severely in the left eye, and so intense as to prevent sleep. Simultaneously with the accession of pain he noticed also that he had lost control over the eyelids, which remained rigidly closed, and any attempt to open them increased the pain, which he described as dull, aching, and dragging, extending upwards from the eyelids to the top of the head, and posteriorly to the back of the eyes. Four weeks previously he suffered from a similar attack, which lasted for six hours, and was produced by the same cause. At present there is noticed spasm of the eyelids, which keeps them constantly closed, and any attempt to open them induces winking and photophobia, spasm of the ciliary muscles, and extreme contraction of the pupils.

Treatment.—Free instillation of solution of atropine at intervals, which in ten minutes sensibly diminished the

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pain. In twenty minutes the pain had almost gone, the pupils became dilated, and the spasm of the eyelids was so far relieved that he was able to open them; and in thirty minutes after admission there was complete relief.

The sensation produced by the solution of atropine was described as both "cooling and a feeling of something slackening under the eyelashes and back of the eyes."

Treatment for Suppuration of Tear-Passage.

Dr. Wolfe has lately introduced a new method for the treatment of chronic suppuration of the lachrymal sac. The disease is the opprobrium of ophthalmic surgery, so that Dr. Wolfe used to question whether we ever succeed in curing such cases. The patients invariably return with the sac distended with pus or muco-pus. Some years ago he introduced a *porte-caustique caché* on the principle of Lallemand, but this is too expensive an instrument for general use, and requires besides a great deal of caution for its manipulation in a bony cavity: he therefore resorted to the expedient of silver bougies coated with nitrate of silver; these are easily and safely introduced into the tear and nasal passages.

The results which this treatment has yielded in a whole group of cases of long standing, after two or three introductions of the bougies, are very remarkable and highly encouraging.

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The Medical Times and Gazette *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, APRIL 14, 1883.

THE GOVERNMENT MEDICAL BILL.

In moving the second reading of the Medical Bill in the House of Lords on the 5th inst., Lord Carlingford spoke in a very conciliatory and temperate spirit; and though objections were made by Earl Cairns, Lord Cranbrook, and other speakers to various points in the measure, still, as we last week anticipated would be the case, no serious opposition was offered to the second reading, and the Bill passed safely through that stage in its existence. After a historical introduction, touching briefly on the previous attempts that have been made to pass a Medical Act Amendment Bill, and referring to the Royal Commission on the Medical Acts, Lord Carlingford described the particular provisions of the present Bill, which had been framed by Government on the lines of the Report of the Royal Commission. These have already been laid fully before the profession in our pages, and we may pass by that part of Lord Carlingford's speech, to direct attention to his observations on what the Government consider essential points. They hope, by the changes proposed in the constitution, powers, and functions of the Medical Council, to make that body more important and more useful than it has ever yet been. One change would be the admission in a moderate form of the representation of the whole body of medical practitioners of the country. He agreed with the Report of the Royal Commission that the whole body should have some direct connexion with the Medical Council. The next change would provide that the members of the Council derived from the medical licensing authorities should not be directly chosen, one by one, by those authorities, but by the Medical Boards of each division of the kingdom. The only serious difficulty was as to the proportionate numbers of the representatives of the different medical authorities, and upon that subject a great deal was to be said. He had had, he observed, the advantage of hearing a great many objections to the proposals in the Bill, and ample time would be given for the consideration of those objections in Committee. He had been much struck by the representations made on the point in question by the two Irish Universities, and he was very sanguine that the matter would be satisfactorily settled. The duties of the Boards under the Bill were the very essence of the measure. Another point was the affiliation of those who pass under the new scheme to the various medical bodies; and it was a matter of no little difficulty. There had been no provision for affiliation in the previous Bills that had passed the House of Lords; but the Royal Commission had expressed the opinion that young medical men would feel it their interest to attach themselves to those medical bodies which had a high reputation, and upon that opinion the present Bill had been framed. It was a question not without difficulty, but he would be very ready to consider any proposals made on the subject before the next stage of the Bill, with the hope of being able to deal with it. The Bill was full of provisions of considerable importance, which it would not be useful to go into at this stage, but he could not but urge that it was time the question was settled. Four years ago the General Medical Council had passed a resolution, certainly of much force, to the effect that the continued uncertainty of medical legislation was contrary to the interests of the profession, and that was certainly true. He hoped their lordships would endeavour to settle a question in which the interests of the public also are very deeply concerned. Elsewhere in our pages will be found a brief report of the criticisms that were offered on the Bill. They refer in the main to the same points as those upon which representations have been made by the English Colleges of Physicians and of Surgeons, and by other medical authorities. Lord Carlingford's speech showed that he had already recognised that the proposals contained in the measure on some very important points must be amended; and he has since proved that his expression of willingness to consider any suggestions or proposals of amendments not opposed to the essence of the Bill was not a mere phrase. It has been urged upon his notice that the constitution of the Medical Board for England is open to grave objection. The Royal Commission did not fix the number or proportion of the representatives to be sent by the various medical authorities to the "Divisional Boards" of their outlined scheme; but they stated that "due regard should be had to the special claims of particular universities and corporations, as, for instance, in Scotland, the Universities of Edinburgh, Glasgow, and Aberdeen, and in England the Colleges of Physicians and Surgeons"; the meaning of this being that the numerical representation of each medical authority on a Divisional Board should bear some proportion to its

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importance as an educational or examining body, or both. This principle has been carefully observed in the formation of the Medical Board for Scotland, but forgotten in the constitution of the Board for England. On the Scotch Board the universities, as being by far the most important educational and examining bodies, are largely predominant; even if the University of St. Andrews were taken out, the remaining universities would have seven representatives on the Board, and the corporations only three. In England, the corporations—that is, practically, the Royal Colleges of Physicians and of Surgeons—hold, as examining and licensing bodies, the position held by the universities in Scotland; but on the Medical Board for England, as at present proposed to be constituted, they will be, even with the addition of a representative of the Apothecaries' Society, in a minority. We believe that the injustice and inexpediency of this is recognised by Lord Carlingford, and that the representation of the Colleges on the Board will be increased. The representations of the Irish universities as to a like defect in the constitution of the Medical Board for Ireland are also under consideration, and will most likely be satisfied. Another of the points especially referred to by Lord Carlingford is that of the affiliation of medical practitioners entering the profession under the new Act to some one or more of the existing medical authorities; and one of the objections to the measure most strongly urged by the English colleges relates to the constitution of the Medical Register. It has been suggested, we believe, to Lord Carlingford that these two difficulties may be satisfactorily met in a very simple way. It is proposed that the licence granted by the Medical Council to those who pass the new final examination shall admit to the Medical Register; but it shall not confer any registrable title. The practitioner who may be content with this licence, without which no one admitted to the profession in the future will be admitted to the Register, will not be able to enter in the Register anything but his name and his address; while those practitioners who take also licences, diplomas, or degrees from corporations or universities will be able to register the titles of them in the third column of the Medical Register; and there will not be any classification of licences into higher or lower titles. This suggestion has, we understand, been very favourably received. If adopted, it will do away with the proposed absurd and cumbrous title of "Licentiate of the Medical Council in Medicine, Surgery, and Midwifery"; it will remove all real or imaginary difficulties in the way of the registration and continued use of the honourable and trusted titles of L.R.C.P. Lond. and M.R.C.S. Eng.; and it will strongly influence practitioners in the direction of affiliation to some one or more of the now existing licensing bodies. The acceptance by the Government of amendments of the character and in the direction of those of which we have spoken will unquestionably greatly facilitate the passage of the Bill through the House of Lords. It may perhaps even be safely predicted that with such improvements, and a broad and liberal-minded treatment, by all parties, of matters of less importance, the measure will be sure to get over this, the least dangerous part of its necessary course, without serious let or hindrance.

BEER IN LUNATIC ASYLUMS.

Dr. Murray Lindsay, the Medical Superintendent of the Derby County Asylum, following the example set by several other asylums for pauper lunatics, has recommended the visiting justices of that establishment to discontinue the use of beer as an article of ordinary diet, and they have promptly acted on his suggestion. Water has been substituted for beer in the case of patients, and an allowance of money is now paid to attendants, nurses, and servants in place of their beer ration, but they are not, we suppose, forbidden to obtain beer for their own consumption should they wish it. However that may be, it seems a little hard that the patients should have been less liberally treated than their attendants, being simply referred to the pump when deprived of their ancient privilege of brewery. The Commissioners in Lunacy should, we think, firmly insist on an equivalent in food being given to the inmates of every asylum from the dietary of which beer is withdrawn—an equivalent, we mean, not of any supposed nutritive value of the beer, but of its money value. Even when the most attenuated beverage bearing the name of beer is in use, it will cost the establishment about sixpence per week per head, a sum which would allow of a very appreciable and acceptable addition to food in the form of milk, soup, or meat. Asylum dietaries are no doubt sufficient, but they are by no means excessive, and the withdrawal from them of a pint of even weak beer per diem is a distinct loss in variety and sustaining power, which cannot be defended on the ground of economy. The inmates of asylums are among the most afflicted of mankind. They bear—

> "The weariness, the fever, and the fret,
> Here, where men sit and hear each other groan,
> Where palsy shakes a few, sad, last grey hairs,
> Where youth grows pale and spectre thin and dies,
> Where but to think is to be full of sorrow
> And leaden-eyed despairs;
> Where beauty cannot keep her lustrous eyes,
> Or new love pine at them beyond to-morrow."

And the first great aim and object of lunatic asylums is to alleviate the miseries, and infuse some cheerfulness into the lot of those who are immured in them, and who are, by mental limitations and legal restrictions, shut out from so many of the enjoyments and interests—personal, domestic, and social—which make life endurable to sane men and women. Lunatic asylums are not mere cheap and convenient receptacles for human rubbish, but hospitals for the cure and treatment of mental disease, and it therefore becomes those who preside over them to strive, with singleness of purpose, not after a paltry saving to the ratepayers, who will never thank them for their cheeseparing, but after the "betterment" of their patients in the widest sense of the word. And in this pursuit they should never lose sight of the assistance to be derived from a generous and varied diet-table. The food instinct is the earliest to be developed, and it is the last to fade away, and around its reasonable gratification cluster a whole host of little pleasures that in the aggregate contribute largely to complacency and well-being, and that may sweeten the bitterness and momentarily lighten the gloom of even hopeless madness. An abundant supply of good, toothsome food, nicely cooked and varied in character, is what no right-thinking man would deny to lunatics; and should it appear that a faint semblance of beer gave a relish to that food, and was agreeable to the palates or imaginations of the inmates of our public lunatic asylums, that "phantom of delight" should not be withheld, even although sixpence a week should be saved thereby in the rate of maintenance. And further, should it appear that it is, on other grounds, advisable to stop the beer fountain at its source in all lunatic asylums, then some compensation should be given in the way of solid pudding or more digestible viands for the stream which is thus cut off, and which many believe they have found refreshing. It cannot be too strongly impressed on all lunatic asylum officials in these days, when the assimilation of asylums and workhouses is steadily going on, that efficiency and not economy is their destined aim and way, and that true economy consists in restoring to usefulness the largest possible proportion of those who are disabled by mental disease, and in securing a large measure of relief where recovery is out of the question.

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Waste and extravagance must of course be checked, and thrift as sedulously enforced, in public as in private affairs, but there should be no stinginess, no penny wise and pound foolish policy, no losing the ship for the saving of a ha'p'orth of tar, no cutting down of legitimate indulgences under the name of luxuries. Enjoyment in food is not, however, a luxury, but a necessity, and a condition of healthy nutrition; and if this sixpenny beer in any degree heightens the enjoyment of pauper lunatics in hash, or helps down bread and cheese, then it is alike by its intrinsic qualities and effects removed from the category of superfluous and voluptuous gratification. There is no commoner error than that of classifying all things beyond the most absolute necessaries of existence as luxuries. If, indeed, the sole object to be held in view is to keep respiration and circulation going and maintain body-weight, then a very simple dietary will suffice; but if regard be had to the healthy activity of the whole economy in civilised races, then the list of necessaries must be enormously enlarged. It has been said that the history of modern civilisation may be summed up in the contentions of the peoples of the West for the spices of the East; and certain it is that there are many persons living, to whose complete functional activity and happiness a little beer or tobacco may be fairly said to be a necessity. If beer is to be withdrawn from asylum dietaries, it should not be done on the ground that it is a luxury; for on this ground tea, coffee, sugar, onions, and a majority of the other constituents of existing dietaries might also be withheld.

Dr. Murray Lindsay speaks of beer in lunatic asylums as "a luxury that may be done without," but it is fair to add that he has not based his recommendation that it should be dispensed with in the Derby Asylum on this doubtful and shifting foundation. The chief objections to its continued use which presented themselves to his mind were of a domestic and disciplinary nature, connected with the working of the establishment. Beer, he alleges, is frequently wasted altogether in asylums; is given away to, or taken by, patients of gluttonous and intemperate habits, who thus get more than their allowance; and it is often the source of loss of time, and of divers troubles from misuse and quarrelling. This is a sad picture that Dr. Murray Lindsay sketches, but the practical inference which we should draw from the state of matters which he describes, is not that which has occurred to him. That a number of pauper lunatics, shut up in an asylum, will defraud each other, quarrel, and behave in a disorderly manner if left to themselves, is obvious enough; but the remedy for such a state of things would seem to be more vigilant supervision, and not the deprivation of all possessions about which it is possible for them to quarrel. Do not lunatics quarrel about tobacco, pocket-money, clothes, as well as about beer? and is it proposed that they should be despoiled of all these in order that quiet living may be promoted? It was suggested in the House of Commons a few evenings ago, that in the case of a criminal escaping from gaol, the flogging, which is the inevitable corollary of his recapture, should be bestowed, not on him, but on the officer by whose negligence he had been permitted to escape; and so we should venture to hint, that in the case of disorderly proceedings in an asylum arising out of the inequitable distribution of beer, the proper course would be to stop the beer, not of the irresponsible lunatics, but of the responsible attendants.

Dr. Murray Lindsay's strongest argument against the use of beer in the asylum under his charge is that most of his patients have been unaccustomed to the use of that drink previous to their admission. If that be so, the change he has made is justifiable and judicious. The dietary of each asylum ought to have some reference to the dietetic habits of the district in which it is placed; and it would be absurd to tempt to the use of beer a large body of persons who had lived without it, and had no wish for it. But there seems to be a difficulty in reconciling this statement with another statement in Dr. Murray Lindsay's report to the effect that a considerable proportion of the patients admitted are of the collier class. It is not amongst colliers that teetotalism has hitherto found its most numerous and devoted converts. But supposing that a large majority of Dr. Murray Lindsay's patients have been innocent of the taste of beer previous to coming under his charge, that fact would surely point to the importance of supplying some other beverage in place of the beer which he has banished, for in those districts of England where beer is not consumed—and they are unhappily few and far between—milk, cider, or some other drink, or the everlasting teapot, is almost invariably in common use. Let it not be supposed that because we criticise the course adopted at this asylum we are, in any way or degree, opposed to the *temperance* movement. The appalling evils of alcoholic excesses, and their connexion with a large amount of madness, have been widely recognised, and every method of checking the propagation of these evils suggested has commended itself to some section of the community, and thus perhaps it has seemed a wise and prudent course to make total abstinence compulsory in the case of pauper lunatics. That course may be wise and prudent, or it may be the reverse—it may be a blessing in disguise, or another bitter drop in an already overflowing cup of bitterness,—but, wherever it is adopted, some addition to food should certainly be given to make up for the beer that is no more.

THE WEEK.

TOPICS OF THE DAY.

THE report of Mr. Rodgrave, C.B., Chief Inspector of Factories, on the subject (with other communications) of white-lead poisoning, has recently been issued as a Parliamentary paper; and at the same time reports are published by local authorities from St. Leonards, Shoreditch, from Poplar, Newcastle-upon-Tyne, and from several parishes in the Holborn Union. These reports give detailed accounts of the numbers of those who suffer from the manufacture of white-lead, their ages and circumstances, the symptoms of disease, and the mortality amongst the patients; and in some cases the means employed to save the workers from being poisoned through the lungs and skin are detailed. In his report Mr. Redgrave suggests, as regards the sanitary arrangements required, that certain precautions should be made compulsory by Act of Parliament. Every person engaged in such works should have an overall suit, head-covering, boots, gloves, and respirator; hot and cold baths should also be provided, and there should be a dining-room in a portion of the premises separate from the working-rooms; acidulated drinks should be accessible to all workers; and there should be ample ventilation. No one should be allowed to carry on the trade of a white-lead manufacturer unless he has the certificate of the Secretary of State that all these precautions have been adopted; and special rules should be framed for compelling the observance of the regulations. Mr. Redgrave is greatly impressed with the value of periodical medical examinations; but that, for more reasons than one, it is not advisable that a medical officer should be appointed by the employer.

At a recent meeting of the Bethnal Green Vestry, the Chairman of the Sanitary Committee, in reply to inquiries, said it was true that their inspector had reported to them that horse-flesh was being sold in that parish as beef. The meat presented that peculiarly rosy appearance which people generally liked to see, and very few persons outside the trade were able to distinguish it from good cow-beef. But

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the Committee were debarred from action by a legal difficulty: the Act required that evidence should be given that meat offered for sale was "unfit for the food of man," and the magistrate at Worship-street declined to convict unless this was positively stated in evidence. Their medical officer of health, Dr. Bate, could not swear that the meat now in question was "unfit for the food of man"; all, therefore, that the Committee and their inspectors could do was to watch events, and, as soon as they could find any of the meat in a diseased condition, to interfere at once. The Sanitary Committee, it was further stated, would exercise their utmost vigilance in the matter for the protection of the public.

The Senate of the Royal University of Ireland recently held a meeting at Dublin, which was attended by Lord O'Hagan (Vice-Chancellor of the University), Sir Robert Kane, Dr. Moffat (President of Queen's College, Galway), Dr. Allman, Dr. Lyons, and many others. The subject brought forward for consideration was a report from the Standing Committee on the Medical Act Amendment Bill, in which it was stated that the Committee had requested a deputation to proceed forthwith to London for the purpose of endeavouring to obtain such modifications of the Bill as may be found desirable, especially in the interests of the medical graduates and students of the University. The Senate approved the action of the Committee. The examiners appointed last year in connexion with the medical examinations were re-appointed for a period of one year, with the addition of Dr. Redfern as one of the examiners in anatomy for the same period.

The present Archbishop of Canterbury thoroughly explained his position to a deputation from the Lambeth Vestry, which waited upon him to ask that the pasture grounds at the back of Lambeth Palace might be thrown open as a public recreation ground. He informed the members that he had no more power to sell it—except for the benefit of the see of Canterbury—than they had. He had gone into the question carefully, and found that he had succeeded to a piece of land which for very many years had been thrown open for the enjoyment of a large section of the inhabitants of Lambeth, with only lim itedrestrictions. An indiscriminate use of the ground would sweep away all the arrangements which had existed so long, and he had received a very influential petition from the neighbourhood praying that the ground might be retained for its present uses. To him personally it made not the slightest difference, since he had no private interests to serve; there was not the slightest prospect of the Ecclesiastical Commissioners using the land for building purposes, which might have justified the deputation in seeking his assistance. He understood that another petition on the subject was about to be presented to him, and he should like to see it before giving a final answer.

One of those sad accidents to which the profession are at all times unfortunately liable was the subject of an inquest recently held at Wolverhampton. On the 15th ult. the deceased, Mr. Herbert Lynsey Manby, a young surgeon only twenty-eight years of age, practising at Brewood, was assisting in making a post-mortem examination on the body of a man who had died from congestion of the lungs. Whilst so engaged he accidentally scratched his right thumb, very slightly, against the jagged edge of one of the ribs of the corpse. Though the abrasion was scarcely perceptible, Mr. Manby immediately washed the wound in carbolic acid solution, having taken the precaution to wash his hands in the same liquid before commencing the examination. But soon afterwards he began to suffer from general malaise, the thumb became swollen, and though everything was done for him that medical science could suggest, he died, after much suffering, on the 1st inst., from blood-poisoning.

Another important question has recently been decided by the law courts in favour of the water companies, and goes still further to illustrate how little the interests of the public were considered in drawing up the Acts of Parliament dealing with the subject. The action was that of the Sheffield Waterworks Company *v.* Bingham, and raised the question whether householders are bound to supply, at their own cost, meters for the purpose of measuring water used to supply bath-rooms. The case was heard before Mr. Justice Pearson in the Chancery Division of the High Court of Justice. The Company sought to obtain a declaration that the defendant was bound to put up a meter for the measurement of the water supplied to the bath in the defendant's house at his own cost. The question whether water for a bath was for "domestic use" has already been decided in the negative, and, under the various private Acts obtained by the Company, they have power to supply water for other than domestic purposes by measurement, at a price which might be agreed upon. The practice was for the Company to put up water-meters at their own expense, and charge a rent for them; but there was nothing in any of their Acts to show how the water was to be measured, or at whose expense the meter was to be put up. The defendant declined to put up a meter at his own expense, or to pay any meter rent. Evidence was given by Mr. Hawksley, C.E., and Sir Frederick Bramwell, C.E., to the effect that the only known method of accurately measuring water was by an automatic self-registering meter; and his lordship held that the defendant was bound, at his own expense, to measure accurately by some sufficient meter, or other instrument, and record the quantity of water used for the bath.

The monthly return of the Registrar-General for Scotland for February last shows that the number of births registered in the eight principal towns of North Britain during that period was 3310, 3033 being legitimate and 277 illegitimate, whilst the number of deaths was 2580. Allowance being made for increase of population, this latter number is 57 below the average for the month during the last ten years. A comparison of the deaths registered in the eight principal towns elicits the fact that during February last the mortality was at the annual rate of 18 deaths per 1000 persons in Aberdeen, 20 in Leith, 21 in Edinburgh, 23 in Perth, 26 in Dundee, 27 in Greenock, and 28 in Glasgow and Paisley. The miasmatic order of the zymotic class of diseases proved fatal to 424 persons, constituting 16·4 per cent. of the whole mortality; this rate was, however, exceeded in Glasgow and Dundee. Whooping-cough was the most fatal epidemic, having caused 196 deaths, whilst fever was responsible for 41, of which number 10 were tabulated as typhus, 28 as enteric, and 3 as simple continued fever. Two deaths from typhus were registered in Glasgow, 2 in Edinburgh, 1 in Aberdeen, 4 in Greenock, and 1 in Leith. The deaths from inflammatory affections of the respiratory organs (not including consumption, whooping-cough, or croup) amounted to 646, or 25·0 per cent. Those from consumption alone numbered 250, or 10·0 per cent. Seven females were aged ninety years and upwards, the eldest of whom was a widow aged one hundred years.

A deputation, representing the promoters of the proposed new hospital for North London, waited on several of the metropolitan members of the House of Commons, on Monday last, to solicit their assistance, which in nearly every instance was cordially promised. The Duke of Westminster has consented to preside at a public meeting in aid of the movement, and it is probable that Lord George Hamilton and the members for Hackney and Finsbury will also attend.

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THE ZYMOTIC DEATH-RATE OF ST. MATTHEW, BETHNAL GREEN.

In his very comprehensive report on the sanitary condition and health of the parish of St. Matthew, Bethnal Green, for the year 1881-82, Dr. G. P. Bate, the Medical Officer of Health, calls attention to the fact that the annual rate of mortality for that period—24·0 per 1000—was above the average death-rate for the ten years 1871 to 1881, which was 23·4; while the zymotic death-rate was 5·2, against 4·5 in the previous year, and 3·64 for the whole of London. As diseases of the latter class are known, the report says, to be amongst the most preventable, it seems far from satisfactory that in the parish of St. Matthew the rate should be one and a half per 1000 higher than the metropolitan rate; and although the district is a densely crowded one—for which reason isolation, if attempted, is extremely difficult,—this alone is not sufficient to account for the disproportion. The causes, Dr. Bate thinks, are partly the following. First, the tardy information of the outbreak of infectious disease which is received by the Medical Officer of Health, the registrar's weekly returns being in some cases the first notification. And secondly, that when the information has been received, the means for fighting disease are not sufficient. Compulsory removal, or even isolation, is, Dr. Bate explains, practically out of his reach, and even after the removal of the centre of infection by convalescence, the parish ambulance, or death, the disinfection which he can order is neither efficient nor thorough. It will scarcely be believed that the parish of St. Matthew has no disinfecting apparatus, and therefore, after referring to the partial benefit derived from sulphur fumigation, Dr. Bate again urges upon the Vestry the absolute necessity which exists for providing a disinfecting chamber. He is of opinion that, probably before very long, the notification of the existence of infectious disease will be rendered compulsory by Act of Parliament, and medical men will be obliged to give information of all such cases under their care; but, he asks, how can sanitary authorities ask medical men to reveal such particulars, if they are not in a position to deal with them when discovered? If the parochial authorities of St. Matthew are wise, they will not compel Dr. Bate to expose this shortcoming in a future annual report.

ILLEGAL PRACTICE IN FRANCE.

The *Union Médicale* (April 5) furnishes a striking example of the utter inefficiency of the laws against illegal practice as now carried out in France. An American, named Taylor, provided with what purported to be a Cincinnati diploma, having married a French midwife, who was able to act as his interpreter, settled two or three years ago in a village near Bourges, and soon acquired a considerable practice, not only among the peasantry, but also among the working classes of Bourges, to a public-house at which place he repaired three times a week in order to give his consultations. Having been fined on two occasions for illegal practice, he now appeared again before the Tribunal, charged with very serious infractions of the law. He had, contrary to the advice of experienced practitioners in Bourges, removed a cancerous ovary, the woman dying two days afterwards, portions of the intestine having been taken away with the tumour. On another occasion, a woman whose breast he removed died of hæmorrhage; while Taylor was also in the habit of giving enormous doses of calomel, producing dangerous stomatitis. At the trial these accusations were not denied, but claimed as *contretemps* that might easily occur in practice, while a crowd of witnesses affirmed the skill of the doctor as exhibited upon themselves. The Tribunal pronounced a very grave discourse, dwelling upon the enormity of the conduct of the accused, and sentenced him to twenty days' imprisonment and a fine of 100 francs, his wife being also fined 50 francs! Of course, such a sentence is a great discouragement to prosecutions, Taylor possessing no regular diploma, nor yet any authorisation to practise. The effect of such illusory sentences is exhibited in the fact that the French Medical Association, which at one time prosecuted illegal practitioners very vigorously, has now desisted from all such attempts. On leaving prison Taylor was entertained at a banquet, and a surgical dressing-case, "from his grateful patients," was presented to him.

A QUESTION AS TO THE UNWHOLESOMENESS OF CERTAIN MEAT.

A case involving a point of great importance came before Sheriff Mair, at Glasgow, on Saturday, the 7th inst. The plaintiff, a butcher, sued the authorities charged in the duty of administering the Contagious Diseases (Animals) Act for the sum of £9 19s. 9d. as damages for having condemned portions of carcases of bullocks belonging to him. The animals had been slaughtered on account of having shown symptoms of foot-and-mouth disease, and the point at issue was whether the tongues could be sold as food after the ulcerated portions had been simply excised, or whether they were liable to be confiscated altogether. From the evidence it appears that such affected tongues have on former occasions been sold as fit for human food. Drs. Russell and Littlejohn, health officers of Glasgow and Edinburgh, were examined. The case was taken *ad avisandum*.

THE REGISTRAR-GENERAL FOR SCOTLAND ON THE FOURTH QUARTER OF 1882.

The Registrar-General for Scotland reports, in his quarterly return for the period ended December 31 last, that the number of births registered during the three months in North Britain was 30,912, representing an annual birth-rate of 3·27 per cent. Of the eight principal towns, Greenock had the highest and Perth the lowest birth-rate. For every 10,000 inhabitants the births were at the annual rate of 401 in Greenock; 369 in Glasgow; 358 in Paisley; 356 in Leith; 348 in Aberdeen; 330 in Dundee; 306 in Edinburgh; and 292 in Perth. Of the 30,912 births, 2602, or 8·4 per cent., were illegitimate, and these were most frequent in the Southern, least frequent in the North-Western Division. In the county of Kirkcudbright such births amounted to 18·8 per cent., and in seven of the thirty-three counties the illegitimate constituted more than 12 per cent. of the whole number of registered births, while in five they did not amount to over 5 per cent. of all births. In Shetland they were only 2·1 per cent. During the whole quarter there were registered on an average 335·9 births every day; and for every 100 girls there were 105·1 boys born. The number of deaths registered as occurring in Scotland during the last quarter of 1882 was 19,522, being in the proportion of 206 deaths to every 10,000 of the estimated population. The average death-rate of the corresponding quarter of the ten preceding years was 210 per 10,000 of the population; in England during the fourth quarter of the past year the annual death-rate was 200 for every 10,000 inhabitants. Of the principal towns, Glasgow had the highest and Edinburgh the lowest death-rate. For every 10,000 of estimated population, the registered deaths were at the annual rate of 281 in Glasgow, 267 in Paisley, 257 in Dundee, 245 in Perth, 235 in Greenock, 211 in Leith, 210 in Aberdeen, and 205 in Edinburgh. The Registrar-General observes that the remarks made in the quarterly reports on the causes of deaths that have been registered in the eight principal towns of Scotland, may be regarded as approximately applicable to

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the country at large, since upwards of 32 per cent. of the inhabitants of the country reside in these towns, and a disease seldom prevails extensively in one of them without making its influence felt in the surrounding districts. The zymotic class of diseases caused 1409 deaths during the quarter under notice, constituting 18·3 per cent. of all deaths registered, referred to specific causes. The most fatal was whooping-cough, which caused a mortality of 330, and scarlet fever stood next on the list with 223 deaths. Diseases of the organs of respiration were accountable for 1974 deaths, or 25·6 per cent. of those referred to special causes. From old age 54 deaths were recorded during October, 96 during November, and 118 during December. In treating of the weather of the quarter the return records that the month of October was, on the whole, an agreeable and favourable period, unmarked by any of the severe storms felt in the South of England. The mean temperature was above the average, rain rather less than the average depth, but two days longer in falling. During November the wind was nearly normal as to direction, but in excess as to strength, and the barometric pressure was unusually low, while the mean temperature was low, and the wind greatly in excess. December was characterised, on its mean quantities, by low barometric pressure, very low temperature, great depth of rainfall, and moderate amount of wind from all quarters.

THE PARIS WEEKLY RETURN.

The number of deaths for the thirteenth week of 1883, terminating March 29, was 1303, and of these there were from typhoid fever 30, small-pox 12, measles 41, scarlatina 3, pertussis 11, diphtheria and croup 40, dysentery 3, erysipelas 6, and puerperal infections 4. There were also 62 deaths from acute and tubercular meningitis, 260 from phthisis, 45 from acute bronchitis, 128 from pneumonia, 81 from infantile athrepsia (32 of the infants having been wholly or partially suckled), and 28 violent deaths. The number of deaths for the week notably exceeds the mean of the last four weeks. The deaths from measles have increased from 25 in the preceding week to 41. The births for the week were 1208 in number. During the first quarter of 1882 there were 16,160 births and 16,669 deaths; and in that of 1883 there were 16,760 births and 15,329 deaths—so that in the past year there have been 600 more births and 1340 fewer deaths than in 1882.

TUBERCLE-BACILLI IN DISEASES OF CHILDREN.

Special observations on the presence of the tubercle-bacillus in the various tubercular diseases of childhood have, up to the present, not been recorded. The first instalment comes from the hands of Dr. Demme, of Bern, who has investigated altogether forty-four cases, an abstract of which is given in the *Berliner Klin. Wochen.*, No. 15. We regret that the results of the investigations are not given in a more accurate and detailed form, because the subject is fully worth the trouble and time of careful recording. The bacilli were detected in cases of tubercular meningitis, and in primary tubercular disease of the kidneys, but only after the autopsy. The sputa and fæces were examined during life, and for the most part with success. The difficulty of obtaining the expectoration in children under five years of age is well known, but can be overcome by patience and management. Demme seems to have obtained it sufficiently pure in some cases by wiping the sputa out from the back of the throat. The observation of Lichtheim that the sputa in cases of genuine acute miliary tuberculosis contain no bacilli, receives support from these latest researches. In the cases investigated by Demme, the mucous membrane of the bronchi was not ulcerated. It is regarded as probable that ulceration is necessary before the bacilli can be obtained from the sputa. The bacilli were easily found in thin sections of the miliary nodules in the lungs. In cases of lupus vulgaris of the face and thigh, sections of excised portions of the diseased parts contained the bacilli in fair numbers, some being detected in the giant-cells of the growth. Observations were also made on cases of scrofulous ozæna with success. Dr. Demme relates at some length the case of a male child of eight months, the offspring of healthy parents, in whose family history there was no suspicion of phthisis or syphilis. The boy was put out to nurse two months previously in a family the father of which died of acute phthisis. It is alleged that the child was infected in the nasal mucous membrane from the diseased foster-father. After the child had suffered from ulcerative ozæna for some time, the symptoms of tubercular meningitis appeared, and the patient succumbed. After death some sections of the diseased pituitary membrane were made, and stained with gentian-violet; the bacilli were detected both in the ulcers and in the non-ulcerated nodules. Demme thinks that, in the absence of any proof of hereditary taint, we must look on the above case as a clear one of contagion from the phthisical foster-father. A further hypothesis was put forward in attempting to explain the meningitis by supposing a transference of the infective bacilli by means of the blood-vessels from the nose to the meninges.

THE CHLOROFORM QUESTION IN THE GLASGOW ROYAL INFIRMARY.

On Wednesday, the 4th inst., the Lord Provost Committee, which was appointed in connexion with the use of chloroform in the Royal Infirmary, held a meeting, the object of which was to prepare a report to be laid before the directors at their meeting on the 9th inst. Replies were submitted from nearly all the large hospitals in the kingdom with reference to the practice of administering chloroform in each. The Committee were unable to come to any definite resolutions on the question at issue, but they agreed to send these reports to the medical gentlemen connected with the Infirmary, and to request them to appoint two of their number to confer with the managers, and that this be the final report of the Committee.

WHY IS THE HEAD PRESENTATION THE MOST FREQUENT?

The causes which determine the position of the fœtus in *utero* have long been a subject for argument. There can, we think, be no question that the action of gravity is the most constant of the forces acting on the fœtus. Dr. Matthews Duncan has shown that the position into which the action of gravity, if unopposed and unmodified, would bring the fœtus, is that which it actually does assume; and we may therefore conclude that gravity is not only the most constant, but the most powerful of the forces which determine the fœtal position *in utero*. But it is not the only one, for if it were, living children at term would always present with the head. Sir James Simpson invoked the movements of the fœtus, his theory being that when the fœtus presented by another part than the head, its shape was not so well adapted to that of the uterus, certain parts of it were unduly pressed on, and thus reflex movements were excited, the effect of which was to put the fœtus in the more comfortable position. In a recent number of the *Archiv für Gynäkologie* Dr. Meeh elaborately studies the effect of the fœtal movements with relation to the position the child assumes in *utero*. The answer which he gives to the question, Why does the fœtus present oftener with the head than with the breech? is the following:—That part of the uterus which lies within the pelvis, and (being surrounded with a bony

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ring) is unyielding, while the rest is very yielding, retains the head of the fœtus longer than the breech on account of the different length of the leverage exerted by the upper and lower limbs of the child respectively. Extension of the fœtal limbs alters the position of the child more easily if they come into contact with the hard, unyielding pelvic segment of the uterine wall (as is the case in breech presentations) than if with the more roomy and yielding part of the uterus which lies in the abdominal cavity (as in head presentations). The movements of the lower extremities exert a greater effect in altering the fœtal position than those of the upper, because the lower extremities are further from the centre of the child's body, and therefore act with more powerful leverage.

PUBLIC HEALTH, GLASGOW.

The health officer's report states that "during the fortnight ending March 31 last there were 706 deaths registered as compared with 632 in the preceding fortnight, an increase of 74, representing a death-rate of 36 in place of 32 per 1000. In the corresponding fortnight of last year the mean temperature was 7° Fahr. higher, the rainfall ·52 of an inch greater, and the death-rate 24½ in place of 36. Of this enormous excess of deaths registered this year, 45 per cent. were caused by diseases of the lungs, and 37 per cent. by infectious diseases, leaving only 18 per cent. to be accounted for by all other causes. The number of deaths below one year of age was 152 in place of 128, and of persons aged sixty years and upwards 114 in place of 99. The past fortnight has, therefore, been very fatal to both extremes of life. Although March is always a trying month to the inhabitants of Glasgow, we have to go back to 1877 for a parallel to these returns. In the fortnight ending March 24 of that year the death-rate was 36, and the mean temperature 39° Fahr. Not since until now have there been so late in March as many deaths of old people, or as many deaths from pulmonary diseases. The epidemic prevalence of two diseases which prove fatal through their lung complications, at a time when lung diseases are so fatal in themselves, goes far to account for the high death-rate."

THE METROPOLITAN WATER-SUPPLY FOR FEBRUARY, 1883.

The February report of the Metropolitan Water Examiners, although it shows no improvement on the preceding month, does not record any further deterioration. Colonel Bolton observes that the state of the water in the Thames at Hampton, Molesey, and Sunbury was bad in quality during the whole of the month, the river having again been in a state of flood for the entire period. It was also much polluted by the effluent waters bringing down from the land large quantities of marl and clay, as well as decayed vegetation and other impurities, which stained the water and rendered it exceedingly turbid. The Chelsea Company were, the report says, able to close their intake on six days during the month, and the Grand Junction on fifteen days; but the Southwark and Vauxhall, being totally unprovided with reservoirs for subsidence, have to draw from the river at all times, and consequently their filter-beds soon become choked up, with the result which is shown in the following report upon the water after filtration. In the second portion of the report Dr. Frankland records that the Thames water supplied by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies was of about the same average quality as that of the preceding month; the proportion of organic matter, though much higher than desirable, being not excessive considering the season of the year. With the exception of that furnished by the Southwark and Grand Junction Companies, all the Thames water was efficiently filtered before delivery. The water in the river Lea was also reported to have been in a bad condition during the whole of the month; but Dr. Frankland states that the water abstracted from this source by the New River and East London Companies was of about the same quality as that delivered in January last, both waters being superior to any of the Thames water, and both having been efficiently filtered before delivery.

THE NAVAL MEDICAL FUND.

At the quarterly meeting of the directors of the Naval Medical Supplemental Fund, held on the 10th inst. (Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair), the sum of £55 was distributed among the several applicants. Among the cases brought forward was one of the young orphans of a surgeon, who would have received a grant had not the directors been precluded from making it, by the fact that the father, having entered the Service after the compulsory subscription was abolished, had never constituted himself a member of the Fund by a voluntary contribution.

DR. CHARLES R. BROWN, EASTBOURNE.

We are glad to invite the attention of the profession to the sad case of Dr. C. R. Brown, of Eastbourne, as one eminently deserving of assistance. While actively and successfully engaged in practice, Dr. Brown was stricken with left hemiplegia in December last, at the early age of thirty-seven years. He is now completely paralysed on the left side, and his condition gets worse rather than better; and he is deprived both of income and of all means of making due provision for his wife and five children. In these circumstances an influential committee has been formed to raise a fund to aid Dr. Brown and his family; and we hope a really useful sum may be raised. Subscriptions may be paid in to the fund at the Lewes Old Bank; to any member of the Committee at Eastbourne; or to Mr. F. Wallace, 96, Cazenove-road, Upper Clapton.

PARALYSIS OF THE ASSOCIATED MOVEMENTS OF THE EYES.

M. Parinaud (*Archives de Neurologie*, No. 14, 1883) divides the associated movements of the eyes into those which are parallel and those which are not parallel. The non-parallel movements are either convergent or divergent, the latter bringing the eyes back to their normal state of parallelism after convergence has taken place. It has been customary hitherto to regard this merely as the effect of relaxation of the muscles effecting the convergence, but the cases which M. Parinaud brings forward on this head would certainly seem to show that this movement is of a more active nature than is generally supposed. The centres for both these movements probably reside in the cerebellum, but there is room for further investigation in this matter. As regards the associated parallel movements, they are either horizontal or vertical. When there is paralysis of the horizontal movements on one side, say on the left side—then not only does the left external rectus fail to turn the left eye out, but the right internal rectus does not act either; and this should distinguish the case at once from the not uncommon one of peripheral lesion of the sixth nerve, where the corresponding internal rectus acts in an exaggerated manner. Another very important feature in such a case as we are now considering is that when the patient is made to use his accommodation both eyes converge, *i.e.*, the right internal rectus, which did not act when the patient looked to the left, yet acted during accommodation. When the vertical associated movements are paralysed the patients are unable to look up or down, in a severe case;

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and in the cases recorded in the papers before us there was also paralysis of the movements of convergence, that is, that the patients could move the eyes in readily during the lateral movement, but during attempted accommodation there was no convergence. This, it will be seen, is exactly the opposite condition to what we found in the case of paralysis of horizontal movements; and these facts, taken together, afford an extremely strong argument in support of the doctrine that the internal rectus has a double nerve-supply, viz., from the sixth nerve for lateral movements, and from the third nerve for movements of convergence—a view which has been advocated by MM. Duval, Laborde, and Graux, who have traced in the cat a nerve filament from the nucleus of the sixth pair on one side to the nucleus of the third pair on the opposite side.

THE EXTRA-MURAL TEACHERS, GLASGOW, AND THE MEDICAL BILL.

At a meeting of the Glasgow Extra-mural Teachers' Association, held in the Faculty Rooms on the evening of the 11th inst., the Medical Act Amendment Bill, 1883, was under consideration, and the following resolutions were unanimously carried:—"1. That this Association agree to the principle of the Conjoint Board. 2. That the Extra-mural Teachers' Association of Glasgow, comprising thirty-nine teachers, educating about 300 students annually, consider that they ought to have at least one representative at the Divisional Board of Scotland. 3. That they wish it to be enacted that no teacher should be permitted to examine his own students for the licence of the Board."

ACCOUCHEURS AND THE FRENCH "CONCOURS."

The *Gazette des Hopitaux* (April 7) states that the surgeons of the Parisian hospitals, having met together on April 4, "unanimously protested, if we are well-informed, against the introduction of accoucheurs into the juries of the *concours* of hospital surgeons and physicians. This measure would, according to them, have as a result the destruction, at no distant period, of those great hospital *concours*, which have up to the present time maintained the high level of French surgery and medicine.

SEQUELÆ OF TRACHEOTOMY.

Mr. J. Maxwell Ross contributes a paper on this subject to the March number of the *Edinburgh Medical Journal*. It is based on the case of a young woman, aged twenty-three, who came under his observation suffering from a very severe attack of dyspnœa, which at one time seemed likely to require tracheotomy for its relief. It was ascertained that at the age of fifteen months the patient had swallowed (or rather inhaled) into her larynx a hook which had been removed two days later, after tracheotomy. The tube was removed a fortnight after the operation, and since then the patient had enjoyed fairly good health, though subject to slight hoarseness. Latterly she had been liable to attacks of dyspnœa. When the attack for which she first came under observation had subsided, a laryngoscopic examination became possible, and besides swelling of the ventricular bands, which was then noted, we read—"A short distance below the level of the cords, on the anterior wall of the trachea, is a broad white scar corresponding in position with that on the outside of the neck. Below this again, at the lower end of it, attached to the anterior and side walls, is what appears to be a shelving projection of mucous membrane, passing more than halfway across the lumen of the trachea." Mr. Ross expresses himself in very guarded language as to the nature of this affection, and refers to cases of a possibly analogous affection published by Billroth and Stoerk. Seeing that it occurred exactly in the site of the wound in the trachea, we cannot help asking whether it is not probable that the swelling may have been due to the formation of a keloid in the scar. We do not remember ever to have met with any mention of keloid growth in this neighbourhood; but still we do not know that there is any good argument against its formation. The author next instances the occurrence of polypoid vegetations in the trachea in the region of the scar, in cases where the tube had not been worn for more than ten days. We must confess to some difficulty in understanding such cases. When the tube has been worn for some weeks or months it is evident that redundant granulations would be not unlikely to form around the wound, and help to occlude the trachea when the tube was removed; and this aspect of the question has been dealt with by Dr. Steavenson in a paper on this subject in the recently issued volume of *St. Bartholomew's Hospital Reports*, where several cases are quoted of difficulty in removing the tube on this account. Of the other sequelæ alluded to by Mr. Ross we have only space to mention one, viz., the liability to laryngeal catarrh; and here too, though quite recognising its frequency, we are unable to see our way to admitting it to be a result of the tracheotomy. In our view the larynx has been already shown (by the primary disease necessitating tracheotomy) to be a *locus minoris resistentiæ*, and its subsequent inflammation on exposure to chill or other exciting cause would therefore be due solely to the predisposition of the individual.

THE FRENCH GENERAL MEDICAL ASSOCIATION.

This body held its twenty-fourth annual meeting on April 1, under the presidency of M. Henri Roger, who congratulated it on its prosperous position. Its total receipts amount to a sum of 1,673,751 fr. During 1882, sixty-six pensioners received the sum of 27,800 fr., 111 widows, mothers, or daughters of members received 25,900 fr., ten members of the Association received 12,150 fr., and thirty-seven persons unconnected with the Association received 1650 fr., being a total of 67,560 fr. Nine pupils were also adopted by the Association. The proceedings terminated by an eloquent *éloge* on the late Amédée Latour, the founder of the Association, delivered by his life-long friend and medical attendant, Dr. Gallard.

THE WIESBADEN CONGRESS FOR INTERNAL MEDICINE.

We understand that this Congress will be held at Wiesbaden from April 17 to April 20, instead of from April 20 to April 22, as announced in our number for February 10, at page 165.

The Queen has been pleased to give orders for the promotion of the Right Hon. Lyon Playfair, C.B., LL.D., to be an Ordinary Member of the Civil Division of the Second Class, or Knights Commanders, of the Most Honourable Order of the Bath.

A Lectureship in Philosophy, in Edinburgh University, tenable for three years, has been endowed by Mr. A. J. Balfour, M.P. The course will begin some time before Christmas, and the subject to be dealt with in the first year's course is "Scottish Philosophy." Mr. Seth, who is at present assistant to the Professor of Logic and Metaphysics, has been appointed first holder of the lectureship.

We regret to have to record the death of Dr. James Palfrey, Obstetric Physician to the London Hospital.

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MEDICAL MATTERS IN PARLIAMENT.

HOUSE OF LORDS—THURSDAY, APRIL 5.

The Medical Act Amendment Bill.—Lord Carlingford moved the second reading of this Bill in a speech of which we have spoken elsewhere in these columns.—The Earl of Aberdeen said that copies of the Bill were not available to the public until March 15, and it was, therefore, obvious that there had not been sufficient time for forming an opinion on the subject or to make representations to the House. In Scotland a considerable feeling existed on the subject, and he need not, therefore, apologise to their lordships for mentioning the Scottish schools of medicine. He had just received a telegram from the Principal of the University of Aberdeen, in which he stated that the feeling was unanimous on the part of the governing body of that University that very considerable amendments were required before the Bill passed. —The Earl of Milltown said that as the Bill proposed to sweep away certain rights and powers without any compensation, there were certain points which the Irish colleges wished to impress upon their lordships, the first of which was uniformity of education. The noble lord (Lord Carlingford) had intimated that that was extremely desirable, but there were some clauses in the Bill which were totally inconsistent with it, notably Clause 20. The next question with which the Irish colleges dealt was that of affiliation, which was a question of considerable importance, and which would obviate some of the difficulties which appeared on the face of the Bill. It was very desirable that somebody should exercise a controlling power, such as that exercised by the benchers of the Inns of Court over the Bar. A third point taken by the Irish colleges was the disposition of the surplus fund, for which no provision had been made in the Bill; and another grievance was the annual registration of all practitioners, which was unnecessary and vexatious. He also objected to the admission of laymen to the Medical Board, as proposed by the Bill.—Earl Cairns contended that a comparatively small number of university graduates in England entered the medical profession, while in Ireland the number was very large. In round numbers, in Ireland and Scotland, something like 40 or 50 per cent. of the medical profession took their places upon the Register by university qualifications. The Bill proposed that practitioners should not go on the Register with the university qualification, but must go through a further medical examination. It was an enormous sacrifice for the universities to make, as they were called upon to surrender their power of conferring medical degrees. There was one thing, and only one, which would keep the universities in the position which they would sacrifice, and that was by giving them a very strong position on the Medical Board. He could not help thinking there had been an oversight in another respect. As the Bill stood the universities of Ireland were in a perfectly different position from those of England and Scotland. What was the power which the English universities had on the English Board? There were fifteen members on the English Board, and the universities had eight out of the fifteen, and, therefore, the universities had a preponderating influence on the Board. The Scotch Board had eleven members, and out of the eleven the universities had eight. The Irish Board, however, like the Scotch, consisted of eleven members, but the universities had only four out of the eleven. Surely that must be a mistake. The Irishmen, it appeared, were more moderate than the Scotch, for they did not ask for more than a bare majority, and that was a proposal which might very well be agreed to.—Lord Cranbrook objected to the provision imposing a penalty of £20 for using a foreign degree in this country, though the person using it had an English qualification, and had rightly obtained the foreign degree.—Lord Balfour of Burleigh wished to call attention to the fact that no one who took a degree in medicine or surgery in a Scotch university could take that degree without undergoing a satisfactory examination in the other branches of the subject; and if some of the licensing bodies had committed errors in the past, it was certainly unfair to strip others, who had not erred, of the privileges which they had enjoyed. The Royal Commission disclaimed any intention of interfering with the teaching of the universities, and declared that they required no concession from the Scotch universities which was not required from every other university. That might be the case, but it was obvious that to require universities which educated three thousand students to give up their power of conferring degrees was a very different matter from acting in the same way towards a university having only fifty medical students. It had been urged that the Scotch universities were well represented on the Medical Board. But they must remember that the Scotch Medical Board was entirely under the control of the Medical Council, and therefore a majority of members on the Board was not sufficient to preserve their interests. Moreover, considering all the circumstances of the case, he was by no means satisfied with the idea of establishing this particular medical degree. The standard would be likely to become a minimum one, and as nothing more was required to qualify practitioners, there would be no incentive to proceed to higher degrees.—Lord Camperdown, as Chairman of the Royal Commission on the Medical Acts, expressed their grateful thanks for the invaluable assistance they had received from the late Master of the Rolls. He defended the recommendations of the Commission, and strongly supported the Bill. He thought that if Lord Carlingford continued to be as conciliatory as he had been, he would in the end give them a measure which would, for some time at least, settle this much vexed question.—Lord Carlingford having briefly replied, the Bill was read a second time; and the committee was fixed for Thursday, the 19th.

HOUSE OF COMMONS—THURSDAY, APRIL 5.

Nursing Sisters.—Mr. Greer having asked the Secretary of State for War whether he would consider the advisability of giving medals to all Her Majesty's nursing sisters who served in the late campaign, whether on duty at Gozo, in Cyprus, or in Egypt,—the Marquis of Hartington said: As stated in my answer to a question put by the hon. member for West Aberdeenshire on March 12, the grant of the medal is restricted to those who served in Egypt between July 16 and September 14, 1882. I do not consider it advisable that the terms should be extended, or that any exception should be made.

Typhoid Fever at Plymouth.—In answer to Sir H. Peek, Mr. Chamberlain said that typhoid fever had again appeared among the emigrants waiting at the depôt at Plymouth for the refitting of the ship *Oxford*. An inquiry had been made into the causes of the outbreak; and he was informed that the result showed that it was not due to overcrowding. With respect to compensation to the emigrants for the expenses incurred by them in the past, and for the further delay necessitated by the reappearance of the fever, the statutory compensation payable was 1s. 6d. per day, but an additional sum per diem had, by the intervention of the Agent-General for Canada, been granted in these cases.

Drainage of the Barrow.—Mr. A. O'Connor inquired whether the attention of the Chief Secretary to the Lord Lieutenant had been called to Dr. Burke's report to the Local Government Board in Ireland, to the following effect: —"That he entertains no doubt that inundations caused by the frequent flooding of the river Barrow must exercise an injurious influence upon the health and general sanitary condition of the inhabitants residing permanently in the towns of Mountmellick and Portarlington, and particularly the latter"; and whether the Government would take any steps in the matter.—Mr. Trevelyan replied that the question of the Barrow drainage had been under consideration for some time. The Irish Office as a department had no direct control in the matter; but they had done all in their power to aid those interested in advancing it. The next steps must be taken by the local proprietors interested in the scheme.

FRIDAY, APRIL 6.

The Vaccination Acts.—Mr. Burt inquired whether it was the intention of the Government to introduce in the present session a measure to repeal or to mitigate the severity of the compulsory clauses of the Vaccination Acts,—and Sir C. Dilke replied that in the present state of public business he could not hold out any hope of legislation on the question during the present year.

MONDAY, APRIL 9.

The Artisans' and Labourers' Dwellings Acts.—In reply to Sir R. Cross, it was stated by Sir J. M'Garel Hogg that the Metropolitan Board of Works is proceeding with the four

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new schemes under the Acts of 1875-82, and that the local inquiries made under the Secretary of State for the Home Department had been concluded in each case. Should the Secretary of State, on the report of the local inspector, approve of the scheme, provisional order would, no doubt, be issued and confirmed in the usual manner.

TUESDAY, APRIL 10.

The Artisans' Dwellings Act, 1882.—Sir Richard Cross asked the Home Secretary what steps had been taken by the Commissioners of Sewers under this Act towards insuring the erection of suitable accommodation on the ground cleared under the Act of 1875. Sir William Harcourt replied that he had been in communication with the Commissioners with regard to the proposals of December, 1882, for providing dwellings for artisans. The plans had been carefully scrutinised by the Home Office, and he was assured by the Commissioners that they hoped to re-commit the plans for consideration this week. They were very desirous to come to a conclusion with the work as soon as possible.

THE ROYAL COLLEGE OF PHYSICIANS, LONDON, AND THE MEDICAL BILL.

REPORT OF THE COMMITTEE ON THE MEDICAL AMENDMENT BILL.

AT a meeting of the Royal College of Physicians, held on Thursday, the 12th inst., the Committee appointed by the College "to watch the progress of the Medical Act Amendment Bill introduced into the House of Lords, and to take such steps as they may think necessary," reported as follows:—The Committee have carefully considered the main provisions of the Bill, and have taken the opinion of the law advisers of the College as to the effects which the Bill would have, if it became law, on the rights and privileges enjoyed by the College under its Charter. They have also given attention to the details of the Bill, so far as time has permitted, and believing that there are some clauses on which the College would desire to express an opinion, the Committee recommend:—

I. That on the constitution of the Medical Council (Clause 14) the College should not offer any opinion.

II. That the College should agree to the principle of a common Medical Board for each division of the United Kingdom (Clause 9), by whom every candidate, whether male or female, shall be examined in the departments of Medicine, Surgery, and Midwifery, and receive a certificate of competency before admission to the Medical Register. Such a Medical Board for England the College has for some years past strenuously sought to establish. To the method proposed for electing such Medical Boards, the Committee see no reason to object, nor to the main functions assigned to them, such as the framing of schemes for medical education and examinations, the appointment of examiners, and the supervision of examinations.

III. That as regards the constitution of the Medical Board for England (Clause 9, Section 3), the Committee recommend that the College should claim for this division of the kingdom a preponderance of members for the corporations, the chief licensing authorities in England, as is granted in the Scotch Board to the representatives of the universities, which are the principal licensing authorities in that division of the kingdom.

IV. The endowment and incorporation of the Medical Boards (Clause 9, Section 6), the Committee believe to be alike undesirable; unjust to existing authorities; and unnecessary for the efficiency of the Boards in carrying out the objects for which it is proposed to establish them.

V. The Committee recommend the College to accept the scheme of a separate licensing examination (Clause 26), entitling to registration as registered medical practitioners, provided that the titles of the College be afterwards separately registrable, on such conditions as the College may see fit to determine, with the approval of the Medical Council.

VI. Some provision should also be made in the Bill (Clause 28), to the following effect:—On and after the aforesaid day, if any person, whether a registered medical practitioner or not, takes or uses the designation of, or represents himself to be a physician, unless he be a graduate in medicine of a recognised university, or hold a qualification from a college of physicians, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds. On and after the appointed day, if any person, whether a registered medical practitioner or not, takes, or uses, the designation of, or represents himself to be, a surgeon, unless he be a graduate in surgery of a recognised university, or hold a qualification from a college of surgeons, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds.

VII. In conclusion, your Committee believe that there are many other clauses in the Bill which may require the careful consideration of the College, but which do not affect the principle of the Bill, and to that alone your Committee has hitherto had time to devote their attention.

FROM ABROAD.

THE FUTURE OF RABIES.

PROF. BOULEY has published in his *Recueil de Méd. Vétérinaire* for January 15 an interesting article on the new vista which is opening up in the pathology and prospective treatment of rabies. Until quite recently, he observes, we have been content to regard it as a simple neurosis, the material agent giving rise to the functional disturbances characteristic of the disease being undiscoverable by the means at our disposal. All this is now changed, and new researches of Pasteur and others demonstrate that the functional disturbance, of which physiological induction places the seat in the central nervous system, is determined by a *material agent* which, although still invisible, is yet present in this system. This is shown by the effects which it produces when a portion of the cerebral or medullary matter is transferred from a mad animal to the surface of the brain of a healthy animal. In other words, the living element which gives rise to rabies, the virus of this disease, has its seat in the central nervous system, which is its medium for organic culture and multiplication. It is this multiplication which gives rise to the various symptomatic manifestations known as rabies. As no objective sign denounces this condition, the proof of its reality is found in inoculation. So, also, by culture of the virus in an extra-organic medium, the material agents of the disease may be multiplied to infinity.

The knowledge of these facts should lead to much greater precautions being taken in the practice of autopsies of subjects, whether in man or animal, dying of rabies. The belief that the localisation of the rabid virus was exclusively confined to the mouth has given rise to a very deceptive security, in face of the experimental demonstration of the concentration of the elements of virulence in the cerebro-spinal apparatus, seeing the greater difficulty in opening the cranium and spine, and the greater chance of inoculative wounds.

One of the great difficulties of the experimental investigation of rabies arose from the want of fixity in the virulent properties of the saliva—the sole reputed inoculable material. When the dog had been inoculated, the effects had to be waited for for months, and even when they were not produced, a rigorous conclusion would scarcely be formulated. All this is now changed; for experiment demonstrates, on the one hand, that we may transmit rabies with certainty by taking directly from the brain the inoculable matter in perfect purity and powerful activity; and, on the other hand, that by inoculating the surface of the brain, laid bare by the trephine, directly with this virus, we reduce the delay of the period of incubation to rarely more than two weeks, and often less. When the virus is injected directly into the veins, as practised by M. Pasteur, its virulent diffusion into the central nervous system takes place with great rapidity, and the symptoms of rabies are produced as by inoculation of the brain, but with somewhat different modes of expression of the disease.

One of the most important results of these experiments has been the *cure* of an inoculated dog after a manifestation of the early symptoms, and the refractory condition this dog

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offered to every attempt to reinoculate it. Three other dogs were also refractory, but their anterior history is less exactly known; but the first dog mentioned had been carefully watched, and resisted cerebral inoculation and intravenous injection, which are such certain means of transmitting the disease. This fact, unique as it is, allows of our ranging rabies in the category of diseases against which immunity may be acquired by a former attack, remaining compatible with life. We would thus seem to be on the way to "vaccination" against rabies itself. Another hope may still be entertained—namely, that therapeutics will some day render itself mistress of rabies, and succeed in vanquishing it. We now know where to proceed in attacking it, for its seat is the central nervous system, and its cause is a living element multiplying in that system. The problem lies in the discovery of an agent which may oppose such multiplication. But when we witness in the laboratory the infinitely minute quantity of a substance which may prove efficacious in arresting the pullulation of a given ferment, we feel authorised to conceive the hope that experiment will lead to the special agent which, transmitted by the bloodvessels to the central nervous apparatus, will there be enabled to arrest the pullulation of the rabid virus, and extinguish its activity. Thanks to the double discovery of the inoculability of rabies by transferring its virus to the cerebral surface and by intravenous injections, investigations of this nature have become possible, and great is the interest that they should be undertaken.

GENERAL CORRESPONDENCE.

TEMPERANCE APPELLATIONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is extremely difficult to provide with a suitable name (I mean etymologically suitable) those persons who imagine alcohol to be in all cases a poison. In many instances an arbitrary term, etymologically defective, or altogether fanciful, is the most useful. Everybody knows what "calomel" means, although its etymology implies an absurd contradiction; and so it is with "teetotaler." To call a man a total abstainer would imply that he abstained from everything; to call him a temperance man is absurd, because from time immemorial men have drunk, as they still drink, wine temperately. Aquabib and hydropot may mean one who drinks water, but most men do that. I drink it always to quench thirst, but then I drink also a moderate quantity of wine. Some teetotalers call themselves Rechabites, but the sons of Rechab were only enjoined by him not to drink *wine*; nothing was said about beer, which in the eyes of teetotalers is just as bad as wine.

An amusing name was lately suggested in an American newspaper—*amethyst*. *Ἀμέθυστος* (*αμεθύω*) is one who does not get drunk, and the stone we call amethyst was so named because it was supposed to preserve from or cure drunkenness. But on this principle I might call myself an amethyst, for although I have always taken wine, I never was drunk in my life.

It seems we must put up with "teetotaler" till some one can invent a really good word. Who will?

April 7. I am, &c., D.

PROFESSOR BILLROTH'S CLINIC IN 1882.—Dr. Wölfler states (*Allg. Med. Woch.*, January 23) that the statistical data of 1882 furnish the interesting fact that the percentage of mortality in Prof. Billroth's clinic presented an enormous difference to that of 1881; for while in the former year it was only 6·3, in 1881 it was 9·5; and he attributes this difference in a great extent to the far more frequent use of iodoform. Among the other unjustifiable objections which have been taken to the employment of this valuable medicinal agent is its liability to induce erysipelas; but how erroneous this statement is, is shown by the fact that there are under its uses far fewer wound-diseases than formerly. In the year 1881 there were 822 patients treated in the clinic, of which number 82 (9·5) died; while of the 722 patients treated in 1882, only 45 (6·3) died. After operations only 7 persons (0·9) died, and from accidental wound-diseases there died 1·42 per cent.

REVIEWS.

Manual of Gynecology. By D. BERRY HART, M.D., F.R.C.P.E., Lecturer on Midwifery and Diseases of Women, School of Medicine, Edinburgh; late Assistant to the Professor of Midwifery, University of Edinburgh, etc.: and A. H. BARBOUR, M.A., B.Sc., M.B., Assistant to the Professor of Midwifery, University of Edinburgh. With nine lithographs and four hundred woodcuts. London: Simpkin, Marshall, and Co. 1882. Pp. 644.

THE book before us is very unequal, but the best parts of it are so good as to make us hope, indeed feel sure, that the authors have not yet done the best of which they are capable. It is evidently the work of men who are accustomed to observe and think for themselves, but who have not yet had opportunity to make every question, or indeed many of the questions, which are yet unsettled in gynæcology the subject of original and independent research. Of this latter assertion anyone who distrusts our judgment can satisfy himself by reference to the "Medical Directory." Hence the inequality of which we have spoken. In some parts—mainly those dealing with topics upon which Dr. Hart has made contributions to our knowledge which will ever bring credit to his name—the book is admirable. In other parts it is crude, undigested; and unsatisfactory. We find current errors copied at one page, and in another contradicted by the authors' good sense.

The first eighty-five pages are devoted to the anatomy and physiology of the pelvic organs; the basis upon which a sound conception of the morbid changes which affect them must be built. This section is excellent; it is the best part of the book, and the clearest and most philosophical account to be found in any text-book. From this to page 143 is occupied with a description of the modes of examining the pelvic organs. This is good enough, but seems to us rather overdone. The precise method of handling the gynæcologist's tools is a thing of very small importance compared with the informed and reasoning mind which can appreciate at its true value the information which they give.

The diseases affecting the pelvic organs then follow. Peritonitis, cellulitis, and hæmatocele are taken first, and are treated in a manner which is exceedingly clear. Then come the diseases of the ovaries and tubes. This section is one of the least satisfactory parts of the book; it may even be called bald and imperfect. Diseases of the uterus then are described, and upon the whole exceedingly well; especially the sections which treat of pathological anatomy. The weak places in this, for the most part, excellent book are those in which the authors deal with debateable topics. Where they have to write upon established facts, they are comprehensive, clear, and logical; but when we get into the regions in which practice is based on hypothesis, the authors' veneration for well-known and respected names seems to blunt their critical faculty. For instance, in the chapter dealing with stenosis of the cervix, after this condition has been described, it is said to cause dysmenorrhœa, and to cause the cervical canal to dilate into a spindle-shaped cavity (page 237). This latter assertion, so far as the shape of the cavity is concerned, cannot be disputed, seeing that the cervical cavity in the nullipara is naturally spindle-shaped. The supposed dilatation is here illustrated by a diagram from Mundé, which is wholly imaginary, and can carry with it no authority for that reason. Throughout the chapter there is no mention of the fact that cases are not uncommon in which the external os is of the smallest dimensions, and yet there is no dysmenorrhœa. Nor do the authors explain how it is that a canal which will admit a metrotome should prevent the escape of a few ounces of blood having several days in which to make the transit. It is true they say the blood coagulates; but this is, in their account, secondary to the prevention of its escape by the contracted condition of the outlet. They say too that stenosis of the cervical canal primarily produces dyspareunia. We do not see why this should be, nor is there any evidence of the fact.

In treating of atrophy of the uterus they speak of the "hysteria and other disturbances of the nervous system which usually accompany imperfect development of the uterus." Is it not well known that imperfect development

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of the uterus is quite consistent with excellent health in every other respect? and is it not probable, seeing how few of such healthy subjects would seek the advice of specialists, that these form the majority? For the treatment of this harmless condition the authors recommend the so-called galvanic stem pessary. Perhaps some day they will publish a table of cases so treated. Our forecast will be that undoubted injury from these instruments will be found to far outweigh doubtful benefit.

The book does not throw any fresh light on the vexed question concerning uterine flexions and versions. The authors almost, but not quite, accept the mechanical theory of the pathological importance of flexions, but they do not seem to have made any original investigations into the subject. At page 314 they say, "The etiology of flexions and versions is a subject on which little definite is as yet known. This is the more unfortunate, as a knowledge of etiology is of the first importance in rational treatment. . . . *We are sometimes surprised, on examining a patient, to find a well-marked flexion which had not made its presence felt by any symptom. This is, however, the exception:* as a rule, displacements are followed by a well-marked train of symptoms." If the latter of the sentences which we have italicised be a fact based on observation, and not an inference from a hypothesis, it is manifest that the pathological nature of uterine flexions can hardly be disputed. But there is no evidence whatever in support of it; and some which points to the very opposite. Vedeler, the latest worker at the question, finds that anteflexion occurs in 70 per cent. of nulliparous women, and concludes that this condition is the normal shape of the uterus,—cases in which the organ is straight being the exception. He found it occurred with equal frequency in the healthy and in the sick. Herman found anteflexion almost equally frequent: and that it occurred with just the same frequency in those who menstruated painlessly as in those who menstruated painfully. Many French investigators have directed their attention to the frequency of anteflexion in children and in healthy women, and all testify as to its extreme frequency. Writers on pathological anatomy agree in their statements as to the rarity with which they find uterine flexions associated with evidence of disease. To all this evidence, of course, criticism may be directed, and exception taken. But the point is this, that there is absolutely *none* on the other side. *All* who have investigated the matter, whatever the value of their statements may be, agree as to anteflexion being extremely common in health. That is, that for anteflexion, at least, to occur without symptoms is not the exception, but the rule. Those writers who take the view accepted by our authors, base it on examinations of complaining women only, in whom, of course, such a common condition as anteflexion is often found. We are surprised that authors so thoughtful as those who have produced this book should not have seen the extreme importance of settling the frequency with which anteflexion occurs in the healthy, before assuming that it is a morbid condition. As to anteversion, they are inconsistent. They say: "Probably in a few years anteversion will cease to be considered among uterine displacements" (page 332); and yet they figure pessaries for its treatment. But, even when on flexions, they do think for themselves on some points. At page 337 we are glad to see that they reject the nonsense sometimes talked about a retroverted uterus (unimpregnated) pressing on the sacral nerves; and at page 347 that about the "genupectoral" position in the treatment of this displacement. We must except from our criticism of the author's handling of displacements the chapter on prolapse (a subject to which Dr. Hart, as is known, has given great attention), which is admirable.

Each chapter is prefaced with a short bibliography of the subject. These are far from complete, but still they are useful.

We regret that we have not space to dwell on many other points in which this book calls for commendation. A call for successive editions will, we hope, attest its popularity, and give the authors opportunity for working at the controverted questions of gynæcology as thoroughly as Dr. Hart has done at the anatomy of the pelvic floor. As it is, the book is a valuable addition to gynæcological literature, and cannot fail to make its authors widely and favourably known.

REPORTS OF SOCIETIES.

THE CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 30.

ANDREW CLARK, M.D., President, in the Chair.

MR. HOWARD MARSH read the report on Mr. Shuter's case of subperiosteal amputation at the hip-joint, which was signed by Messrs. Croft, Marsh, Clement Lucas, and Shuter. The report went to show that it was doubtful whether any amount of bone was present in the central cord of firm resisting tissue, that it was true that the muscles were in a high state of nutrition, and were able to give the stump and an artificial limb independent motion. The committee also decided that in the operation performed there was diminution in the risk from hæmorrhage, with preservation of muscles of such a length as would correspond to that obtained by an amputation through the upper third of the thigh; it was also found that the periosteum had been stripped off as high as the trochanters.

The PRESIDENT remarked on the satisfaction of having so able a report on a case which had excited considerable interest.

A CASE OF CONTUSED WOUND OF THE THIGH AND LEG IN A CHILD—GANGRENE OF THE LIMB—DEATH.

MR. ROBERT W. PARKER read a paper on this case. A female child, aged fourteen months, was admitted into the East London Hospital for Children, having sustained an extensive wound of the left leg twenty-four hours previously. The wheel of a heavy drag had caught the outer border of the limb and torn off a large crescentic flap of integument. The front of the knee-joint was exposed, but not opened. An attempt was made to clear off the mud with which it was plentifully covered, and so establish an aseptic condition, after which antiseptic dressings were applied. The child appeared to be doing well for about thirty-six hours, after which he became drowsy and restless, and some livid patches and œdema appeared on the foot. Twenty-four hours later these symptoms had become more pronounced, and on the following morning extreme gangrene of the limb had supervened; she died. The author sought the opinion of the members of the Society—first, on the treatment he had adopted; and, secondly, as to the cause of the gangrene. He felt that amputation in the upper third of the thigh, the only alternative, was a severe operation for such an infant, while the suppuration and granulation of such a wound, unless they ran an aseptic course, would almost certainly have proved fatal. As regarded the gangrene, no injury could be discovered as a cause. Could the action of carbolic acid have produced such a result?

In reply to the President, Mr. PARKER said that only a little clotted blood was found in the popliteal artery.

Mr. PAGE thought that the case raised many important questions, and related a somewhat similar case which fell under his own care of a child aged eighteen months, in whom the left arm was caught in a swinging gate and contused. The following day the limb was found to be dead from the fingers up to two inches above the elbow, the child was extremely ill, and the limb was amputated, contrary to the advice of Mr. Page's senior colleagues. The child was supported with alcohol, a good recovery was obtained, and the patient left the hospital in two weeks. The brachial artery of the amputated limb was found to be plugged in two places where the middle and internal coats had been ruptured. He thought that after careful consideration surgeons would come to the opinion that amputation must be resorted to in such cases. We must recognise different kinds of gangrene. In senile gangrene a line of demarcation might be waited for with advantage; but in other cases, the inseparable notion of a line of demarcation to be waited for was apt to bias the surgeon in favour of non-interference until it was too late.

Mr. HARRISON CRIPPS said that it was perhaps impossible to lay down any arbitrary rules in the treatment of gangrene after injury. We ought to distinguish between the varieties of traumatic gangrene. There was a mechanical form in which the tissues were killed by the direct violence inflicted on them. There were two well-marked forms of spreading

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traumatic gangrene which he proceeded to illustrate by two typical cases that he had had the advantage of studying during life and after death. The first, a non-inflammatory variety, happened in a man who fell down a lift and met with a fracture of the forearm just above the wrist, and with some contusion of the thigh; in addition, marked dyspnœa was observed. The fingers soon became swollen and dark, and this condition spread up to the elbow, the constitutional condition at the same time becoming very grave, with the pulse small and rapid. The arm was amputated at the shoulder-joint by Luther Holden. The artery was seen to be patent; the vein was occluded by a clot. A day later the leg began to swell, and spreading gangrene extended upwards, and the patient died. At the autopsy the femoral artery was found to be pervious, but the vein was filled with coagulated blood. The key to this form of the disease was found in the fatty change which the heart had undergone, in the fibroid adhesions of both pleura and pericardium, and in fracture of seven ribs. In such cases amputation would be useless; the local death was merely the beginning of the death of the whole body, which was the result of severe constitutional depression. In the second example a man experienced a slight injury from a piece of gauze to the hand near the thumb. This soon swelled, and the tips of the fingers became black; then the whole limb became tumid as far as the elbow, the posterior surface being of a bright-red colour. The patient suffered much pain; the temperature was 104° Fahr., the pulse rapid. The limb was amputated through the shoulder-joint, and marked improvement followed, but only for three days, when a rigor set in, with extension of gangrene about the stump and on to the face. Here we had to deal with an acute case of pyæmia, and the illness presented a marked difference from the other non-inflammatory form of gangrene. In reply to the President, Mr. Cripps stated that there had been very little history of previous disease either of a gouty or rheumatic nature. The wife of the first man stated that although he had not been a strong man, he had not suffered from definite illness till pericarditis, which developed a few years before the fatal accident. In the second case the man was of sober and steady habits.

Mr. Christopher Heath said that amputations of limbs of children of such a tender age as about fourteen months were perhaps hardly justifiable. He thought that Mr. Parker's case had died simply from the result of the original injury. In the rapid spreading form of gangrene it was necessary to amputate early and high up. The treatment of small children especially with the spray, looking to the exposure and cold which such procedures necessitated, was certainly bad. In this regard Mr. Heath narrated the case of an amputation of the thigh, on account of a large sarcoma, in a young woman, which he had recently performed, in which death occurred in twenty-four hours; this result was partly attributed to the exposure to the cold and damp of the spray, but also probably to the absorption of carbolic acid and its non-excretion by the kidneys. There was no carboluria; probably if there had been the case might not have terminated fatally, for it was likely that the refusal of work by the kidneys was at the bottom of the fatal result. Liston's teaching was certainly right, in Mr. Heath's opinion, viz., that oily preparations keep up the temperature of the part; and for this reason he thought that Mr. Parker's suggestion to use a hot poultice was a valuable one. He thought it was most necessary that we should not lose sight of the fact that some injuries were mortal.

Mr. Parker, in reply, said that he had not expected gangrene; the injury seemed to be quite superficial. He did not quite fall in with Mr. Heath's views anent the harmlessness of mud in a wound; nor could he regard Mr. Page's case as quite comparable with the one he had read to the Society. He agreed with Mr. Heath in thinking that prolonged exposure to the steam spray was likely to be injurious.

The President remarked on the interesting side-issue which Mr. Heath's remarks had opened up.

Tetanus.

Mr. Warrington Haward read the following notes for Mr. Spencer Watson. The case was that of a well-nourished boy, aged eight, who came under treatment eleven days after receiving a small lacerated wound on the dorsum of the foot. Four days before admission, symptoms of tetanus commenced, and on admission the convulsions occurred every half-hour. At first the temperature was 101°, but afterwards was very little above the normal standard, being 99·4°, but the pulse and respiration were much accelerated. The temperature on the second day was 100·2°, and continued at that height till the fourth day, when it went up to 103·2°. He died the same evening. He was treated by the administration of chloral, with occasional injections of morphia and rather free purgation. A mustard-plaster was applied to the spine. During the third day a severe spasm terminated by sudden cessation of breathing, but artificial respiration succeeded in restoring him. He died in a similar spasm ten hours afterwards. The post-mortem examination showed that the membranes of the brain and spinal cord were intensely congested, but the substance of both appeared healthy. Microscopic sections of the cord gave chiefly negative results. The only appearance that seemed abnormal was the presence of slight vacuities in the grey matter surrounding the vessels and the multipolar cells. It was thought, however, that these spaces were due to the method of preparation of the sections. There was no exudation, either in the spaces or in any part of the cord examined, except in some sections of the dorsal region, which presented colloid bodies here and there such as those described by Dr. Ross. Sections of the peroneal nerve exhibited changes, probably due to inflammation, chiefly affecting the sheath and neuroglia. The questions raised by the case were:—1. Would the performance of neurotomy or amputation at an early stage of the case have given the patient a better chance of recovery? 2. Was the treatment by chloral and morphia the best adapted to the circumstances of the case? 3. Was the case an argument of any value as showing that microscopic appearances of the cord were sufficient to demonstrate the essential tetanic condition, or was one justified in assuming that at present the microscope failed to give any reliable information, and that the essential changes in tetanus were too subtle to be discovered by any of the means of post-mortem inspection that we possessed?

Case of Tetanus following Laceration of the Toes, and lasting Forty-two Days—Syme's Amputation—Recovery.

Mr. Howard Marsh read notes of this case. Alfred M., aged eight, was knocked down on September 9 by a tramcar, which passed over his left foot, severely crushing the three inner toes. On September 12 he came into St. Bartholomew's Hospital with the toes gangrenous; on September 23 tetanus set in, and in the next twenty-four hours rapidly increased in severity, and was attended with frequent and urgent spasms. Syme's amputation was performed in the afternoon of the 24th, with the effect that the spasms were both less frequent and less violent. Tetanus, however, continued severe for the next thirty-five days, and then gradually subsided, to cease entirely on the forty-second day. The wound healed slowly, but without complications. It was all but closed at the end of a month after the amputation. Treatment consisted in the administration of an abundant fluid diet, enemata of chloral and bromide of potassium, and of hypodermic injection of morphia. The chloral and bromide injections did very little, if any, good; but morphia always relieved the spasms and procured rest, though only for short periods. On many days upwards of two grains were injected, as much as five-twelfths being injected at a time. The author remarked that the case was rare not only as an instance of recovery from severe traumatic tetanus, but also on account of the prolonged period (forty-two days) over which the disease extended. Though many authorities were opposed to amputation, he resorted to it in this instance because the operation was not a large one, because the foot was already in part gangrenous, and because amputation afforded the surest means of removing peripheral irritation—a principal indication in the treatment of tetanus. He did not resort to nerve-division, as this might fail to check irritation, and he did not know which of the several nerves ought to be divided. In the present instance, morphia was the only drug that seemed useful, and, though employed in such large doses, it produced no unfavourable result.

Mr. R. W. Parker related a case which had occurred in the practice of Mr. Hutchinson, at the London Hospital, of a gunshot wound of the lower part of the leg, which was apparently quite superficial in the extent of the damage done; however, tetanus set in, and persisted despite the

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operation of stretching the sciatic nerve. At the autopsy the damage was seen to extend deeply, and to involve the posterior tibial vessels and nerve. The preparation was shown, and six shots were still to be felt in the sheath of the posterior tibial nerve. The nerves and vessels were grouped together by a dense inflammatory exudation. In another case a man was shot in the thigh; tetanus set in and lasted till death. At the autopsy a wad of paper and a piece of the trousers and drawers of the patient were found embedded in the tissues. In yet another case the lesion could be appreciated by the naked eye; this was under the care of Mr. Rivington at the London Hospital. A pitchfork had been run into the outer side of a labourer's leg whilst loading a dung-cart; here the musculo-cutaneous nerve was kinked and spread out. To contrast with these three cases of local lesions, the case of a boy aged five years, who had met with a superficial injury of the skin of the tibia, was mentioned. Subcutaneous injection of curare failed to relieve the tetanus which developed, and ended fatally. Mr. Parker had recently seen two cases of tetanus neonatorum at Shadwell; but nothing like a septic etiology could be made out in these cases, which were frequently ascribed to a septic condition of the umbilical structures. Epidemics at the Rotunda Hospital, Dublin, had been attributed to bad hygiene. Numbers of cases occurred on the battle-field, and in the foundling hospitals of hot countries, where it might be conjectured that such variable hygienic conditions played a part in predisposing to sepsis. So far as he knew, there was no essential difference in the phenomena presented by the so-called traumatic and idiopathic varieties of the disease. Microscopical preparations were also shown, in which the nerve-fibres were seen to be glued together and widely separated by inflammatory infiltration.

Dr. Dickinson referred to the old expressions regarding the pathology of the disease. A good deal might be said in behalf of the blood theory. In the majority of cases of traumatic tetanus there was an open wound which favoured the humoral notion. Then, again, a period of incubation was clearly traceable, during which it may be presumed that the poison was brewing. The irritation was no doubt conveyed through the nerves. The nerves he had found congested, though not always, but there never was more than hyperæmia. In the spinal cord, and most marked in the opposite half to the side injured, hyperæmia was always present, and there might be nothing else; but this congestion was frequently accompanied with exudation into the perivascular spaces, sometimes the anterior horn was ruptured and blood extravasated into the rent, as might be seen in the picture made from one of Dr. Dickinson's specimens in Mr. Holmes's book on surgery. In his experience, Calabar bean given as physostigmin under the skin had been the most successful of all drugs; next to that came chloral. Mr. Henry Lee had divided a nerve to relieve tetanus, but without a good result, and Dr. Dickinson thought that such operations were not likely to be successful when the disease was established.

Mr. Barwell related a case in which there were marked tetanic spasms, and which were completely relieved by the removal of about an inch of a carpet-needle from a spot one inch and a half above the internal malleolus of the tibia of a man who had run the needle into his foot four months previously.

Mr. Butlin said it was almost impossible to discover the value of any particular mode of treatment. He said there were two classes of cases of tetanus—in the one no local spasms were noted in the onset of the disease; in the second this was the case: and he illustrated such by an instance which happened in the practice of the late Mr. Callender; the spasm slowly spread from the leg to the whole body, and finally assumed the typical characters of traumatic tetanus. Perhaps in cases of this kind operation might be successful. He did not concur with Mr. Heath's views of the innocuous nature of mud in a wound.

Mr. Howard Marsh replied that although contrary to Dr. Dickinson's experience, many surgeons had found great benefit in the treatment of tetanus from the use of chloral and morphia. The value of amputation was shown by the fact that cases had recovered after tetanus had well set in, and apparently the good result was due to the amputation. It was reasonable to suppose that the local injury was the site of the manufacture of a virus which was poured into the circulation, very much as strychnia might be, so there was no extravagance in the notion that amputation was of value. He quoted the late Mr. De Morgan to the effect that no case of traumatic tetanus had ever recovered. There was no reason to doubt the good effect of the drug used in the present case.

Living Specimens.

Excision of the Wrist without Removal of the Bases of the Metacarpal Bones, by Mr. Barwell.

Remarkable Case of widespread Osteitis Deformans, by Mr. Howard Marsh.

The meeting then adjourned.

THE PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, April 3.

J. W. Hulke, F.R.S., President, in the Chair.

The Pathology of Diabetes.

The President reminded the members present that it had been decided to devote that evening to the consideration of the morbid relations of diabetes. He thought that the changes in the blood and in the nervous system would be those which most demanded attention, it being specially necessary to determine whether the changes in the latter which have hitherto been found were peculiar to diabetes or not. It was only diabetes mellitus that they were to occupy themselves with. He then invited Dr. Wilks to open the discussion.

Dr. Wilks, after premising that he had not had any intention of taking part in the debate, and therefore had not referred to his own cases, said he should not be able to contribute any new facts. What was wanted was anatomical knowledge; and, further, were the changes that had hitherto been found the consequence or the cause of the disease? All the viscera had at one time or another been asserted to be the starting-point of the disease. He well remembered the celebrated experiments of Claude Bernard on rabbits in reference to the part played by the fourth ventricle; and even quite recently he had seen a pamphlet by Dr. Luys, supporting the view that a lesion of the fourth ventricle was the primary change, and he handed round the drawings with which Dr. Luys supported his views. Others had found changes in the medulla and spinal cord, notably Dr. Ogle, in a paper read some ten years ago before one of their societies, when he described vascular lesions and dilatation of the central canal of the spinal cord. The sympathetic nervous system too would require to be taken into consideration, but it was to be remembered that there was no disease that had ever been described that had not at some time or other been attributed to vasomotor influences. Then, as regarded Brown-Séquard's theory of over-action of the liver, he remarked that many years previously Dr. Wilkinson King had been in the habit of teaching his pupils at Guy's Hospital that the liver was large and fleshy. The pancreas had by some been thought to be the source of the disease, and Lancereaux defended that opinion at the present day. The stomach too was considered by some to play a prominent part in the disease, and various slight changes in it had been described. The state of the kidneys was of peculiar importance, and a matter to him of the greatest interest. He believed they were generally enlarged—an instance of a general physiological law, viz., that increased function led to hypertrophy. A recent writer, Leudet, had said that anæsthesia and atrophy of the skin were common; it would be interesting to know if this had been observed by others. The state of the blood was of great importance. When bleeding formed part of the treatment of the disease, he could remember that the whole surface of the blood was sometimes found to be covered with a milky layer. This question has an additional interest in regard to the possibility of fat embolism. The last points he would touch upon were the duration and mode of death. Speaking from general impressions, he thought that twenty years ago he should have said that the majority of diabetics died slowly from phthisis, whereas, at the present time, his impression was that the majority died rapidly from coma. These were only general impressions, and must therefore not be made too much of. One point which could not, strictly speaking,

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be included in the discussion was: What was the nature of the lung affection in phthisis? Addison always held that it was inflammatory, and had depicted as a typical specimen of phthisis the lung of a diabetic patient.

Dr. RALFE said he would limit his remarks to the question of "acetonæmia." He distinguished between two forms of diabetic coma; to the one, and by far the rarer, the acute form, he thought the term acetonæmia ought alone to be applied. After describing the characteristic symptoms of this condition, he drew a parallel between it and the symptoms exhibited in acute yellow atrophy, phosphorus-poisoning, and poisoning by the injection of acids into the blood. He doubted whether acetone was ever found free in the blood, though there was no doubt of its existence in diabetic urine. He believed that it was present, however, in the blood contained in some other body that yielded it easily on decomposition. This body some had supposed was ethyl diacetate, but more recent investigation had shown that it was more likely to be aceto-acetic acid. If this was ultimately proved, it might offer an explanation—(1) of the highly acid condition of urine that was associated with diabetes; (2) the lactescent condition of blood, since acetic acid will give a milky appearance when agitated with a dilute and slightly alkaline mixture of fatty substances heated to 100° Fahr.; (3) it would explain the intense fatty degeneration so noticeable in these cases of acute diabetic coma, since it is well known that injection of acids into the blood leads to the increase of fatty matter in the blood, and of fatty infiltration in the tissues and organs. Dr. Ralfe pointed out the parallelism between acetonæmia, and acute yellow atrophy and phosphorus-poisoning, and alluded to the statement made by Professor Gamgee in his work on Animal Chemistry, that, in a case of acute diabetic coma, "the liver was found, after death, to be the seat of intense fatty infiltration, similar to that observed in cases of poisoning by phosphorus." Dr. Ralfe thought there was no ground for doubting the presence of aceto-acetic acid—given glucose in the blood,—since it was one of the many products of alcoholic fermentation that might be formed. In conclusion, he felt warranted in regarding the acute forms of diabetic coma as due to a toxic agent, that this agent was of an acid nature, that it was formed from the alcoholic fermentation of the glucose in the blood, that it was usually present in all cases of diabetes, and gave the highly acid reaction to the urine so characteristic of the disease; that sometimes it was produced to an excessive extent, or its excretion was interfered with, in which case it gave rise to symptoms closely parallel with those observed in acute yellow atrophy, phosphorus-poisoning, or poisoning with bile-acids, tartaric or oxalic acids. Dr. Ralfe thought that, if it could be shown that acute diabetic coma depended on a toxic condition, and was not due to any sudden nervous lesion, then the treatment should be directed towards altering the percentage relationship of the blood to the toxic agent; this might probably be best effected by transfusion, either with blood, or even simple water, or a dilute saline solution, whilst endeavours should be made to rouse the patient, and promote full action of the skin, which, he thought, could be attained by the use of the cold pack, etc. Dr. Ralfe demonstrated the presence of acetone in diabetic urine by ferric chloride and iodoform reactions, and explained a process for the quantitative estimation of acetone from the amount of iodoform yielded.

Dr. FINLAY showed microscopic sections of the lungs, kidney, liver, brain, and spinal cord, from a case of diabetes which he had under his care a few months ago in the Middlesex Hospital. The patient died comatose on the second day after admission to the Hospital. The history of diabetes was of only a month's duration; the urine contained 5 per cent. of sugar. On the morning of the second day after admission, he complained of difficulty of breathing, and became restless and somewhat delirious. When seen at 2 p.m., his breathing was laboured and stridulous, and he was in a semi-unconscious state, with a dry and brown tongue, but no sour smell in the breath. Percussion resonance over the chest was normal, and the breath-sounds merely harsh. He sank into a state of profound coma, and died at 7.15 p.m., above ten hours after the graver symptoms set in. At the post-mortem examination made by Dr. Fowler, the muscles were found of a dark red colour, the mesenteric glands slightly enlarged, the lungs engorged and friable, and the pancreas the seat of a small hæmorrhage. The liver appeared normal, weighing fifty-two ounces and three-quarters; the spleen small and pale; the kidneys normal, with the exception of slightly adherent capsules. The pia mater was injected, the brain substance firm, and appearing in every respect normal to the naked eye, as were also the cord and its membranes. The blood, shaken up with ether, yielded no fat, and appeared perfectly normal microscopically examined. Under the microscope the lung-tissue was found to be normal; no fat embolisms were present. Although there were a few rounded bodies which stained black with osmic acid, these were in the alveoli, not in the vessels, and were probably fattily degenerated epithelium cells. The kidney showed granular degeneration of the secreting epithelium, and some hyaline casts in the tubules. The liver-cells were granular and ill defined. No dilatation of capillaries was observed. As to the nervous centres, sections from the pons and medulla showed, to some extent, the cribriform appearance described by Dr. Dickinson, but the excavations were small, and not common to all the arteries. Some of these were taken to be the result of the manipulation of the sections in cutting and mounting; and, as to the rest, it might fairly be questioned whether they were not more likely to be the consequence than the cause of the disease. There was nothing noteworthy in the condition of the cord, the central canal appearing natural. In the record of the case there seemed nothing to suggest an essential pathology, and he thought it would be unsafe to do so until we had a much larger store of post-mortem records, with microscopic examinations of all the viscera which might be concerned in the causation of the disease, particularly of the nervous system; as well as examinations of the same parts from cases of other disease for purposes of comparison. In connexion with the general subject, with the aid of his colleague Dr. Coupland, he had searched the post-mortem records of the Middlesex Hospital over a period of thirty-two years, and had found particulars of twenty cases of diabetes, of which a tabular statement and summary were given. In the course of this, reference was made to the interesting fact that a well-marked case of lipæmia was observed in 1859 by the late Dr. Charles T. Coote, Assistant-Physician to the Middlesex Hospital, who made it the basis of an elaborate paper, reviewing the whole subject, in the *Lancet*, September, 1860.

Dr. HALE WHITE criticised in detail that theory for the pathology of diabetes which refers it to the existence of vacuolation in the nervous centres. In the first place, he stated that, in twenty-three post-mortem examinations made at Guy's Hospital on diabetic subjects, no changes in the nervous centres were in any case detected. He exhibited microscopical sections of the nervous centres from some of the cases, together with the entire brain from one of the cases, in which it was evident that the only appearance that could in any way be called vacuolation was due to the falling out of vessels from their spaces. Sections of a healthy brain, showing this false vacuolation, were shown. Specimens of the true vacuolated or "Gruyère cheese" condition were brought forward, and in all of them it was pointed out that, in the subjects from which they were taken, there was no sugar in the urine. For these two reasons it was inferred that the pathology of diabetes was not to be found in any such condition of brain, which, if it did cause diabetes, would surely sometimes affect other centres, such as those of the seventh or ninth nerves; but affections of these centres were unknown complications of diabetes. Dr. Hale White next treated of the relation of glycosuria to insanity, and gave tables of the condition of the urine in 124 cases of insanity which he had examined at Bethlem Hospital with Dr. Savage, and at the Surrey County Asylum with Dr. Paddison. Out of these cases, only 2·56 per cent. contained sugar. Dr. Dickinson had given the percentage as 16·65, and it was suggested that possibly this difference was due to the presence of abundant uric acid, which would cause reduction of the copper test. Dr. Hale White stated, in conclusion, that he was not able to confirm the statement that children with tubercular meningitis are liable to glycosuria. For these reasons, he was not disposed to agree with any theory that had been put forward to connect the disease with described morbid conditions of brain.

Dr. STEPHEN MACKENZIE divided his remarks into three groups:—1. An analysis of a number of fatal cases; 2. The naked-eye appearances in the body after death; and 3. The microscopic appearances in the cases examined.

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1. *Analysis of all the Fatal Cases in the London Hospital during Eight Years and a Half.*

Death by coma; no disease found after death		7
Death by coma; no post-mortem	No signs of pulmonary or other visceral changes during life... ...	3
	With signs of pulmonary disease during life	1
Death by coma	Recent pneumonia or phthisis ...	4
	Old pneumonia or phthisis	4
		—19
Cerebral hæmorrhage		1
Cerebral meningitis, coma...		1
Cerebral tumour		1
Spinal cord disease, phthisis		1
Stricture of urethra, suppurative nephritis, coma ...		1
Scrofulous nephritis and phthisis...		1
Pneumonic phthisis		9
Scirrhus of pancreas: sudden collapse		1
Gangrene of foot; death rather sudden...		1
Dermoid ovarian cyst; calcified mesenteric glands (supposed to have helped herself to codeia)		1
		37

Some remarks were then made as to the changes found in relation to cause or effect. The frequency of pulmonary disease was well shown; in twenty out of thirty-seven cases there were pneumonic or phthisical changes. It was pointed out that the phthisical changes were found in two organs only—the lungs and the kidneys—organs which were placed under peculiar circumstances in the disease. The occurrence of coma in association with diabetes was next discussed, it being pointed out that it was the determining cause of death in nineteen of thirty-seven cases, excluding all cases in which an explanation, other than diabetes, would account for its occurrence. It was pointed out that the coma in the cases in which pulmonary disease was present, differed in no essential way from that in pure cases. As regards its production, the various assigned causes were reviewed. In three cases of pure coma, five of coma with pulmonary disease, and ten miscellaneous cases of diabetes, examination of sections stained with osmic acid showed no fat embolisms, and no fat in the bloodvessels. The pink or lakey character of the blood described by some observers was not noticed in these cases; the blood being either natural in appearance, or dark, sometimes thick, sometimes fluid. An acetone odour during life, or after death, had not been observed in any of the cases. He therefore concluded that, whilst fat embolisms and acetonæmia might account for the coma in some cases, they were too inconstant to serve for a general explanation. At the same time, he thought that its sudden onset, peculiar features, and absence of characteristic lesions after death, pointed to some poison developing in the body; if not acetone, possibly something of an allied nature. 2. *Naked-eye Appearances.*—He knew of none pathognomonic, but some were frequent. He had not seen the cribriform condition of the nervous centres described by Dr. Dickinson. The most frequent, besides the emaciation and phthisis, were a shiny, homogeneous condition of the liver and spleen. The kidneys were usually large, and often congested. The pancreas had only been found diseased in two cases; once scirrhous, once cretaceous. 3. *Microscopic Appearances.*—In fourteen cases in which the nervous system was examined, no changes were found. In six cases, slight peri-vascular and peri-ganglionic dilatations were found, but in none to the degree described by Dr. Dickinson. He was doubtful how far they were due to the mode of preservation. Hyaline degeneration of some of the vessels was present in some cases, and miliary aneurisms of the retina in one. In the lungs, the changes were chiefly those of necrotic pneumonia. In one case only, giant-cells were found; four cases had been examined for bacilli, but none found in any of them. In six cases, intra-alveolar hæmorrhagic extravasations were found; these were all cases of coma, and their occurrence was, no doubt, due to this cause. In the kidney, the most remarkable changes were a hyaline degeneration of the intima of the small arteries, and a peculiar skeleton-like condition of the epithelium of the collecting tubes. In the spleen, a hyaline degeneration of the arteries was found in all the cases (five) examined. The liver showed signs of fatty degeneration in only one of eleven examined; a point of importance in connexion with fatty embolism. In the other cases there was atrophy of the liver-cells. The pancreas was examined in four cases, but nothing of importance was found. The heart showed signs of wasting and degeneration. The morbid anatomy of these cases, therefore, was of a barren character, throwing no light on the pathology of diabetes. The changes found must be regarded rather as the consequences of diabetes than as explaining its occurrence.

Dr. Goodhart handed round a small bottle, sent by Dr. Hamilton, containing some lipæmic blood taken from the heart of a patient who died of diabetic coma.

At the suggestion of the President it was unanimously agreed to adjourn the discussion until Tuesday, May 1.

Microscopical specimens of the viscera in diabetes were exhibited by Dr. Stephen Mackenzie, Dr. Finlay, Dr. Hale White, and Dr. Victor Horsley.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

Wednesday, March 7.

G. Buchanan, M.D., F.R.S., President, in the Chair.

The Delhi or Oriental Sore.

Surgeon-General Murray read a paper on this subject. He stated that this disease had attracted little attention in India previous to the Mutiny in 1857-58, at which time the palace and city of Delhi were occupied by European and native troops. The military cantonment had previously been situated two miles outside the city walls, and this disease was scarcely known amongst troops; but cases were occasionally heard of there, and at Mooltan and Lahore. After 1858 it was brought prominently to notice, as the troops in garrison at Delhi were attacked with great severity —from 40 to 70 per cent. were admitted into hospital suffering from the sore, whilst nearly half the regiments had slight sores which were treated out of hospital. The disease was very tedious and troublesome, though only in two or three instances fatal. When severe, or situated on a joint, it rendered the men unfit for duty; and when on the face, it was very disgusting and disfiguring. This was illustrated by eighteen photographs of the disease situated in various parts of the body. In 1865 the Government of India appointed a Commission to investigate the disease, to trace out its origin, and to point out a remedy. Dr. Murray was President of this Commission, and he thus had an opportunity of accurate observation of the disease. It appears on exposed parts of the body—at first as a small pimple, like an irritated mosquito-bite, and remains in this state for several days or weeks, sometimes even for months. It then slowly increases, and a thin fluid escapes from the top, which dries and forms a circular scab, gradually increasing in size and thickness. When this scab is removed, an indolent ulcer is exposed, with undermined edges, and lobulated granulations in the centre—in healthy subjects like raspberries, but paler and more blue in cachectic cases. These ulcers, when very broad, show signs of cicatrising from the centre; in all there remains a depressed cicatrix after healing. This is the natural course of the disease, which may last from six months to two or more years, when uncomplicated with leprosy, secondary syphilis, miasmatic fever, or a cachectic state of the body produced by other diseases or famine. When such diseases exist they are aggravated and rendered more fatal by combination with the one under consideration. The Delhi sore appears identical with the "yaws" of the West Indies, "parangi" of Ceylon, and the "bouton" of the eastern and southern shores of the Mediterranean. At Delhi, Mooltan, and Lahore the disease is endemic, and confined to residents within the city walls. The Commission at Delhi, after patient investigation, formed the opinion that the Delhi sore is a cutaneous disease, of parasitic origin, and that the foul water of the city wells was the habitat of this parasite. The water of all these wells was excessively impure. In some, according to analysis at this time, the water contained from 45·375 to 123·200 grains of organic matter per gallon. The wells were then cleared out, and from one a cartload of bones was extracted. It is probable they had not been cleared out for centuries. The water from them was only used for washing or bathing purposes. The wells in all the

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ancient cities of India are very impure, and if a germ or parasite in foul water is the cause of the disease, this would account for its presence in Mooltan, Lahore, etc., whilst the impure water in some of the tanks in Ceylon would furnish its habitat in that country. This germ or parasite finds entrance to the body, during bathing or washing, through an opening in the cuticle caused by any abrasion of the skin, and the most frequent channel is probably the surface of an irritated mosquito-bite, as the ordinary situation of the sores is on an exposed part of the person, as the face, hands, and arms, while the hairy scalp escapes. It was remarked that nearly all the dogs in Delhi suffered from this disease in the nose, whilst the body, which is covered with hair, and thus protected from mosquitoes, escapes. The germ, once introduced, developes in the cutis vera, exciting inflammation in the surrounding part, and the sore results. Attempts were made to detect the germ microscopically, but in vain. Since then, Dr. Fleming and others have supposed they have discovered it, but as Drs. Lewis and Cunningham, after careful examination, failed to see it, implicit confidence cannot be placed in less experienced observers. Medical men differ in opinion regarding the contagious nature of the disease. To determine this point six natives were inoculated from a dry crust, but no disease followed. They were then inoculated from a fresh sore, and twenty-three out of twenty-four punctures showed irritation like that from vaccination on the third day, which gradually extended till the sixth and tenth day, when remedies were applied to check the disease in four men, leaving it to take its course in the other two cases. Photographs of these cases show their similarity to the ordinary Delhi sore. The treatment recommended by the Commission was to avoid using impure water, or, if that were impossible, to boil the water before using it, and to have all wells cleared out every year. The local treatment of the sore is directed to destroy the vitality of the germ by the application of the actual cautery in the earliest stage, and potential cautery —potassa fusa or nitric acid—and carbolic acid or mercury in more advanced stages, following the destruction of the specific disease by simple dressing, and washing with diluted carbolic acid.

In the discussion which followed, the President, Sir Joseph Fayrer, Surgeon-General Manifold, Dr. Scriven, Dr. Ewart, and Mr. Long took part.

THE RECTORSHIP OF EDINBURGH UNIVERSITY.—Lord Rosebery, the present Lord Rector of Edinburgh University, whose term of office expires in November next, has, it is said, intimated his desire that he should not again be nominated. The name of the Right Hon. G. O. Trevelyan, M.P., Chief Secretary for Ireland, is freely mentioned as the candidate whom the Liberal students will select. In the face of the opposition which has been threatened, the party by whom the Duke of Albany was looked to as a suitable non-political Lord Rector, in whose election all sections might have concurred, have resolved not to allow His Royal Highness's name to be put in nomination.

ACTION FOR MALPRAXIS AGAINST AN ESTATE.—In New Hampshire, not long since, a suit was brought by a patient against the administrators of a deceased surgeon for injuries alleged to have been inflicted by his unskilful treatment. The suit was dismissed for technical reasons, which will be of interest, as similar cases may often arise. The Court held that as the action was for personal injuries it could not be maintained after the death of the surgeon. It is the theory of the law that an action for injury done to property is not affected by the death of the alleged wrong-doer, but can be brought against his legal representatives; but that an injury to the person is of an entirely different character, and does not survive the death of the surgeon who is charged with inflicting the injury. This may seem rather a narrow rule, and it may not be followed in all the States; but it has in it the basis of justice, as there would seem to be little chance of defending such a suit when the most important witness as to the alleged malpractice—the surgeon himself—is dead and gone. The condition of the patient might be the result of other causes besides the unskilful treatment of the surgeon, but it would be difficult to show such facts after the death of the only person fully conversant with the case.—*New York Med. Journal*, March 24.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology, at a meeting of the Board of Examiners on the 5th inst., and when eligible will be admitted to the pass examination, viz.:—

Benson, Matthew, student of the Manchester School.
Bindloss, C. Frederick, of St. Bartholomew's Hospital.
Campion, G. Coring, of St. Bartholomew's Hospital.
Corbin, E. B. St. Clair, of University College Hospital.
Davis, A. Holdsworth, of St. Bartholomew's Hospital.
Gregory, Alfred J., of the London Hospital.
Gregory, E. Thomas, of Charing-cross Hospital.
Gruchy, C. William de, of St. Thomas's Hospital.
Hall, St. Strange, of the Manchester School.
Hardy, A. Edward, of Charing-cross Hospital.
Iddon, W. Henry, of the Manchester School.
Jacomb-Hood, C. John, of King's College Hospital.
Langton, C. Baring T., of the Manchester School.
Melland, Brian, of the Manchester School.
Merrall, Harry, of the Manchester School.
Pisani, L. John, of Charing-cross Hospital.
Pollard, G. Frederick, of Guy's Hospital.
Raw, W. E. Michael, of the London Hospital.
Rigby, J. William, of the Manchester School.
Roper, H. Hennaway, of Guy's Hospital.
Smith, J. Anderson, of St. Bartholomew's Hospital.
Staddon, W. Joseph, of St. Thomas's Hospital.
Swyer, Robert, of the London Hospital.
Tattersall, C. Herman, of the Manchester School.
Washbourn, J. Wychenford, of Guy's Hospital.

Three candidates were referred. The following gentlemen passed on the 9th inst., viz.:—

Baker, George H., student of Charing-cross Hospital.
Barrett, W. Peard, of University College Hospital.
Collingwood, F. William, of the London Hospital.
Gaston, H. Percival, of Charing-cross Hospital.
Gow, W. John, of St. Bartholomew's Hospital.
Harris, C. Campbell, of St. Bartholomew's Hospital.
Holyoake, Hubert, of the London Hospital.
Jones, John A., of the London Hospital.
Jowers, R. Francis, of St. Bartholomew's Hospital.
McIlroy, J. Black, of the Westminster Hospital.
O'Meara, F. A. Thomas, of King's College Hospital.
Pedler, W. Frederick, of St. Bartholomew's Hospital.
Stedman, F. Osmund, of Charing-cross Hospital.
Totsuka, Kanka, of St. Thomas's Hospital.
Travers, E. A. Otho, of the London Hospital.
Varley, George, of St. George's Hospital.
Wheatley, James, of King's College Hospital.
Young, C. W. Forrest, of St. Bartholomew's Hospital.

Five candidates were referred. The following gentlemen passed on the 10th inst., viz.:—

Achard, Alexander L., student of St. Thomas's Hospital.
Bright, Eustace F., of University College Hospital.
Burrell, A. William, of the London Hospital.
Carless, Albert, of King's College Hospital.
Colclough, J. Arthur, of Charing-cross Hospital.
Combes, Reginald H., of St. Bartholomew's Hospital.
Cory, G. Chamberlyn, of Westminster Hospital.
Cropley, Henry, of the London Hospital.
Davidson, Harold, of St. Bartholomew's Hospital.
Fooks, Henry, of Charing-cross Hospital.
Green, C. R. Mortimer, of the London Hospital.
Hardwick, Arthur, of Westminster Hospital.
Heffernan, W. Hilton, of St. Thomas's Hospital.
Jervis, Arthur, of St. George's Hospital.
Johnson, Raymond, of University College Hospital.
Lever, Frederick, of Guy's Hospital.
Panton, J. Edward, of St. Bartholomew's Hospital.
Skill, J. Maurice, of St. George's Hospital.
Smith, F. John, of the London Hospital.
Soutter, James, of St. Bartholomew's Hospital.
Spencer, W. George, of St. Bartholomew's Hospital.
Wacher, Sydney, of Guy's Hospital.

Two candidates were referred. The following gentlemen passed on the 11th inst., viz.:—

Barber, F. Samuel, student of St. Bartholomew's Hospital.
Bradford, J. Rose, of University College Hospital.
Charlesworth, G. Henry, of Charing-cross Hospital.
Ellis, W. McDonogh, of University College Hospital.
Gifford, G. Taylor, of King's College Hospital.
Gubb, A. Samuel, of Westminster Hospital.
Jarvis, John, of St. Thomas's Hospital.
Jones, S. Harold, of St. Thomas's Hospital.
Lewis P. King, of Charing-cross Hospital.
Morgan, F. James, of Westminster Hospital.
Owen, J. Vaughan, of King's College Hospital.
Owen, S. Walshe, of Guy's Hospital.
Permewan, William, of University College Hospital.
Price, A. Edward, of Guy's Hospital.
Raghib, Edmund, of Charing-cross Hospital.
Rayner, H. Edward, of the London Hospital.
Rolleston, Humphry Davy, of St. Bartholomew's Hospital.
Smith, G. Francis, of St. George's Hospital.
Wright, F. Marsh, of St. Bartholomew's Hospital.

Five candidates were referred for three months.

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APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 5:—

Dumbleton, Charles Eardley, 4, Felbrig-terrace, Ealing.
Fletcher, William John Harvey, Church-street, Uttoxeter.
Groom, Harry, 12, North Brink, Wisbech.
Guilding, Lansdown Murray, St. Lawrence, Reading.
Lyster, Arthur Edward, Brentwood, Essex.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Humphreys, Charles Evan, London Hospital.
Roe, Montagu Walter, St. George's Hospital.

At the examination in Arts, held at the Hall of the Society on April 5, 6, and 7, 128 candidates presented themselves, of whom 93 were rejected, and 35 passed and received certificates of proficiency in General Education.

In the First Division.—None.

In the Second Division, in alphabetical order—

W. H. Andrews, T. S. Biggs, F. Boxall, A. Caddy, E. A. Clarke, E. N. H. Davidson, N. M. Davidson, S. B. C. De Butts, H. J. Des Voeux, P. W. Dove, H. D. Duff, T. A. Durrant, C. W. Essex, W. J. Farren, S. D. Graham, T. D. H. Holmes, W. L. Hubbard, W. H. Hughes, C. E. Hutt, J. H. E. Jarvis, H. W. Lewis, D. W. Liebstein, W. H. McKinstry, J. T. B. Miller, H. Nichol, E. C. Palmer, E. M. B. Payne, E. S. St. B. Sladen, W. P. Smart, H. A. Smith, E. Springett, T. Whately, and W. W. Williams.

Passed in Elementary Mechanics only—

B. Walker and A. W. Waller.

BIRTHS.

CHETWOOD.—On March 9, at 10, King-street, Finsbury-square, the wife of William Chetwood, M.R.C.S., of a son.

COLLINS.—On April 6, at 10, Cadogan-place, S.W., the wife of W. M. Collins, M.D., Royal Horse Guards, of a son.

LOVELL.—On April 2, at 58, Wellington-road, St. John's Wood, N.W., the wife of F. Otley Lovell, M.R.C.S., L.R.C.P., of a son.

MCGACHEN.—On April 9, at Brickwell House, Olney, Bucks, the wife of F. William D. McGachen, L.F.P.S., etc., of a son.

MURRAY.—On April 10, at Meadow Side, Putney, the wife of G. Stanley Murray, M.D., of a daughter.

RAHILLY.—On April 4, at the Court Hutton, Somerset, the wife of Surgeon-Major J. R. Rahilly, A.M.D., of a daughter.

TOMLINSON.—On April 4, at 3, Abbot's Heyes, Chester, the wife of Surgeon-Major W. Winslow Tomlinson, A.M.D., of a son.

TURNER.—On March 28, at 244, Milkwood-road, Herne Hill, the wife of W. M. Turner, M.R.C.S., L.S.A., of a son.

MARRIAGES.

BLATHERWICK—HARTRICK.—On April 3, at Glasgow, Charles Blatherwick, M.D., to Sophia Josephine, relict of the late William Hartrick, Esq., Royal Fusiliers.

COCHRAN-WILSON—THOMSON.—On April 5, at Edinburgh, William Patrick Cochran-Wilson, Esq., jun., of Belltrees, Renfrewshire, to Jane Elliot, third surviving daughter of George William Thomson, M.D.

FINCH—KINGSMILL.—On March 29, at Torquay, Thomas, son of Thomas Finch, M.D., of St. Mary Church, to Emily Jane, daughter of Arthur Kingsmill, of Gosford, New South Wales, and niece and adopted daughter of Mrs. Lemon, of Torquay.

GRANGER—DIXON.—On April 7, at Chester, Farington Marsden Granger, L.R.C.P., to Phillis Annie, daughter of the late Thomas Dixon, jun., of Chester, banker.

GREEN—GODDARD.—On April 4, at Paddington, Henry Green, M.R.C.S., to Lilian, eldest daughter of R. Walter Goddard, M.D., of Norfolk-crescent, Hyde-park.

OLIPHANT—HAINES.—On April 5, at Pau, France, William Bruce Oliphant, M.D., to Edith Mary, third daughter of the late Lieut.-Col. E. E. Haines, 92nd Gordon Highlanders.

WEBBER—WASHBOURN.—On March 27, at Gloucester, Walter Frederick Webber, of the Surveyor's Department, General Post Office, to Constance Mary, elder daughter of Thomas Buchanan Washbourn, M.D., J.P.

WILSON—HOARE.—On April 5, at Water Newton, Hunts, Joseph Henry Wilson, M.R.C.S., of Kenninghall, Norfolk, to Constance Mary, fourth daughter of William P. Hoare, F.R.C.S., of Water Newton, Hunts.

WOODHOUSE—CLERIHEW.—On April 5, at Hanover-square, Arthur, son of H. B. Woodhouse, Esq., of Wyndham-place, Bryanston-square, to Elizabeth Pauline, daughter of George Clerihew, M.D., Inspector-General of Hospitals.

WOODRUFF—SHEDDEN.—On April 5, at East Cowes, Isle of Wight, John Winthrop Woodruff, M.R.C.S., L.R.C.P., to Charlotte Louisa Jessie, elder daughter of the late Roscow Cole Shedden, J.P., of Millfield, East Cowes.

DEATHS.

DAVEY, CHARLES HENRY, second son of Richard Staines Davey, M.D., of Walmer, Kent, at Millford, Manitoba, on March 11, aged 18.

PALFREY, JAMES, M.D., of the London Hospital, at 29, Brook-street, Grosvenor-square, W., on April 10, aged 45.

SMITH, HANNAH, wife of Thomas Smith, M.D., at Portland House, Cheltenham, on April 9, aged 73.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

LINCOLN COUNTY HOSPITAL.—House-Surgeon. Salary £100 per annum, with board, lodging, and washing. Candidates must be Members or Licentiates of one of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, and Licentiates of the Apothecaries' Company, or of one of the Royal Colleges of Physicians, or graduates in medicine of one of the Universities of Great Britain or Ireland, and duly registered under the Medical Act, under forty years of age, and unmarried. Testimonials as to qualifications and character to be sent to the Secretary on or before April 23.

LIVERPOOL ROYAL INFIRMARY.—Resident Medical Officer. Salary £100 per annum, with board, lodging, and washing. Candidates' names must be on the Medical Register of Great Britain, and they must possess at least one medical and one surgical diploma, licence, or degree recognised by the Medical Council, and be unmarried. Applications, with testimonials, to be sent to the Chairman of the Committee on or before April 25.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY AND FEVER HOSPITAL.—House-Surgeon. Salary £150 per annum, with residence in the Infirmary, without board. Candidates must be legally registered practitioners, qualified both in surgery and medicine, and unmarried. Applications, with testimonials (prepaid), to be made to the Secretary before May 1.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Church Stretton Union.—The Fourth District is vacant by the death of Dr. J. R. McLintock: area 17,745; population 1698; salary £46 1s. per annum.

Thetford Union.—Mr. E. G. Archer has resigned the Sapiston District: area 2981; population 587; salary £11 10s. per annum.

APPOINTMENTS.

Berwick-upon-Tweed Union.—John Paxton, jun., L.R.C.P. Edin., L.R.C.S. Edin., to the East Northamshire District.

Henley Union.—Egerton C. A. Baines, M.R.C.S. Eng., L.R.C.P. Edin., to the Henley District and the Workhouse.

Malton Union.—William Deeley, L.K. & Q.C.P. Ire., to the Leavening District.

Poolhelí Union.—John E. Jones, B.M. and M.C. Glasg., to the Aberdaron District.

Redruth Union.—Septimus Farmer, M.R.C.S., L.R.C.P., to the Western District.

THE anniversary festival of the Hospital for Sick Children, Great Ormond-street, was held at Willis's Rooms on Wednesday, April 11, the Right Honourable Sir Michael Hicks-Beach, Bart., M.P., being in the chair. There was, as usual, a large assembly of ladies present. Funds were urgently appealed for to enable the Committee to complete the new building, and so extend the usefulness of the institution. During the evening it was announced that £1600 had been collected by the stewards and others interested in the work of the Hospital.

THE LORD RECTORSHIP OF GLASGOW UNIVERSITY.—Mr. Fawcett, M.P., has consented to become a candidate for the Lord Rectorship of Glasgow University. An address has been issued by the Liberal Committee, recommending the right hon. gentleman to the students as one specially qualified to be their Lord Rector, seeing that the Scotch University system is about to undergo Parliamentary revision, in connexion with which his academic experience and Parliamentary reputation would be particularly valuable to them. Mr. Fawcett has further indicated that, if elected, he will deliver an address to the students.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.—At the last meeting, held on March 30, 1883 (Dr. D. Lloyd Roberts, President, in the chair), Mr. Holden, of Preston, submitted to the members a scheme for the formation of a fund for the relief of widows and orphans of medical men in the north-western counties of England. He proposed the formation of a brotherhood which would be alike provident and benevolent,—the funds to be raised by donations and subscriptions of honorary and ordinary members, and from the commuted fees of life members. An entrance fee of one guinea and an annual subscription of two guineas would, he thought, together with the interest arising from the donations of the honorary members, be sufficient to augment the annual income of a widow with children to £50 for herself and £10 for each child. After an animated discussion, it was decided to recommend the appointment of a committee to co-operate with the committee already formed in Preston to carry out the scheme.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, April 7, 1883.

BIRTHS.

Births of Boys, 1490; Girls, 1438; Total, 2928.
Corrected weekly average in the 10 years 1873-82, 2790·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	1008	932	1940
Weekly average of the ten years 1873-82, corrected to increased population ...	939·0	869·7	1808.7
Deaths of people aged 80 and upwards ...	...	...	94

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	5	2	3	8	1	4	1	3
North ...	905947	1	19	5	3	10	1	2	1	...
Central ...	282238	...	6	...	...	3	...	3	2	...
East	692788	...	10	4	5	11	...	3	1	4
South	1265927	...	11	4	9	10	1	1	2	2
Total	3816483	1	51	15	20	42	3	13	7	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·141 in.
Mean temperature	48·6°
Highest point of thermometer	69·1°
Lowest point of thermometer	28·4°
Mean dew-point temperature	40·0°
General direction of wind	Variable.
Whole amount of rain in the week	0·00 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 7, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending April 7.	Deaths Registered during the week ending April 7.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2928	1940	25·6	69·1	28·4	48·8	9·34	0·00	0·00
Brighton	111262	63	52	24·4	64·0	34·6	46·1	7·84	0·00	0·00
Portsmouth ...	131478	94	48	19·0	...	...	...	...	...	...
Norwich	89612	70	44	25·6	...	...	...	...	...	...
Plymouth	74977	54	41	28·5	58·5	32·0	47·6	8·67	0·03	0·08
Bristol	212779	141	84	20·6	61·2	30·4	46·6	8·12	0·00	0·00
Wolverhampton .	77557	60	34	22·9	62·4	27·7	44·6	7·01	0·00	0·00
Birmingham ...	414846	326	194	24·4	...	...	...	...	...	...
Leicester	129483	88	68	27·4	...	...	...	...	...	...
Nottingham ...	199349	173	111	29·1	66·8	24·8	47·1	8·39	0·02	0·05
Derby	85574	62	36	22·0	...	...	...	...	...	...
Birkenhead ...	88700	69	32	18·8	...	...	...	...	...	...
Liverpool	566753	437	352	32·4	61·2	35·4	46·4	8·00	0·03	0·08
Bolton	107862	90	58	25·6	59·0	29·0	44·8	7·12	0·00	0·00
Manchester ...	339252	269	232	35·7	...	...	...	...	...	...
Salford	190465	155	66	18·1	...	...	...	...	...	...
Oldham	119071	92	72	31·6	...	...	...	...	...	...
Blackburn	108460	64	56	26·9	...	...	...	...	...	...
Preston	98564	77	54	28·6	...	...	...	...	...	...
Huddersfield ...	84701	52	47	29·0	...	...	...	...	...	...
Halifax	75591	57	28	19·3	...	...	...	...	...	...
Bradford	204807	119	83	21·1	59·2	33·4	44·9	7·17	0·00	0·00
Leeds	321611	258	154	25·0	61·0	30·0	44·7	7·06	0·00	0·00
Sheffield	295497	237	172	30·4	65·0	28·0	46·0	7·78	0·00	0·00
Hull	176296	146	104	30·8	65·0	28·0	44·3	6·84	0·03	0·08
Sunderland ...	121117	107	48	20·7	59·0	33·0	44·9	7·17	0·05	0·13
Newcastle	149164	104	60	20·9	...	...	...	...	...	...
Cardiff	90033	63	44	25·5	...	...	...	...	...	...
For 28 towns ...	8620975	6455	4339	26·1	69·1	24·8	45·9	7·72	0·01	0·03
Edinburgh	235946	143	119	26·3	60·0	33·3	46·2	7·89	0·34	0·86
Glasgow	515589	370	326	33·0	58·0	31·0	45·9	7·72	0·20	0·51
Dublin	349385	205	270	40·3	60·2	28·5	44·8	7·12	0·10	0·25

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·14 in. The lowest reading was 29·87 in. on Monday afternoon, and the highest 30·48 in. on Saturday morning.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

"AUTHOR WANTED."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Dr. Th. M. Dolan, of Halifax, Yorkshire, is the author of the essay referred to in my letter to you of the 2nd inst. with the above heading. He will in due course receive the prise from Valencia.

I am, &c., P. M. BRAIDWOOD.

THE ANTISEPTIC TREATMENT OF TYPHOID FEVER.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Could you inform me if Rothe's so-called antiseptic treatment of typhoid has been tried in England, and with what results? Said treatment consists of a combination of carbolic acid with iodine.

Florence, April 7. I am, &c., Z.

A Generous Gift.—Mr. George Henry Strutt, of Belper, has given £1000 towards the Derby Children's Hospital endowment fund, and has promised to contribute £50 per annum for the next three years.

Mortality, Cyprus.—A correspondent writes to a contemporary from Cyprus, "that nearly all the English medical officers sent there have either died or have left the island invalided, Greeks and Arabs, who are proof against fever, taking their places. It is true that the death-rate is comparatively low, but the figures are got at in this way: the soldiers (about twenty times as many as all the other English in the island) are quartered on the slopes of Mount Olympus, which no doubt is healthy enough, but the civilians have to live where duty takes them, in the towns and on low ground, and there among them the rate of sickness and death is very high. When, however, they are lumped with the soldiery, a very low death-rate is obtained."

Building on Unwholesome Refuse.—A firm of builders has been fined £5 and costs at Birkenhead for having erected some houses on a site on which unwholesome refuse had been deposited.

A Non-professional "Medical Alliance."—The fifth annual conference of the Friendly Societies' Medical Alliance has been held at Exeter. Representatives from various important towns were present. The Alliance consists of delegates from various associations. These associations are formed by the members of all orders of friendly societies. Formerly the members of friendly societies had but the partial services of medical men in the time of sickness, but by amalgamating the various societies in large towns the undivided attention of medical men who supplied them with drugs was secured, and they now were able to obtain the best attendance and the best medicines. This movement, it was stated, had incurred the greatest hostility from the profession, but friendly societies found it to be a necessity for their own protection. The associations affiliated to the Alliance numbered 22,684 members, and their contributions last year for medical purposes amounted to £23,000. A special committee, appointed to consider the question of an agency and register, made a report, and it was decided that both should be maintained, the agency being the means of securing eligible medical officers, and the register recording the experience which the associations possessed of various medical men, as a safeguard against, in future, being imposed upon by unsuitable persons.

A Street Fatality: The Orange-peel Nuisance.—A fatality having recently occurred in the City from persons throwing orange-peel about the streets, it has been officially suggested that the nuisance might be considerably reduced by the street orderly boys being instructed to remove orange-peel—a practical proposal, which is to be acted upon.

No Main Sewer.—The Governors of the Brewers' Company have called the attention of the Clerkenwell Vestry to the fact that Goswell-road is without a main sewer, and requests the Vestry to take measures as soon as possible, failing which the Company would feel compelled, in the interests of their tenants, and also in a general sanitary point of view, to apply to a higher authority on the matter.

Cremation Items.—The practice of cremation is held in especial honour and is rapidly increasing in the Japanese Empire, more particularly among the Maritan sect of Buddhists, and something like nine thousand dead human bodies are treated in this way every year in Japan. The method adopted is simple; no unpleasant odour is emitted either during or after the operation, and this is attributed to the high chimney. The chief place of cremation is described as looking somewhat like a factory built of clay and cement, and surmounted by a very tall chimney. But th is cremation-house is half hidden in a dense grove of bushy bamboos, among which may be seen an abundance of red camellias, whose bright colours harmonise little with the Western idea of funeral associations. The bodies of the general public are burnt in a large chamber, and the charge is one yen (about 3s. 6d.) each, but the families who wish to have a private cremation have to pay five yens. At the crematory at Lemoyne, Washington, no fewer than seventeen human bodies have lately been cremated. At Gotha, which contains the chief cremation cemetery in Europe, the corpses of two Hamburg women were burned a few days since.

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Worthy of Notice.—The Registrar-General, in his report for the week ending the 31st ult., points out that no fatal case of small-pox took place in London during the week; the corrected average number in the corresponding week of the last ten years being twenty-four.

A Proposed Reversal.—The discussion by the Salford Board of Guardians of the motion (which we lately noticed in these columns) to the effect—"That in the opinion of the Board it is necessary to reverse the inefficient and spendthrift policy pursued in organising the union infirmary," resulted in the motion being negatived by nine votes to six.

Celestial Doctors.—By the Overland China Mail we learn that Li-Fu-jên, wife of His Excellency the ex-Viceroy of Chihli, is again seriously ill. Miss [Dr. Howard arrived from Peking on the evening of the 5th inst. (January), having been sent for in haste by Li.

Supervision of House Drains.—The Wandsworth District Board of Works has resolved—"That application be made to the Metropolitan Board of Works to insert in the next amendment Bill which they may introduce into Parliament a provision requiring builders to lay house-drains under the inspection, supervision, and control of the surveyor of the district board; in default, that builders should be bound under a penalty to open drains for inspection at their own cost: and also a provision that no new house should be occupied until a certificate has been given by the surveyor of the Board that the drainage works thereto are satisfactorily completed: and that a copy of this resolution be sent to the central authority, and to each of the vestries and district boards of the metropolis."

Adulteration in Spain.—This practice has not escaped attention by the authorities even in Spain. One Spanish magistrate at least may lay claim to originality in dealing with sophisticated article. "All articles," runs a proclamation, "in the shape of wines, groceries, and provisions, which upon examination and analysis are proved to be injurious to health, will be confiscated forthwith and distributed to the different charitable institutions."

An Experiment.—A motion has been discussed by the Lambeth Board of Guardians, that lady visitors be permitted to provide patients in the infirmary with some light employment to amuse them, under such conditions as the Board might prescribe, and at first only in one ward as an experiment, and that all resolutions to the contrary be rescinded. The Chairman observed that the medical superintendent of the infirmary was strongly opposed to this being done, but it was ultimately decided to try the experiment for three months.

Milk from Diseased Cows.—Some German medical journals have announced that there is danger in using milk furnished by diseased cows. M. Leurat, however, in an account of an outbreak of foot-and-mouth disease in the Canton Vaud, Switzerland, states that experiments made, and experience acquired, while the malady lasted in the neighbourhood of Lausanne, and amongst the population of that city, prove "while the milk preserves its physical characters, and so long as it may boil without clotting, it is not hurtful to health. If, however, the teat alters the secretion of milk, it is easy to conceive that in this case, as happens also in some lesions of the teat which are not the effect of this disease, the milk then drawn is improper for nourishment."

A Medical Examiner and a Student.—Of an examiner in medicine it is related that, having failed to elicit satisfactory replies from a student regarding the muscular arrangement of the arm and leg, he somewhat brusquely said, "Ah! perhaps, sir, you could tell me the names of the muscles I should put in action were I to strike you!" "Certainly, sir," replied the candidate; "you would put in motion the flexors and extensors of my arms, for I should use them to knock you down!" History is silent concerning the fate of this particular student.

"The Ocean Cure."—By advice of their physicians, people now take "the ocean cure,"—that is, a trip to America and back, without stopping the States more than a day or two, as that would destroy the good effect. Moreover, the medical men say that this ocean travelling ought to be continued for some months; and some of the companies, *e.g.*, the Peninsular and Oriental, seem to be lowering their fares to meet the doctors' views.

Contravening the Sunday Closing Act.—Several persons have been ordered by the Cardiff police magistrates to pay fines ranging from £5 to 40s. for selling intoxicating liquors at private houses on Sunday, the 11th ult. This evasion of the law was discovered by detectives in private clothes.

Doctors in Russia.—It is stated that in the whole of Russia there are not more than about 14,000 doctors properly so called.

Juvenile Tobacco-Smoking, America.—An investigation respecting the use of tobacco by boys of Boston, United States, in schools of different grade has led to the conclusion that the majority of boys of eleven years of age and upwards are smokers. Cigarette-smoking is greatly on the increase also among school-girls.

COMMUNICATIONS have been received from—

Dr. Wahltuch, Manchester; The Registrar of the Apothecaries' Hall, London; Mr. James Dixon, Dorking; Dr. A. G. Blomfield, Exeter; Mr. J. Chatto, London; The Honorary Secretary of the Medical Society of London; The Honorary Secretary of the Pathological Society of London; Dr. W. Alexander, Liverpool; The Secretary of the Statistical Society, London; Dr. P. M. Braidwood, Birkenhead; The Registrar-General for Scotland, Edinburgh; Dr. A. T. Thompson, Glasgow; Dr. Wilson, Florence; Mr. George Meadows, Hastings; Mr. Shirley Murphy, London; The Secretary of the Royal Institution of Great Britain, London; Mr. J. Heckscher, London; Dr. Wolfe, Glasgow; The Secretary of the Naval Medical Supplemental Fund, Admiralty.

BOOKS, ETC., RECEIVED—

A Letter of Junius Secundus to the British Public on a Question of Education—Reports, etc., of the Pauper Lunatic Asylum for the County of Northumberland for 1882—Venereal Diseases, by Berkeley Hill and Arthur Cooper—Transactions of the National Association for the Promotion of Social Science: Nottingham Meeting, 1882—Physiology, by M. Foster, M.A., M.D., F.R.S.—Annual Report of the Infirmary, Newcastle-upon-Tyne—Transfusion, by Charles E. Jennings, L.R.C.P. Lond.—Elementary Physiology, by D. M'Alpine, F.C.S.—Mechanical Exercise a Means of Cure—Das Oson, von Dr. Edward Stabel—Surgical Diagnosis, by Christopher Heath, F.R.C.S.—College-Bred Men, etc., by Charles McIntire, jun., M.D., of Easton, Pennsylvania.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Centralblatt Therapie—Australian Medical Gazette—Revista de Medicina—Popular Science News and Boston Journal of Chemistry—Il Propugnatore della Salute—Boston Home Journal—An Ephemeris of Materia Medica, etc.—Journal of Anatomy and Physiology—Medical Register—Italian Times, April 7—The Physician and Surgeon—New York Medical Journal—Canadian Practitioner.

APPOINTMENTS FOR THE WEEK.

April 14. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Mr. A. Geikie, "On Geographical Evolution."

16. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Medical Society of London, 8½ p.m. Dr. Isambard Owen (for Dr. Baddaloni, of Nocera, Italy), "On Permanganate of Potash and Viper-Poison." Dr. Robert Lee, "On the Relation of Progressive Spinal Deformity and Fragility of Bones to Insanity; case of a Man, aged forty." Mr. Hugh Smith will show a case of Foreign Body in the Pterygoid.

17. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

Statistical Society (28, Jermyn-street, S.W.), 7¾ p.m. Mr. Noel A. Humphreys, "On the Recent Decline in the English Death-rate and its Effect upon the Duration of Life."

Pathological Society, 8½ p.m. Dr. Wilks (for Dr. Handfield Jones)—Occlusion of Vessels by Oil. Mr. Horsley—Adeno-Sarcoma of Testicle and Abdominal Viscera. Mr. Davies-Colley—Sarcomatous Ulcer of Back. Dr. F. Taylor—Sarcomatous Ulcer of Back. Mr. F. Eve—Hypertrophy of Limb. Mr. Morgan—Multiple Growths in the Bladder. Dr. Curnow—Hydatid Cyst in Lung; Ulcerated Intestines. Dr. Percy Kidd—Disseminated Growths in the Liver. Card Specimens: Mr. Lediard—Spindle-cell Sarcoma; Dry Caries. Mr. Watson Cheyne—Tubercle-Bacilli. Dr. Francis Tayler—Intestinal Obstruction. Dr. Abercrombie—Atresia of Right Ventricle of Heart.

18. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

19. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Dr. Waldstein, "On the Art of Pheidias."

20. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Royal Institution (Council Meeting, 3 p.m.), 9 p.m. Prof. Balfour, "The Island of Socotra."

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THIRTY-FOURTH SESSION OF THE
GENERAL MEDICAL COUNCIL.

HELD AT THEIR HOUSE, OXFORD-STREET, W.

THURSDAY, APRIL 19.

THE members of the General Medical Council assembled in the Council Hall, Oxford-street, W., for the dispatch of business at two o'clock this day.

The PRESIDENT (Dr. Acland) commenced the proceedings by the delivery of the following address:—

Besides the ordinary duties of the Council, three special subjects demand your attention at this its thirty-fourth meeting. It is not necessary that any one of these should long detain you. Since it was not desirable to defer their consideration till a later period of the year, I have thought it well to arrange the present meeting so that it might be easily concluded before the summer session begins in the several medical schools.

The three subjects are as follow:—

1. Alleged or proved misconduct on the part of certain practitioners, which has been found to demand your judgment under Section 29 of the Medical Act.

2. The Report of the Committee on Unqualified Assistants.

3. The Report on Professional Examinations, which you directed last year to be forwarded to the medical schools.

The cases of alleged or proved misconduct of practitioners, which has been found to demand your judgment, are, I regret to say, five in number. They are not alike.

The first is the case of Mr. Prosser, M.R.C.S. Eng., L.S.A., against whom the President and Fellows of the King and Queen's College of Physicians in Ireland have made the charge that, should certain facts be proved to be as stated by Mr. O'Leary, L.K.Q.C.P. Ireland (who had been committed for manslaughter on a charge wherein Mr. Prosser had given evidence in June, 1880), then the conduct of Mr. Prosser, socially and professionally, deserves to be termed "infamous."

The Branch Council for England, to whom the case was referred on July 6 of last year, acting under Clauses 1 to 5 of Chapter XIV. of the Bye-laws of the Council, have come to the conclusion that there are no grounds for finding Mr. Prosser guilty of infamous conduct in a professional respect. The Branch Council will accordingly lay before the Council the evidence of the case, together with the opinion of the solicitor to the Council, and their own resolution thereupon.

The second case is one of a different character, and bears upon a subject of wider significance than that of a charge against an individual. This will hereafter come before you in another shape. It is that of Mr. Thomas Gray, M.R.C.S. Eng., and L.S.A., who, having been charged by the Medical Alliance Association with systematically giving false certificates of the cause of death in cases where he had never seen the deceased persons in their illness, was convicted at the Thames Police-court in the single case of a false certificate as to the death of Minnie Lucy Wadsworth. No further evidence can be obtained than that bearing on this one instance, and the case, therefore, against Mr. Gray rests on this single conviction.

The Council will be called upon to decide whether on that conviction they will remove the name of Mr. Gray from the Register, under Section 29 of the Medical Act. He has been summoned to appear before you to-morrow.

The third case is that of Mr. Hoar, M.R.C.S., who, having been co-respondent in a suit tried before the Divorce Court, was found guilty of adultery, and damages were assessed at £5500. The co-respondent was in the relation of family medical attendant to the respondent and her husband. This circumstance separates it from the cases in which no such professional relation existed, and which, therefore, are only amenable to the ordinary civil actions at law.

Mr. Hoar has been summoned, under Clause 4, Section 14 of the Bye-laws, to appear before the Council to-morrow at two o'clock.

Fourthly, Mr. Arthur Augustus Sadgrove has been summoned to appear to-morrow before the Council on account of a conviction before the Wallingford magistrates, and in respect of an accusation made by the Faculty of Physicians and Surgeons of Glasgow, to the effect that he had claimed diplomas which he was not entitled to use, and in respect of other facts which will be laid before the Council in a report from the Branch Council for England.

It will be for the Council to decide whether the facts adduced bring Mr. Sadgrove within the scope of the 29th Section of the Medical Act, and if so, whether the Council will see fit to remove Mr. Sadgrove's name from the Register.

The fifth case, that of Mr. Dry, is another which relates to the signing of false death-certificates. Mr. Dry has been also summoned to appear.

It has to be here noted, in respect of the judicial duties of the Council, that a practitioner, whose name has been erased from the Register, under Section 29 of the Medical Act, has presented a petition by which he seeks restitution to the Register. Up to the present time this power has been exercised by the Council in four out of the thirty-seven cases in which names have been removed from the Register for criminal offences or professional misconduct. Some doubt was, at your last meeting, expressed as to whether it is within the terms of the Act to restore a name so removed. Counsel's opinion, that the power to restore does exist, will be laid before you. It will be for the Council to consider whether it sees fit, on this occasion, to exercise this power, as it has done in the before-mentioned four cases.

I have been led thus briefly to sum up these cases, partly because, in a Bill now before Parliament, changes are proposed in the power and in the mode of procedure in respect of the judicial duties of the Council. The changes are, in principle, these two:—

1. It is made certain in the Bill that the Council may remove from the Register for a fixed period the name of a practitioner, whom it does not consider to deserve the extreme punishment of permanent civil disability, as such; whereas, as I have said, it has been held to be doubtful under the existing Act.

2. A power of appeal is granted against the decision of the Council to the High Court of Justice, in such manner as may be determined by rules of court.

These changes will, I doubt not, approve themselves to the Council. I mention them here because if, on the contrary, the long experience of the Council should seem to call for any modification in the proposed amendments, in respect of an onerous office of peculiar delicacy imposed on us by Parliament, it would be clearly the duty of the Council to make such conclusion known to the Government, for the improvement of the clauses in question.

The next business to which your special attention is this year invited is the report of your Committee on unqualified assistants, appended to which is a statement of the documentary evidence on which it is mainly based, with a letter from Dr. William Ogle, of the Registrar-General's office.

This subject is closely connected with that of false death-certificates, just now alluded to in the case of Gray. It is a many-sided question, affecting largely the health and well-being of the poor throughout the country, and one which has to be handled with great care. That grievous abuse exists cannot be doubted. The case of Mr. Gray, which has been alluded to, is, without any reasonable doubt, only one of many, the particulars of which are never known. The statement which has been prepared by the Chairman of the Unqualified Assistants' Committee teems with evidence as to the relation which the habit of employing unregistered practitioners bears to the safety of the sick, to the education of medical students, and to the habits of a certain number of registered practitioners.

It is easy to see that the three special subjects which come to-day before the Council in the ordinary discharge of its duties are closely connected. They will hereafter demand dispassionate inquiry and careful consideration with respect to the methods of instruction and the opportunities afforded in the several schools and hospitals both in this country and abroad in training young medical men. Persons well qualified to judge differ much as to the value, for the purpose of learning the practice of the profession, of apprenticeship, of residence with country practitioners, and of employing students in towns, either during their pupilage

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or after it is ended. In one respect probably all will agree, that when pupils and teachers act with singleness of purpose for the real good of the sick, when the pupils have had a good previous education and are of exemplary personal character, when the masters and teachers are conscientious in the care they bestow alike on the pupils and on the patients, the best results for all three—teacher, pupil, and sick—may, and habitually do, follow. Anyone acquainted practically with the conscientious labour and benevolence of many teachers and students in the great cities of England, Scotland, and Ireland, knows that good untold is hourly done, and blessing poured on giver and receiver alike, by sending students among the sick poor. Witness, as examples, the well-known lives of Alison and Stokes, both when they were youths and when they were men.

The subject, therefore, of employing "unqualified men" as assistants will have to be fully weighed before pronouncing against carefully directed methods of employing students, on account of the misconduct of some few legally qualified practitioners. On the other hand, the Council will not be deterred from considering such changes in the law as the important letter from Dr. William Ogle seems to suggest.

Copies of the Report on Professional Examinations, drawn up by Professor Gairdner, Mr. Stokes, and Mr. Teale, together with the remarks of the bodies visited, and the resolution of the Council thereon, as directed by you, were sent by the Registrar to all the medical authorities and medical schools of the United Kingdom immediately after your last meeting.

Under this third head I am led to observe that a considerable change of power is proposed in the Bill to which I just now referred in respect of the teaching in the medical schools. By Clause 21 of the Bill it will be the duty of the Medical Boards in the three branches of the kingdom to inquire into the sufficiency of the arrangements for teaching, by inspection or otherwise, in all recognised medical schools. It is impossible to exaggerate the importance of the provision contained in these few words. Those schools only will be recognised which reach the adopted standard of educational requirements; and those which do not reach it will cease to be recognised. It is well known to members of the Council that the opportunities are very different in different institutions, and that when once a so-called school is established it may attempt to teach over a range of subjects for which it has not adequate means, and which are better taught elsewhere. Small schools even undertake functions of scientific teaching which are best performed in the universities. They may also profess to have the clinical opportunities which can only belong to hospitals that, either from size or situation, have large choice of varied and typical cases, or, as in Germany, have special relations to the municipalities. I venture to say that a combination of some schools, like the combination of colleges recently adopted in the University of Oxford, might be easily effected and be of the greatest service. The power of inquiry, distinctly given to the Medical Council by the new Bill, into the plant and method of schools, was held not to exist under the Medical Act of 1858.

The Committee appointed last year to inquire into and report upon the deficiency of subject for anatomical and surgical teaching and examination has not completed its inquiries.

The subject of the preliminary examinations will be brought before you in a report by a committee appointed for the purpose at the last meeting.

It is not without interest to note here that, in the returns from the Army and the Navy Medical Departments, it appears that whereas in the year 1864, out of 49 candidates for the Navy, only 28 passed and 21 failed, 16 being found deficient in anatomy, 4 in medicine, and 14 in surgery, none who went in for the examination last year were found to be deficient in any subject; and whereas in the year 1864, out of 151 applicants for places in the Medical Department of the Army, 31 failed, 12 having failed in anatomy, 14 in surgery, and 23 in medicine, in 1882, 60 out of 69 candidates passed so as to qualify.

Before quitting the subject of our educational arrangements, I had intended to have called to your notice some points connected with the Conjoint Scheme of Examination, which, after many difficulties and much discussion, had been elaborated by all the licensing bodies in England; which received your sanction in 1877; and which has never come into operation—and then to have named other and more recent attempts made in the same direction. But circumstances have arisen which make it undesirable thus to occupy you on the present occasion; nor is this to be deplored, since, if the Bill, which is this day to be considered in Committee of the House of Lords, become law, all such agreements will be of no effect, and they will leave behind them nothing save the lessons of experience, and therefore of much labour expended not wholly in vain.

The Pharmacopœia Committee will present a report stating the steps which have been taken in the revision and preparation of a new edition of the Pharmacopœia.

The Council will have noticed that allusion has been made more than once to the Medical Bill introduced into Parliament by the Government. Copies of the Bill were forwarded to me for the use of the Council. I therefore beg to be allowed to say a very few words, on presenting it to you, in relation to the progress of legislation in respect of the department of Medicine. The disjointed and unsatisfactory state of medical education in the first half of this century had long baffled the endeavours of many honourable men who desired to remedy its defects. After years of discussion the present Council was formed in 1858. At least one great advantage immediately followed. Men who were supposed to represent conflicting interests met together, and after a short time set themselves to the national task of securing a more uniform and better education for all medical students in each branch of the kingdom, of establishing uniformly wise and good examinations, which are the key to modern education, and of diminishing the number of the examining boards in the kingdom. Two Governments carried through the House of Lords Bills which would have completed these and other required improvements. A collateral issue as to the construction of the Council raised in 1871 obstructed further progress. In the Council and in the several licensing bodies any complete combination and any finality for examination arrangements have been paralysed by this question. For thirteen years students, teachers, examiners, and institutions have been hindered in the attempts they were making at securing in one way or another a sound, permanent, national standard for medical training. Those who have followed the progress of modern biology in all its branches, normal and abnormal, can alone estimate the evil of this suspense. It is quite sufficient to remind you of the names of Brodie, Green, the two Pagets, George Burrows, Thomas Watson, James Arnott, Cæsar Hawkins, Rolleston, the two Woods, Syme, Allen Thomson, Lister, Stokes, William Baly, Sharpey, Parkes, William Lawrence, Teale, Christison, Begbie, Hastings, Rumsey, to recall to your thoughts what a variety of force, what power of goodness, what devotion, what intellect, what public spirit, what self-sacrifice have been during the last twenty-five years thrown within this Council alone into the task of aiming to secure for the next generation, by improved medical education, the welfare of the sick, the health of the nation, the strength of our soldiers and sailors, the progress of natural knowledge, the higher general culture of the medical student, and the social position to be reached by all educated medical practitioners without distinction of place or station. That great improvement has taken place in all these respects, no one who knows our medical students will for a moment question. But until the settlement of various disputed questions, which Parliament alone can settle, the Council is unable to insure for either teachers or students the stability of any sound methods of education upon which agreement can be obtained.

It remains for us, as I said last year, until Parliament see fit to relieve us from the labours imposed upon us twenty-five years ago, to continue to labour as faithfully and efficiently as circumstances permit, and, when relieved, to hand over to our successors such work as we have been able to accomplish for the public good, wishing them, with additional powers and the experience of the past, a hearty God-speed.

It is possible that this may be the last time that I shall be called upon to address you, except for the most formal business; and in this case, I would wish my very last words to be the expression of gratitude for kindness accorded to me for twenty-five years from the whole Council, for support during nine years as your President, and to leave a record of strong personal affection for many to whom I have, for so long, owed so much.

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On the motion of Professor TURNER, it was resolved that the President's address be entered on the Minutes.

The Council then proceeded to other business, which will be reported in our next issue.

ORIGINAL LECTURES.

CROONIAN LECTURES
ON
MODERN THEORIES AND TREATMENT OF PHTHISIS.

Delivered at the Royal College of Physicians, London.

By JAMES EDWARD POLLOCK, M.D.,

Consulting Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

LECTURE II., PART II.

WE come now to the experiments of Koch on the bacilli of tubercle, which have attracted so much attention, and seem especially to have awoke the public to the opinion of the specific character and contagious nature of phthisis. I have purposely considered other parasitic diseases before this one, in order that we may see how tubercle is allied to many affections and shares their pathological meaning. We may condense Koch's opinions as follows. By late researches on the tubercle ferment the constant presence of bacilli is proved in recent tubercular formations. These are small, like those of leprosy, but finer, with pointed extremities. Their protoplasm easily colours with methyl blue, the solution having been made alkaline. They are found in great quantity in inflammation of a tuberculous character while progressing; when the height of the affection is past they diminish, as we found in malarious fever. They are always seen in the periphery of tubercular nodules isolated or grouped in the so-called giant cells, and in chronic tubercle often only in the giant cells. They are always present in caverns mixed with others of analogous form, which do not, however, turn blue with methyl blue; the others take the brown colour of vesuvin. In very recent tubercular formations they are found without the colouring test in bloodvessels, lymphatics, and intercellular spaces. Koch established an artificial culture of these bacilli, making use of the serum of the blood of the ox for that purpose, which he dried by gentle evaporation at a temperature of 122° to 129° F., the coagulation of the serum being avoided. The bacillus of tubercle must be at a minimum temperature of 94°, the maximum 105°. The bacilli of malaria require a higher temperature. Those of tubercle take about ten days to produce the germs, which cover the surface like scales. With these he experiments on animals (rats and mice). He either introduced bacilli into the blood or into various tissues of the body, and always obtained a positive result—viz., tubercular infection. Nothing occurred in tissues where inoculation was practised under eight days, the glands inflamed in fourteen days, the general infection of the system took place in six weeks, then tubercle was developed in various organs, chiefly the liver and spleen. In phthisical cases in men half the number had bacilli in the sputa, and Koch never found them in persons not affected by pulmonary tuberculosis. Further, from inoculation with the sputa of phthisis, even when it had been previously dried, he never failed to produce tuberculous infections. The inference would seem to be that a spore producing a bacillus is the cause of phthisis. The opinion and experiments of Crudeli of Rome are especially advanced. He thinks scrofulous and tuberculous inflammations distinguished from all other pathological processes which produce cheesy masses by this: that the cheesy masses contain the tubercular contagion, which is proved by the inoculation of rabbits, which reproduces the tuberculous inflammation. The cornea of the rabbit inoculated with tubercle evidenced inflammatory action after twenty days, from which tubercle can be reproduced. Tubercle in its earliest days has in its centre a mass of very minute granules, with a small bloodvessel or lymphatic. These granules are not the fatty albuminoid detritus of tissues, for they resist the action of alkalies and ethers. The granules in tubercle are micrococci; they multiply themselves in the blood, and in tissues where scrofulous inflammations are present. A wounded part will be invaded by them if inoculation occur. Bacilli are found in the tubercular nodules, and the peculiar contagion is probably in these. It is found endogenous—that is, it is produced and multiplied in a system affected by what he calls tubercular sickness. It is transmissible from the sick to healthy persons; is found especially in localities where tuberculous men, or animals as oxen, are grouped in numbers; in the morbid secretions of affected organs; in the liquids of normal secretions, and notably in milk. It can be transmitted by using the milk of tuberculous cows, they being very liable to that class of disease. Klebs made animals tuberculous by feeding them on the milk of tuberculous cows. Lockmann, of Christiania, found a whole population in a district of Sweden, previously free from tuberculous affections, become so soon after the introduction of a breed of Ayrshire cows which were known to be affected by that disease. On this evidence Crudeli asks whether man did not originally derive tubercle from cows through their milk. He says it is a matter of historical record that America had no tubercle before its discovery by Columbus, and the introduction of a European population who imported cows. There were no mammiferous herb-eating animals on the American continent previously, excepting the llama of Peru. On this point I think we shall agree to await further evidence. Crudeli considers that tubercle can enter the organism in intra-uterine life through the placenta, also by the father communicating it to the ovum. Tubercular metritus in the female and prostatic tubercular disease in man can infect. The contagion may also enter by the respiratory tract; to breathe the air where many consumptives are assembled, as in hospitals, may turn out very dangerous, and he thinks this is proved by the experience of the Consumption Hospital. The disease is especially communicable from husband to wife. Wounds exposed to tubercular air can be also infected.

Tubercular infection is either primitive and local or general, but in all cases infectious. In those which seem obscure there is some part of the vascular system already the seat of infection, but the general infection is always due to a local primary one. The matter is conveyed by bloodvessels and lymphatics; it forms new foci in glands and organs, where the infection multiplies itself till the whole system is engaged. These foci or stations are determined by local congestions and injuries, producing a diminished resistance of the tissues. Some persons escape the contagion to which they are exposed, as the physiological activity of the tissue, and especially of the circulating powers, hinders the contagion from taking effect. Even when the entry of tubercular infection has occurred, it is limited to that spot of entrance for a time, it being necessary that the condition of the organism be such as to permit the contagion to fix itself and to multiply in it. If it does enter the system it is eliminated by the secretions, the skin and kidneys especially. Crudeli, Koch, and others acknowledge the tubercular habit or constitution, of which they consider that some elements are known, and they confess to a predisposition to tuberculosis. Such are diminished respiratory capacity, lessened cardiac and arterial power and tension compared to the bulk of the tissues. Puberty and rapid growth, the lymphatic and scrofulous habit, incline to phthisis. This is probably caused by the incomplete drainage of any part by the lymphatics, by which a great vulnerability of the lymphatic system is induced. It is confessed that these abnormal conditions can be acquired by bad physical education, deprivation of fresh air and exercise, etc.; but, again, it is acknowledged that it can be both hereditary and congenital. The difficulties of the therapeutics of such an affection are dwelt on, and I shall again have occasion to notice them; but will mention here that, according to this theory, in every node of tubercle the central part contains the contagion, while surrounding this there is a zone of dead tissue in which circulation has ceased. Across this zone the specific ferment can pass in the interstices between the cells; but the therapeutic agent cannot pass, and has already been greatly diluted in the mass of the blood. The same observation has been applied to the thickening of tissues surrounding syphilis. But, granting that we have arrived at the fact

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that in all tubercle, or so-called tubercle, and in all the secondary structure-changes of phthisis, we can recognise a certain parasite, in what manner do those changes manifest themselves in the system?

Perhaps a division (made by others) may be followed with advantage—namely, septic acute changes and specific changes. In the former we must class infection from wounds, putrid matters, the exanthemata, erysipelas, diphtheria, typhoid, malaria; in the latter syphilis and tubercle, and perhaps rheumatism. Septicæmia is distinguished from all others by its short incubation period, and by its not having any elective seat in the system; for it pervades all tissues with rapidity. Typhoid, variola, and the exanthems, with diphtheria, seem to have selected tissues in which to germinate, as the intestine in typhoid and the nerve-centres in diphtheria. Rabies stands alone with a long incubation period and an acute final crisis, but in this it is resembled by rheumatism.

Taking, however, all diseases attributed to parasitic germs, excepting septicæmia, there seems to be a mode of evolution in common. They all have to find a nidus or station—a tissue of the body, in fact, selected by, and peculiar to, that particular germ in which it can, and does, mature and fructify. The incubation period, be it long or short, is just this time in which the seed is undergoing those changes which a grain of wheat does in the soil of the earth. That particular grain dies, but in dying multiplies itself indefinitely. The new germs are let loose into the circulation and lymphatics, or they are small enough to enter the smallest of these vessels, and then a fresh colony is formed in another site, perhaps in another organ. At the date of the first settlement of germs in phthisis there are febrile symptoms and inflammatory products, or so-called tubercle, in a localised part. During the incubation period there is a pause, be it diurnal, or of days, or even a longer interval; and at the first evolution of new germs there is renewed pyrexia, and either extension locally of the first mischief detected in an organ, or a secondary nidus of disease set up at a distance. Taking the malarious disease in its common form of ague, the cold stage is that of first evolution of germs into the blood; they diminish in the hot, and die in the remission period. The pause is the incubation period, followed by similar phenomena in a cycle.

Now, applying this theory to phthisis as we see it, we have much that is plausible in this matter-of-fact way of interpreting its symptoms. The seed-sowing time, the period initiative of active symptoms, when the patient is in a subfebrile state, with few or no signs of local irritation in the lungs, is the time when he has received germs into the economy, and which he has failed to eliminate. The evolution period is that highly feverish state, with slight remissions, when the inflammatory or tubercular product is breaking up. At such time, say the theorists, the new crop of germs is being let loose into the system. At this period all the secretions are apt to be disordered, that of the skin and kidneys especially, and diarrhœa often sets in. An elimination is being attempted, and perhaps fails. Just then we often find a doubtful sound of crackle, with a little dulness of the apex or base of the opposite lung, and here is now a nidus station, or colony of the germs, which have been formed at the first station and been carried hither by the known channels of the circulation or lymphatics. The pauses or subsidence of symptoms in phthisis are very familiar to us, and we are asked to believe that they are the periods when the seed sown is again silently preparing a new crop in the soil of the tissues. The third period of local disease, when much structure has broken down and a pus-secreting surface is formed, is known to abound in these bacilli, which are abundantly found in the sputa and other secretions of the patients.

I come now, sir, to the crucial question whether, granting that these parasites are found in all cases of phthisis, granting that their inoculation in animals will produce a like disease, are the clinical phenomena of phthisis sufficiently accounted for by the germ theory? And in the few observations which I shall make, I must ask you to class me as an inquirer and not as an advocate, being well assured that you are yourselves precisely in that mental attitude of impartiality which is open to the reception of new truths, but repellent of obvious error. The story of phthisis is commonly this. In certain persons, whose constitution is predisposed, or who have inherited a predisposition to a form of disease, and most commonly at a certain age, with or without actual cold-taking or manifest cause, a slight wasting occurs with a subfebrile state, followed by pulmonary symptoms, as cough and expectoration, and blood-spitting. A physical examination reveals incipient disease in a portion of lung. As regards heredity, this sequence of events is so common in some families that a whole generation will be carried off at about the same age. The sickness I am describing will take place without any exposure or direct contact with persons similarly diseased. Nay, it will occur to the members of the same family living at the greatest distances from each other, some in America, some in England. There is another form of disease called accidental, because it is not proved to be inherited from an ancestor, and seems to be due to causes of local origin, as taking of cold, pneumonia, etc., and this again without previous contact with persons similarly diseased.

Are we to believe that both varieties, the inherited and accidental, are instances of seeds—that is, germs—introduced into the system from without, and there producing the characteristics, multiplication and fructification, which we have been studying? Or, if germs, then in the inherited form were they derived from the parent? This implies a long latent period of years during which the germ has been there, but produced no effects on the system. Again, the introduction of such germs into the system in other than inherited cases should be a matter of proof and certainty before the theory can be received. A person falls into ill-health from depressing causes—as poor food, bad dwelling, anxiety, loss of sleep, and such like—and becomes phthisical; but where are the germs? The theorist will tell us that in such a state the individual we have supposed presents the exact soil suited for the reception and growth of such germs of disease. And so it is; but the field well ploughed and manured and ready for the seed-sowing will produce no grain unless the germs are introduced. The theorist will no doubt say, as regards the hereditary cases, that the seed was sown before birth; but if this be true, what a long period of incubation it has required! The introduction of the germs seems to me to be a difficulty yet unsolved. It is not sufficient to prove that germs introduced will bring forth fruit. This, indeed, seems clear from the evidence, but that such germs have been sown as an antecedent to all cases of phthisis has not been proved, and must be proved before we can accept the proposition in its entirety that phthisis has its origin in parasites.

In pursuing the clinical history of phthisis, we must, however, acknowledge that in its later stages the theory of the fructification and multiplication of germs harmonises well with what we observe at the bedside. The theory is that the germ has first a local position—say in the lung—that after a period of incubation it multiplies, and that parasites are carried by the blood and lymphatics to another and distant part, where a colony, or station, or nidus is formed, a fresh deposit of morbid parasitic matter taking place with the same phenomena as in the first local irritation and general febrile disorder. Now, the story of phthisis is well known to consist of exacerbations and remissions, and the history of secondary deposits of miliary tubercle, of secondary infections of the opposite lung and of the small intestine, and of meningitis, singularly corresponds with the theory we have described. In the latest stages of cavity-bronchiectasis, etc., the phenomena are often more septic than specific; yet, if we may adopt the germ theory, we have a ready solution of the clinical conditions. The presence of a peculiar germ appears to be proved, and its secondary results seem demonstrated; but its originating power, its being the sole and invariable cause of the disease, seems scarcely proved. Comparing the tubercular germs with those of other parasitic diseases, we may have some light thrown on the *modus operandi*. Take malarious fever. In the experiments I have detailed, it seems certain that malarious micrococci can be detected and cultivated and inoculated, with the invariable sequence of certain symptoms, the blood examined containing more bacilli in the invasion stage and less in the hot and sweating stages of ague, while in the remission period they nearly disappear. The poison is peculiar to certain localities—persons not visiting those places do not get the disease. It is proved to be non-contagious, that is, no contact of individuals will convey it from one to the other. The nature of the attacks and remissions so resembles phthisis that I have selected it

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first for comparison. If phthisis be contagious, why is not malarious fever or ague also?

I take, again, rheumatic fever, in which the bacilli are most marked in the fibrous structures and muscles, the endocardium, etc. Its symptoms also are acute pyrexia with profuse sweatings. It is one of the most heritable of diseases, and runs in families to a remarkable extent. What of the germs? Were they congenitally introduced; or were they acquired from outside? What of the latent or incubation period? A man will often have an interval of seven or ten years between the attacks. Are the germs there, but latent for all that time? Is it that they have not reached that part of the system capable of assisting in their multiplication? This can scarcely be, seeing that in some former attack a nidus may have already been formed in a joint or in the mitral valve. Again, has ever anyone supposed rheumatism to be contagious? In syphilis we certainly find a more close analogy to phthisis than in the other affections named. Granting the introduction into the system of a definite poison by an ascertained inoculation, we find a long latent period followed by characteristic symptoms—skin rashes with pyrexia, and deposits in distant organs: the brain, the tongue, the periosteum. The theory of successive developments of parasites will fit in here; or rather let us say that, parasitic or not, an infecting material first found in the hard chancre has passed through the blood and lymphatics and manifested itself after a long interval in distant parts. Its identity with the inoculated spot is further evidenced by its amenability to certain specific remedies, as mercury and iodine. We see in both syphilis and tubercle a selection of certain tissues, and we may contrast this with purely septic infections which seem to develope germs in all tissues and membranes.

But beyond all these analogies, and lying deeper in our pathology than any discovery of parasites, are other questions. Can all the systemic phenomena of such diseases be accounted for by accepting the proposed theory? Let us take phthisis tubercle, excluding miliary tuberculosis in its acute primary form. If asked what are the prominent systemic characters of phthisis, we should reply fever and waste. The characteristics of fever are disintegration of the living substance of the body, and increased and diminished constancy of bodily temperature. Fever is not merely a state but a process, and, as Burdon-Sanderson says, has had its beginning in the entrance into or action on the system of some affecting or infecting cause. The cause of waste is a consumption of albumen, which passes out of the system as urea, and which is derived either from blood corpuscles, or from muscular detritus, or from both. It is probable that a breaking down of the blood corpuscles is a part of the febrile process. The colouring matter of the blood is the means by which oxygen is distributed to the tissues, and the destruction of it must impair every function of organic life. In fever the excessive nitrogen and carbonic acid passing out of the system is supplied by the waste of muscle and of blood corpuscles. The same authority remarks that the tissue origin of fever is the basis on which we hope eventually to construct an explanation of the process. Fever probably originates with living tissues, and is from first to last a disease of the protoplasm, to which all systemic disturbances are secondary. He adds that at bottom we are all humoralists and believe in infection, and that fever is tacitly assumed to be the product of a material fever-producing cause contained in the blood or tissue juice, the morbific action of which on the organism is antecedent to all functional disturbances whatever. In applying these facts and theories to phthisis we may see how large a question is the pathology of that disease, and how inseparable are its phenomena from those produced by other affections accompanied by elevated temperatures and waste. That it has some analogies to purely zymotic disease is undoubted, but the question may fairly be asked whether, in the absence of proof of the entrance or inoculation of any germ, it is not possible to conceive blood-changes which may originate the train of symptoms. The moment that the blood is overladen by nitrogenous material, its corpuscles destroyed, and the detritus of muscular waste poured into it, we are assured that the presence of bacilli is manifested. In all degradations of vital fluids, nay, of all organised structures, do we not observe the same law, the development of parasites? Those more evident to our senses, as all the parasitic worms, assail the enfeebled body and enfeebled tissues: so many parasites, and in the vegetable world innumerable lower growths, become manifest when the organisation of the tree or plant is impaired. May it not be so also in those blood-changes which precede the development of tubercle. May it be possible that the bacillus is the consequence, and not the cause, of the disease? the lower organisation which replaces the healthy blood-corpuscle? In the present state of our pathology it is impossible to answer these questions, but thoughtful inquiry will consider them in weighing the evidence, which time and experiment will shortly develope on all sides. For we cannot stop where we are, nor at once accept as a solution to all our difficulties the theory which has its avowed basis in experiment, and not in clinical observation, and which is as yet rather the fruit of the laboratory than of the hospital.

ORIGINAL COMMUNICATIONS.

THE SIGNS OF A

HEALTHY BRAIN AND MENTAL DEVELOPMENT IN AN INFANT,

AS INDICATED PRINCIPALLY BY ITS MOVEMENTS.

By FRANCIS WARNER, M.D. Lond., M.R.C.P.,

Assistant-Physician to the London Hospital, and to the East London Hospital for Children; Lecturer on Botany at the London Hospital.

In examining an infant, and specially looking for those signs which indicate whether the brain is "all there," whether it is well developed and healthy, we compare it in our minds with a standard of the normal, or compare the subject of examination with a normal child. It is therefore necessary that we should be able to define the signs which indicate whether the brain of the infant is well developed, and will therefore probably possess the faculty of mentation in the due course of its growth. This is an important clinical problem, not only as indicating the probable future mental growth, but also because when examining an infant the subject of some degree of ill-nutrition, inflammation, or disease, it is necessary not only to diagnose the condition of disease, but further to consider whether the child be in all particulars well developed and "all there." This factor in diagnosing the condition of an infant is very important as regards the action of the brain in giving vitality to the child, and strength to pass through an illness or period of low nutrition.

Now, the signs of a healthy infant brain are mainly of two kinds: *first*, the form, size, and proportion of the parts of the body, and particularly of the head—signs which indicate to some extent the degree and condition of brain development; *second*, conditions of movement which are produced by the central nerve-mechanism, and which are therefore signs of its condition, or, as they may be conveniently called, "nerve-muscular signs." It is with these latter only that the present paper is concerned.

In the healthy and well-developed new-born infant the common signs of health are as follows:—

1. Crying as soon as born. Probably in most cases this is due to external agencies, or later results from the want of food, cold, or other discomfort.

2. Reflex action. When a finger is placed in the mouth of the infant the movements of sucking result; a little later, when a finger is placed in its hand it is grasped by the infant fingers.

3. Contraction of the orbicular muscle of the eye when a bright light shines upon the eye. If the eyelids be opened the pupil contracts to light. I have seen infants a few hours after birth screw up their eyes when a lamp was brought near.

4. In movements of the eyes parallelism of their axes is maintained while the infant is awake. It is, however, not uncommon in infants, generally healthy, to show an occasional loss of parallelism of the eyes, especially when suckling.

5. Frequent spontaneous muscular movement, causing irregular movements of the fingers, hands, toes, etc., while the child is awake. This spontaneous movement subsides during sleep, suckling, and in states of exhaustion. Such

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movements may be increased or temporarily arrested by the sight of an object, by a strong light, or by sounds. A further important element in the character of this spontaneous movement is the amount seen in the fingers as compared with that of larger parts, and the frequency of spontaneous action of separate digits, etc.

6. In the face, expression is produced by the action of the brain on the muscles. The muscles in expression act earlier in the lower part of the face, those about the mouth causing expression before those on the forehead (corrugators), which are specially connected with mentation. The repetition of facial gestures or special muscular movements upon the sight of a well-known object or on hearing a well-known sound indicates "retentiveness," or memory as a further development. In saying this it is worth while to recall that the set of muscles here described as often acting in the early development of facial expression are those that are most palsied by a hemiplegic lesion. (See woodcut.)

Left hemiplegia: paralysis is seen mainly in the muscles about the left angle of the mouth.

7. Playfulness is probably the result of spontaneous movement together with an increased susceptibility to reflex action. The playful child has "a happy face," owing to the healthy tone of the muscles of the face.

8. When a light is shown to an infant from three months old its attention is attracted by it; the child notices or looks at the light. What we actually see during observation is that the head and eyes are turned towards the light. The head and eyes are moved "at the sight of the light." I think, then, it may be said that the light causes the movement. In a similar manner the infant notices its mother's face, its attention is attracted by it; the light reflected from the mother's face causes movement of the infant's eyes and head.

9. A sound is noticed by an infant a few months old; its attention is attracted by it. The head is turned towards or from the source of the sound; *i.e.*, the undulations of the air cause movement. If the sound strongly attracts the child's attention, spontaneous movement may be stimulated or checked.

10. In the early stages of development there is inability to put out the hand, moving it in a straight line towards an object. There is also inability to touch a definite part of the body where there may be pain. When one leg itches the child is unable to scratch it with the hand, but tends to do so with the other foot. The power to grasp an object by its own act is a later development. The ability to transfer an object from one hand to the other is not acquired for some months, and the association of the two hands in playing with an object is still later in development.

11. Very important signs are the movements indicating (retentiveness) recollection upon hearing the names of well-known objects. In such a case only waves of sound act upon the brain from without, and the movement that results in the child indicates that the sound has been heard. A certain name may always cause the same facial gesture (expression)—thus, "bottle," "bed," excite the facial expression of pleasure, disappointment. The word is said, and the face changes. However complex in mechanism and function the brain which moves the face may be, still it is the sound that produces the movement.

12. Retentiveness of the effects of the sight of an object is very important. Does the child remember objects shown to it? Here the "memory" is indicated by the movements the infant makes when shown an object that it has had sight of often before. The undulations of light are reflected from the particular object; these, falling upon the retina, produce, by their action on the brain, the gestures in the face, hands, etc., the expression of joy, pain, etc.: the sight of this special object always producing similar effects subject to modifications. The sight of a funny doll makes the child laugh; a dog makes it cry and clench its fists.

13. Upturning of the eyes in their orbits, accompanied by elevation of the eyelids, in looking at an object high up, is a late development in the infant, and indicates the advance of intellectuality. It is noteworthy that in hydrocephalus the eyes frequently roll upwards, but the eyelids remain drooped, hiding the cornea.

In the list given above, which is by no means complete, the order followed is about that in which the development of these signs takes place. We will now attempt some kind of physiological classification. Some of these nerve-muscular signs follow and result from external agencies: thus, turning towards a light or an object depends upon light passing from these things to the child's eyes and brain; turning to a sound is the direct effect of the sound-undulations of the air. So, again, when movement is checked or altered by "the sight of an object" or "a sound," the result is the effect of the waves of light or of air upon the nerve-mechanism; in every healthy brain the effect of such waves is probably nearly identical. Other motor signs are more directly intrinsic, the physiological outcome of the structure and properties of the nerve-mechanism, thus: crying, reflex actions, parallelism in the movements of the eyes, the constant movement of the fingers and limbs while the infant is awake, some movements of expression in the face, playfulness; and later on, the repetition of identical movements upon similar stimulation, the acquired power of co-ordinating movements of the hand; and still later, the power of using both hands together—these are the outcome of the properties of the nerve-mechanism itself.

The following observation in a child eighteen months old illustrates how the dawning intellectuality is indicated by the complication and fitness of certain sets of movements. "The child having both hands full of toys, desired to grasp a third; he then put the toy from one hand quickly between his knees, and thus set one hand free to take hold of the desired object."

The following kinds of movements as signs of a healthy infant brain deserve separate attention:—Movements following certain external agencies, light, sound. Movements the outcome of the essential (untrained) properties of the nerve-mechanism. Movements resulting from (training) the acquired association of nerve-centres. Movements similar to those previously occurring from a like cause, showing retentiveness. Movements in different areas, such as the small joints in contrast with large joints; or a different condition of movement of adjacent parts, such as the fingers. There may also be a symmetry of movements.

SUDDEN DEAFNESS FROM MUMPS.—As the number of these cases on record is but small, Dr. Haslon relates one that occurred in a woman aged twenty-three, who, on the day after the mumps commenced, became completely deaf in the ear of the same side, there being neither discharge nor pain present. At the end of three years there is still constant tinnitus, and the watch is not heard on contact. There is a very faint perception of the tuning-fork held on the mastoid, increased by closing the meatus. The external ear and membrana tympani are quite healthy. As there had been no indications of cerebral complications in any of the reported cases, the labyrinth is probably the seat of the disease, and the suddenness and completeness of the deafness point to rapid and copious serous effusion. Most observers have regarded it as of a metastatic character, like orchitis.—*Phil. Med. News*, March 24.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ROYAL FREE HOSPITAL.

CANCER OF DUODENUM—SUPPURATION AND PERFORATION OF GALL-BLADDER, FOLLOWED BY FATAL PERITONITIS.

(Under the care of Dr. COCKLE.)

[Notes by Mr. J. B. Beaby, M.R.C.S., House-Physician.]

James W., aged fifty-three, a coal porter, was admitted on February 5, 1883, for slight jaundice. The patient was a very deaf and unintelligent man, but enjoyed fairly good health until a week before Christmas, when he caught cold. Since that time he has had slight rigors, has been growing weaker and becoming jaundiced, but has felt no pain.

On admission, patient was emaciated and slightly jaundiced. Skin loose, and muscles flabby. Position of apex-beat and præcordial dulness normal, but heart-sounds weak. Margin of liver extends about one inch below the ribs in nipple-line. No pain or tenderness. No œdema or ascites. Urine contained bile, and gave the usual reaction under Gmelin's and Pettenkofer's tests. No albumen. Fæces pale. No great change of symptoms occurred for some days.

February 15.—Rigor; temperature 101·2°; pulse 100.

17th.—Jaundice more intense. Apparent liver-dulness extends three inches and a half below costal margin. From about the lower margin of the liver, and continuous with it, there seemed, on palpation, an enlargement of firm consistence, which extended to within two inches of the iliac crest, and yielded a resonant note on percussion, being apparently overlapped by the distended colon; region of the liver was tender on pressure, but the swelling not so. Very drowsy. Great thirst. Temperature 103·2°.

19th.—Jaundice increased. Swelling greater. Liver-dulness reaches iliac crest. No pain. Tenderness on palpation over the liver, but not over the more localised swelling, which still yields a resonant note on percussion. No further rigor.

20th.—Enlargement much increased, and fluctuation can now be detected over the swelling. Slight œdema of abdominal parietes. Very weak and torpid, with hectic flush on cheeks. Lips pale. Sordes on teeth. Heart-sounds weak and distant. Pulse 100, soft, weak, and compressible; respirations 32; temperature 102·7°. Ordered one drachm of brandy every half-hour.

21st.—Abdomen tumefied. Pulse 112, stronger; temperature 103°.

22nd.—Bowels opened twice; stools light-coloured and copious; abdominal tumefaction increasing. Temperature 100·6°.

23rd.—Enlargement still increasing. Dulness now exists over localised swelling as well as over general hepatic enlargement. Tongue brown and furred. Pulse 108; temperature 102·4°.

24th.—Morning: Less torpid in manner; tongue still dry and brown. In the evening he became much worse. Face bore an anxious expression; the whole body was bathed in hot sweat, and he was evidently in acute pain, which was referred to the abdomen; but he did not flinch on pressure being made. The abdomen was tympanitic, but the pulse hardly that of peritonitis, being full, strong, and scarcely compressible. Fifteen minims of tincture of opium were administered, and, locally, poultices sprinkled with turpentine were applied. In half an hour he was relieved. Opium was continued in ten-minim doses every four hours. Temperature 101·8°.

25th.—Morning: No pain. Abdomen more tympanitic, and pulse decidedly weaker. Temperature 98·8°. Evening: No pain, but great exhaustion. Slept the greater part of the day.

26th.—No alteration of symptoms. Temperature 97·4°. Gradually sank, and died in the evening.

Post-mortem.—On opening the abdomen, the peritoneal cavity contained several pints of sero-bilious fluid and about a quarter of a pint of purulent matter which had escaped from the perforation in the gall-bladder. The intestines were coated with recent lymph, and some of the coils were glued together. The gall-bladder was enormously dilated, and measured when empty eight inches in length and four and a half in width. On its under surface was found an opening about the size of a sixpence, with thickened and ragged edges. The common bile, cystic and hepatic ducts were all dilated. The common duct was dilated to the size of the portal vein, admitting the forefinger. On passing a probe along the duct, it passed through some soft morbid growth in the wall of the duodenum. On opening the duodenum the growth was found hard in some places, soft and confluent in others, and entirely surrounding the aperture of entrance of the common bile-duct, infiltrating the wall of the duodenum for three inches of its long diameter and half its circumference; the duodenum itself was dilated. The lymphatic glands in the neighbourhood were enlarged and soft, and, in many cases, confluent. On section, they consisted of a greyish, semi-solid substance, which could be easily washed away by a stream of water. The liver was enlarged, and on section it presented the ordinary nutmeg appearance. The pancreas was hard and fibrous. Heart, lungs, kidneys, and spleen normal. No adhesion of either liver or gall-bladder to abdominal parietes existed.

On microscopical examination the growth in the duodenum proved to be scirrhus. The liver and pancreas were also examined, but showed no traces of infiltration.

Remarks (by Dr. Cockle).—A precise diagnosis in this case may, perhaps, be allowed to have had its difficulties. At all events, I failed to make one, owing partly to the mental obtuseness of the patient, and partly to the general and local phenomena successively appearing in his case. When first he came under observation his case was regarded as probably one of common catarrhal jaundice, so slightly accented were the symptoms and physical signs then recorded. But as the jaundice gradually deepened, and the area of liver-dulness as gradually increased, with tenderness of this organ on pressure, a question arose as to the probability of occlusion of the common duct by a calculus. But nothing significant of any attack of hepatic colic could be made out. Neither were there any signs or symptoms suggestive of the existence of malignant disease, especially of the duodenum, although the possibility of such disease existing somewhere was not overlooked. The gradual tumefaction of the right lobe of the liver, extending to the right flank, the marked tenderness on pressure, coupled with the rigors and elevated temperature, rather led to the supposition of idiopathic hepatic abscess (of which I have met with more than one instance)—a supposition seemingly strengthened by the somewhat obscure feeling of fluctuation subsequently detected over a circumscribed portion. The condition of the liver just described, and the tympanitic note yielded on percussion, laterally, below, and for some time over the site of fluctuation, rendered any mapping out of a distended gall-bladder very difficult in this case—I may add, well-nigh impossible. On the occurrence of severe abdominal pain, followed by increased meteorism and rapid exhaustion, it was obvious that some perforative accident had occurred, the exact nature of which was not recognised until the body was examined.

Disinfection by Corrosive Sublimate.—Dr. Tarnier, Surgeon to the Paris Maternité, has the greatest confidence in Van Swieten's liquor, employed as an obstetric antiseptic. The midwives and pupils all wash their hands in this liquid, and the whole of the genital region of the patient is washed and injected with a solution of corrosive sublimate at a strength of two-thousandths. Prior to delivery the injection is renewed every three hours, and no accidents from its employment have ever occurred. Dr. Tarnier proposes the disinfection of napkins and mattresses by the same means.

An Innocent Pick-me-up.—Americans are credited in England with the discovery of a new panacea. It has the advantage of simplicity, for it consists of half a glass of very hot water, taken morning and evening, or whenever a "pick-me-up" is required. It is said to cure gout, rheumatism, indigestion, dyspepsia, and many other of the complaints to which flesh is heir. It appears that it has been tried with good effect by a considerable number of persons in England, and notably by those whose brains are heavily taxed.—*Boston Med. Journal*, March 3.

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Medical Times and Gazette.

SATURDAY, APRIL 21, 1883.

THE MEDICAL ACT AMENDMENT BILL.

Before our present issue is in the hands of our readers the Government Medical Bill will have been in committee in the House of Lords; and we shall next week have to report what alterations have been made in the measure. Meanwhile, it may be well to notice the amendments of which notice of movement has been given; or, at any rate, to take note of those placed on the notice-paper by the Lord President, who has charge of the Bill. These occupy five foolscap pages. Many of them are only verbal amendments, but some are of great importance, and some of these are of the character that we have already predicted. He will move the insertion in Clause 10 of words to make more definite and practical the rules with respect to "uniformity" of standard in the final examinations; these are to be framed in such a manner as to secure, "so far as is practicable," in each part of the United Kingdom, "an equality of standard in each final examination, and an equal capacity for testing proficiency; also care shall be taken that the same comparative value shall be assigned to the importance of different branches of knowledge in the final examination held in each part of the United Kingdom, and that for that purpose the same maximum number of marks shall be assigned to the same branch of knowledge in such examination." He will also move to insert in Clause 15, which refers to the duties of the Medical Council, a new paragraph to the effect that "The Medical Council may also make inquiries of, and call for any information from, any of the Medical Boards constituted by the Act, also from any medical authority or medical school, or other medical body taking any part in any medical examination or medical education in pursuance of the Act." In Clause 20, part ii., on medical education, he will propose to alter sub-section (*c*), which mentions the authorities who are to be considered competent for conducting or for appointing examiners to conduct the examinations previous to the final one, by omitting the words, "and such examining authorities may be all or any of the following authorities, that is to say, the Medical Board themselves or any medical authority in the United Kingdom or elsewhere." The effect of this amendment will, apparently, be to leave the conduct of the previous examinations in the hands of the recognised examining authorities only, subject to supervision and control, instead of empowering the Medical Boards also to undertake, should they think fit, such examinations. Lord Carlingford has fully comprehended the force of the objections made to Clauses 26 and 27—clauses dealing with medical titles and registration—as they stood at the time of the second reading of the Bill, and has formulated amendments for the omission of both those clauses, and the insertion instead therefor of one short and simple provision, viz., that "On and after the appointed day it shall be lawful for any registered medical practitioner who is on that day in possession of, or may thereafter obtain, any diploma granted by any authority for the time being authorised to return a member or members to any Medical Board, or who, being on the register of colonial or foreign practitioners, is on such day in possession of, or may thereafter obtain, any recognised colonial or foreign diploma granted in a British possession or in a foreign country to which this Act applies, may cause a description of such diploma to be added to his name in a column of the Medical Register," and he may take and use any title such diploma authorises him to use. The practitioner who is content with registering simply on the strength of a certificate of competency from a Medical Board will no doubt be at liberty to use the title of "registered medical practitioner," but he will have no other legal medical title unless he obtains one by affiliation with a recognised medical authority, *i.e.*, with one of the universities or one of the medical corporations. The majority of practitioners would doubtless feel it to their interest to attach themselves to one or more of these bodies, and the clause, as thus amended, would influence men in the direction that the Royal Commission desired. They expressed the hope and belief that though the certificate of a divisional board would of itself confer a right to registration, men would not be content with a bare licence to practise, but would continue to seek to belong to one or more of the universities or medical corporations. The amendments that would necessarily follow in the form and contents of the Medical Register will of course be provided. Clause 38, part v., Lord Carlingford proposes to amend so as to provide that the surplus funds, if any, of the Medical Boards may be applied by each Board in aid of medical museums and libraries belonging to medical authorities in its own part of the kingdom, instead of handing such funds over to the Medical Council. The next amendment by the Lord President will give universal satisfaction: he gives up altogether the proposed annual registration fee. After Clause 71 a new clause appears, providing that the Act shall "not make illegal the user by any person after the passing thereof of any medical title which he was actually using and was entitled to use at the date of the passing of the Act." The Lord President has not proposed any amendment of the constitution of any of the Medical Boards; but an amendment to increase the proportionate powers of the corporations on the Board for England will probably be proposed by Earl Camperdown, and accepted; his opinion, as having been Chairman of the Royal Commission, necessarily carrying great weight. Lord Carlingford has also shown himself willing to make some change in the constitution of the Board for Ireland. There has been question again about dropping out altogether the Apothecaries' Hall of Ireland, but, whether that be done or not, the proportion of the representatives of the universities to those of the corporations will be changed, so as to give an increase of power to the universities. It is to be remembered, however, that in Ireland the corporations are actual

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educational, as well as examining and licensing, bodies. A complete medical school is attached to the Royal College of Surgeons in Ireland; and the School of Physic, Trinity College, is under the joint government of the Board of Trinity College, Dublin, and of the King and Queen's College of Physicians, so that, looking also at the number of men licensed every year by the universities and by the corporations respectively, these latter bodies have a good claim to possess the larger voice on the Medical Board. We believe, however, that the corporations would be content to have an equality of votes with the universities. Many other amendments have been formulated by Lords Balfour, Cairns, Miltoun, and Powerscourt; but as the Bill is, in all probability, being considered in committee while we are writing, it is not worth while noticing them.

FRESH RESEARCHES ON THE TUBERCLE-BACILLUS.

The results of observations which bear on the surface the stamp of probability are unquestionably more readily believed than are those which seem opposed to previous convictions; and some investigations recently made by Finkler and Eichler, and communicated to the *Centralblatt für Klinische Medicin* for April 14, are perhaps the more interesting on this account. We could have wished the authors had paid a larger amount of attention than they seem to have done to the staining with fuchsin, because this method of staining seems to have become the more general one, and seems to have yielded more satisfactory and more rapid results. The propositions laid down by Koch may be fully harmonised with these new researches, but an increasing number of observations has rendered it highly probable that there are bacilli of ordinary occurrence, which we cannot rightly regard as having anything to do with the tubercular process, and yet which behave to staining fluids apparently in the same fashion as do those bacilli which are called tubercular. And it is probably in this direction that these new investigations may prove of value. Our readers will remember that in a recent number (April 7) we drew attention to the statement made by Spina, and confirmed by Stricker, that septic bacteria react to colouring fluids in the same manner as tubercle-bacilli do. Also in our issue for January 6, page 15, we gave an abstract of some observations by Professors Balogh and Koryanyi which seemed to throw doubt on the specificity of the bacillus associated with tubercle. Formad is another worker who has averred that other forms of bacteria give the same result to staining reagents. Cramer has also detected bacilli in healthy stools, which give the colour-reactions of the tubercular bacillus; and Lichtheim has made a similar observation. The essence of what Finkler and Eichler have to teach us amounts to this:—It is a mistake to believe or to suppose that there are no bacilli other than those called tubercular, which stain blue, and cannot be decolourised by washing in nitric acid. They teach that even nuclei, if not exposed to the agency of nitric acid for too long a period, may have the blue colour restored by washing in distilled water. Likewise, there are bacilli, not tubercular, which may be similarly treated with nitric acid without the permanent loss of their blue tint. The point seems really to be that the tubercle-bacilli are much more resistant to the treatment employed than other forms of bacteria, but are not absolutely unchangeable by it. The prolonged influence of nitric acid may even so fully decolourise them that no bathing in pure water will restore the blue colour. The matter would seem, so far, to be entirely one of degree. But Messrs. Finkler and Eichler go further: with regard to the colouration of the "background" (bismark brown was employed), they say that the assertion that the tubercle-bacilli fail to take up this second colour is only relatively accurate. We may remind our readers that all workers on tubercle-bacilli from Koch downward have justly laid great stress on this phenomenon. Here, as above, it is a question of degree. According to these latest observers we ought to say that the tubercle-bacilli have the least *inclination* to be tinted by the second staining fluid, just as they have the greatest *tendency* to combat the decolourisation by nitric acid. It is, then, on the possession of these *relative* properties that the diagnosis of tuberculosis must depend, if we are to trust to the simple staining method as distinguished from cultivation and inoculation experiments. Put in another way, we may say that those structures which are soonest decolourised by nitric acid are the more readily susceptible to the colouration by a second staining fluid; and conversely, the most hardy are the least susceptible—to this class belong the tubercle-bacilli.

There would seem to be, then, a partial, but for practical purposes a very significant, detraction from the value of previous data concerning the tubercle-bacilli. If these most recent observations and the inferences therefrom be true and legitimate, is there not good cause to suspect that, looking to the numerous difficulties in the way of perfect examination when the question is one of degree and apparently of great nicety, as above explained, the flood of light supposed to have been thrown on the subject of tubercle by Koch's researches is gradually fading out, to leave us in nearly, if not quite, as great darkness as we were about the matter previously? In making these suggestions we have fully borne in mind the fact that Koch himself admits that the bacillus of leprosy is, as regards the staining reactions, quite like that of tubercle, and further, that the experimental inoculations certainly form a barrier of evidence which cannot easily be shaken. Nevertheless, and we repeat *if* these newest observations be valid, the value of Koch's discovery for purposes of clinical diagnosis would seem to have undergone considerable diminution. In the present state of knowledge it is of unbounded importance to preserve an attitude of scientific scepticism on the subject.

THE WEEK.

TOPICS OF THE DAY.

The anniversary festival of the Metropolitan Free Hospital has recently been held under the presidency of the Duke of Connaught. In proposing the toast of the evening, His Royal Highness remarked that like most great charities in this country, this institution was entirely dependent on voluntary contributions; and the charity had passed through many vicissitudes before attaining its present satisfactory position. When originally founded in 1836, it was simply a dispensary; in 1862, 103,983 persons applied for relief, and it was found necessary to limit the number of out-patients. During the past year 48,331 out-patients and 284 in-patients had been treated. Upon two occasions the Hospital had been compulsorily removed to make way for railway extensions, and it was hoped that the site which had now been obtained for a new building in the north-west of London would not again be interfered with. It was proposed to erect a hospital, not grand in appearance, but replete with all the modern improvements suggested by sanitary science, capable of accommodating 150 patients. This number might not meet the wants of that increasing portion of the metropolis, but the out-relief would be a great boon in the quarter selected. He dwelt upon the devotion of the medical staff to the wants of the sick poor, and concluded by asking for practical support to increase the

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resources of the institution. Before the close of the proceedings the secretary read a list of subscriptions promised, which amounted altogether to upwards of £2000.

Members of the medical profession are often called upon to face emergencies involving a terrible risk to life; but happily they are rarely called upon to undergo a similar ordeal to that which was self-imposed upon Dr. Hill, the Medical Officer of Health to the borough of Birmingham, upon the recent occasion of the discovery of secret dynamite manufacture in the town in question. We have frequently placed before our readers short notices of Dr. Hill's periodical reports upon the health of his district, and have called attention to the valuable information contained in the tables compiled by him; but his coolness and devotion on the 8th inst. will cause his name to be much more widely and generally known. The discovery of the Fenian laboratory in Ledsam-street, Birmingham, with its store of rudely made dynamite, necessitated the removal of the latter with the least possible delay, and although an expert, Mr. Macready, had been procured from Glasgow to undertake this task, Dr. Hill considered that it was his duty, in his official capacity, to render any assistance in his power. From the beginning of the operations for removing the dynamite from Ledsam-street until it was safely conveyed to the sewage-farm outside the town and destroyed, Dr. Hill shared with Mr. Macready the perils of the undertaking, and the profession may point with pride and satisfaction to this quiet ignoring, on the part of one of their number, of all personal considerations in the discharge of what seemed to him an official duty. Many men have before now been decorated for deeds of far less bravery. The Corporation of Birmingham have shown *their* estimation of the value of Mr. Macready's courage and services by awarding him the magnificent sum of £10! We will hope that the Government will, without very great delay, find some mode of fittingly recognising the special services lately rendered by Mr. Macready, Dr. Hill, and others to the nation.

At a recent meeting of the St. Saviour's Guardians, an inspector of police attended on behalf of the Public Prosecutor, to ask the Guardians to take up the prosecution of the man Cozens, a member of the sect known as the "Peculiar People." In January last the grand jury at the Old Bailey threw out the bill against Cozens, who had been committed for manslaughter with respect to the death of a child who had not been seen by a medical man. Last month another child belonging to the same man died under similar circumstances, and a verdict of manslaughter was returned by the coroner's jury. On Cozens being charged at the Lambeth Police-court, Mr. Chance—as the jury threw out the bill upon a former occasion—remitted the case to the Public Prosecutor as one for him to take up, with the result that the latter official now sent to the Guardians asking them to undertake the task. The Clerk to the Guardians said that he was clearly of opinion that it was quite out of the province of the Guardians to prosecute in the case, and it was unanimously resolved not to take the matter out of the hands of the Public Prosecutor.

Now that the Volunteer movement has become an established institution in this country, attention is from time to time called to its various wants, which, we are bound to say, the Government do not seem in any hurry to supply. An important meeting was recently held at Charing-cross Hospital, composed of army, volunteer, and hospital surgeons, and of others interested in the cause, to consider the necessity of establishing a Volunteer Hospital Corps. The discussion ended in a resolution, "That such a corps is desirable and necessary." A good working committee was eventually formed to go into the necessary details, and take steps for the formation of a corps, on the understanding that it would be best, if possible, to first form a complete unit of such corps—a bearer company—by private efforts and assistance, and then to present it to the War Office for their authorisation as the nucleus of a complete organisation throughout the country. To the medical students of the London hospitals will be offered the honour of starting the movement by the formation of hospital cadet companies, and from the manner in which the proposition has been received by the students of Charing-cross Hospital, it would seem that the London students, as a body, will be able to make the movement a great success.

At a recent meeting of the Brentford Board of Guardians a letter was read from the Local Government Board, a duplicate of which had been sent to Dr. Whitmarsh, the Poor-law Medical Officer for the Hounslow district. The Local Government Board call upon Dr. Whitmarsh to resign his office, as they "would not be justified in resisting the wishes of the Board of Guardians." A reply from Dr. Whitmarsh to the Local Government Board was also read, in which he maintained that when elected to his present post he signed a contract which he has faithfully carried out; his appointment he considers a life appointment so long as he carries out his duties satisfactorily, and this he contends he has always done; and as he would eventually have been able to retire on a pension he declines to resign. He would rather, he asserts, be dismissed than resign the office he is entitled to hold, since anything extraneous to his duties does not, or ought not, to come under the cognisance of the Local Government Board, and should they dismiss him they will be acting illegally.

A somewhat important discussion was held recently at the rooms of the Society of Arts, on a paper written by Miss Edith Buller, entitled "Open Street Doors and the Supervision of Tenement Houses." The paper pointed out the deplorable condition into which houses of this description frequently degenerate, and dwelt especially on the moral evils that result from the want of privacy. The stairs and landings, being safe from inspection at night, are resorted to for immoral purposes, and the lowest classes convert them into night refuges. Miss Buller complained that the vestries did not execute their powers to deal with the sanitary and social ills resulting from this state of things. Amongst those who took part in the discussion were Mr. Stansfeld, who presided; Lord Mount Temple; Dr. Thorne Thorne, of the Local Government Board; Mr. Holland, M.P.; and Dr. Gibbon. The proposed remedies that found most favour were those of Lord Mount Temple, who suggested that the police should have power to enter the open stair-landings of tenement buildings as "public places"; and of Dr. Gibbon, that every such tenement should have a tenant, or sub-landlord, responsible for its condition. Dr. Thorne pointed to his experience in large provincial towns from the enforcement of sanitary bye-laws, and he produced the model code adopted by his department when Mr. Stansfeld was its president; and which, he considered, would enable local authorities to deal with all the evils that had been enumerated.

A deputation, hostile to any changes in the Contagious Diseases Act as it now stands, is about to wait on Mr. Gladstone, to urge on the Government the necessity of opposing the motion awaiting discussion in the House of Commons.

THE ROYAL COLLEGE OF PHYSICIANS.

At the extraordinary meeting of the Royal College of Physicians of London, which was held on Thursday last week, a letter was read from the Royal College of Surgeons,

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announcing the acceptance by the Council of that body of the scheme for co-operation with the College of Physicians in conducting examinations. The representative of the College in the General Medical Council was requested to apply to that body for its sanction to the co-operation agreed to by the two Colleges. The report of the Committee on the Medical Act Amendment Bill, which we published last week, was considered, and, after much discussion, adopted without alteration. The following amendment was moved on Clause 5 of the report:—"That the College is not prepared, without further consideration, to surrender the privileges and powers which it has enjoyed for centuries, and exercised for the benefit of the public and the profession. That a committee be appointed for the purpose of conferring with the Government, and reporting the results to a future meeting of the College." The amendment was negatived by, we understand, a very large majority. The College then resolved—"That a committee be appointed with power to take all needful steps for obtaining such amendments in the Medical Act Amendment Bill as will embody the recommendations agreed to by the College"; and the committee appointed were—the President, the Registrar, the Second Censor (Dr. Andrew Clark), Sir Risdon Bennett, Sir William Gull, Drs. Quain, Barclay, Maudsley, Ord, and Norman Moore.

THE ROYAL COLLEGE OF SURGEONS.

At a quarterly meeting of the Council of the Royal College of Surgeons of England, held on Thursday, the 12th inst., the minutes of the extraordinary meeting, held on 4th inst., were read and confirmed. Mr. John Tomes, M.R.C.S., F.R.S., and Professor T. H. Huxley, M.R.C.S., F.R.S., were balloted for election to the Fellowship of the College, under Clause 5 of the Charter of 15 Victoria, relating to members of the College of twenty years' standing, and were both elected. The Jacksonian Prize of the College was awarded to Mr. Anthony Alfred Bowlby, F.R.C.S., Curator of the Museum of St. Bartholomew's Hospital, for his essay on "Wounds and other Injuries of Nerves: their Symptoms, Pathology, and Treatment." Mr. Bowlby was admitted a Fellow of the College of Surgeons on June 9, 1881; he is a son of the well-known and highly respected *Times'* correspondent who was so cruelly murdered by the Chinese some years ago.

FATTY HYPERTROPHIC CIRRHOSIS.

It seems we are to add yet another to the long list of diseases that may attack the liver. We gather from an article in the *Progrès Médicale* (No. 9, 1883) that henceforth we must consider fatty hypertrophic cirrhosis to be distinct from any of the forms of cirrhosis hitherto described. Let us very briefly see what are the characters which thus separate it from the other forms. The liver is very large, being so altered in its transverse and vertical diameters as to appear more cuboid in shape than usual; it has, moreover, a pasty feel and yellowish colour; its surface is smooth; Glisson's capsule may be thickened in places, and its prolongations can be traced with the naked eye into the substance of the liver. On section the liver seems to be composed of fatty nodules, varying in size, more or less circular, and almost always completely surrounded by connective tissue. In some places the increase of connective tissue is enormous. Under the microscope the various lobules can be seen to be quite distinct; in their midst are the hepatic cells, separated by, and dotted about amongst, the large fat cells. These fat cells are nothing else than the ordinary hepatic cells enormously distended with oil globules. The essential feature of the lesion is that between these groups of fat cells there is always found to be a layer of young connective tissue. The overgrowth of connective tissue commences in the portal spaces, spreading thence between the lobules; it extends always to the sub-lobular veins, and sometimes surrounds the minute bile-ducts, producing an apparent resemblance to the ordinary hypertrophic cirrhosis. The symptoms of this affection in an early stage present nothing characteristic; pain and weight in the epigastrium, anorexia, nausea, occasional vomiting, are the more common ones. The second stage usually commences rather abruptly; very often there is fever, œdema of the limbs or face, a sense of great oppression, or profuse sweats: these may all make their appearance at the same time. Sometimes there is subacute peritonitis or slight icterus and cough with blood-stained sputa. On examination of the abdomen, the liver will be found to be enlarged; or, if it cannot be made out, there will be an unusual degree of fulness in the epigastrium and a slight amount of ascites. Signs of pulmonary phthisis will generally be present. This second period does not usually last more than four or five weeks. There may be deceptive remissions, but the ultimate result is always the same; and the patient dies sometimes of his phthisis, sometimes from cachexia, and sometimes with the symptoms of icterus gravis. There are two points to be borne in mind in the consideration of the etiology of this disease, viz.:—1. The patients are invariably alcoholic; and, 2. They are nearly always tuberculous. The prognosis is most unfavourable, and no particular line of treatment is recommended.

PRESENTATION PORTRAIT OF MR. ERNEST HART.

On Tuesday, the 10th inst., a large gathering of well-known medical practitioners in London and the provinces, of naval and military medical officers, and of men prominent in various spheres of social activity and usefulness, met at Grosvenor House for the purpose of presenting a portrait of Mr. Ernest Hart to his wife, "in recognition of his many and valued services rendered to the profession at large, and especially to the Army and Navy Medical Services, and the influence which, during twenty-five years, he has exercised on sanitary and social progress, the advancement of the welfare of the sick poor, and the cause of public health." The portrait, which has been painted by Mr. Frank Holl, R.A., is considered to be a fine work of art and a striking likeness. The presentation was made at Grosvenor House by express permission of the Duke of Westminster, who desired to preside on the occasion. In his unexpected but enforced absence Mr. Spencer Wells occupied the chair. Some five hundred persons were present. The proceedings were of a highly complimentary and enthusiastic character, and altogether the occasion was one of which Mr. Ernest Hart and his wife may well be proud.

THE EUROPEAN ARMY OF INDIA IN 1881.

The *Indian Medical Gazette* for March contains a useful abstract of Dr. Cunningham's statement of the health of the army in 1881, contained in his eighteenth annual report. The year 1881 was on the whole a healthy one. During it the strength of the European army of India was 58,172, 35,901 serving in Bengal Presidency, 10,391 in Madras, and 9895 (excluding troops in Afghanistan) in Bombay. The admissions into hospital of the whole force amounted to 1604 per 1000 of strength, the constant sick to 69, the deaths to 16·86, and loss by invaliding to 38; and although the figures indicating sickness are high, yet the mortality and invaliding are less than in former years, owing to the better sanitation and greater care for the health of the soldiers. The diseases to which the majority of deaths was due were—cholera (2·33), enteric fever (2·64), apoplexy (1·48), hepatitis (1·60), dysentery (1·72), and remittent and continued fever (0·75). Chest diseases gave a death-rate of 1·76, and phthisis of 0·75. Cholera

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prevailed more severely in Bengal than in Madras and Bombay, the rates being 3·23, 1·73, and 0·30. The disparity of deaths from enteric fever in the three Presidencies is very marked—2·62 for Bengal, 0·58 for Madras, and 2·83 for Bombay. The death-rate among the women of the army was 25·93, and among children 69·04. The death-rate among officers was 18·85 per 1000.

THE CONTAGIOUS DISEASES ACTS.

On Tuesday, the 17th inst., a very numerous deputation had an interview with Lord Derby, at the Colonial Office, in order to urge upon him, as Colonial Secretary, the desirableness of abolishing the Hong-kong Contagious Diseases Acts Ordinance. The Right Hon. J. Stansfeld, M.P., introduced the deputation; and various gentlemen assailed Lord Derby with the usual arguments employed against the Acts. Dr. E. Whittle took upon himself to state that in a sanitary sense the Acts have been failures, though he admitted that the majority of his professional colleagues did not agree with him. Lord Derby, in reply, gave the deputation some good common-sense advice. He pointed out that what they had to do was not so much to convert him, or the Government, as to convert the majority of the House of Commons. They must convert the public and Parliament, and all the rest would follow. After noting some of the points they had to consider—as the sufferings entailed by the diseases on innocent children—he said: "The medical evidence is, to my mind, exceedingly important. If you can really prove that these Acts, passed for the one object of doing away with or indefinitely lessening certain evils, have not accomplished that object, you will have made out your case, because it is solely upon that justification that the case in favour of the Acts has rested. However, as the gentleman who spoke on that subject admitted, the majority of the medical profession have not taken the same view as he has; and I observe that the majority of the Committee of the House of Commons, which may be presumed to be fairly and impartially selected, did not take that view either. When I find the system prevailing at home, I cannot undertake to sweep it away in the colonies. Colonial legislation will follow that of England. What I have to do is to refer you to the House of Commons." He had, in view of a probable Parliament discussion on the Acts, sent the amended ordinance from Hong-kong back for a thorough investigation and report. When it comes back again, it will probably be known what view Parliament takes; and till then he could not say anything more decided on the subject.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

On Wednesday, April 4, a meeting of this Society was held at University College, Gower-street, Surgeon-General John Murray in the chair, when a paper was read by Dr. G. B. Longstaff, entitled "Phthisis, Bronchitis, Pneumonia: are they Epidemic Diseases?" of which an abstract will appear in our pages. In the discussion which followed, Surgeon-General Murray, Brigade-Surgeon Scriven, Dr. Thorne Thorne, Dr. Mahomed, Dr. Heron, and Mr. Shirley Murphy took part. Surgeon-Major J. B. White read some comments by Surgeon-General De Renzy, and added some observations of his own on the subject.

THE METROPOLITAN ASYLUMS BOARD MEETING.

The usual fortnightly meeting of the Managers of the Metropolitan Asylums Board was held on Saturday last, when a letter was read from the Local Government Board, approving of the proposal of the Managers to provide an ambulance steamer at an estimated cost of £4500. A letter was also read from the Fulham Board of Works, reporting that there had been an outbreak of typhus fever at Nazareth House, a largely inhabited, charitable Roman Catholic institution in Hammersmith; and the Medical Officer of Health for the Fulham district further reported that a number of the Sisters of Mercy and many of the children under their care had been affected; and the children had been removed to the Fulham Hospital. That asylum containing, however, only typhoid fever and scarlet fever cases, the children were transferred to Stockwell. There had been seventeen cases before any report was made of the outbreak. One of the nurses of the Fulham Hospital had also taken the disease, and her case terminated fatally. The report concluded by recommending that the house in question be placed under proper sanitary regulations. Sir E. H. Currie said, from the report of their own officer, Dr. Sweeting, the patients received were filthy in the extreme, and infested with vermin; one was flea-bitten to such an extent as to greatly impede the diagnosis. There had been some sixty children ill before the outbreak had been notified to the medical officer. The house in question, Nazareth House, was extremely dirty and ill-ventilated and overcrowded, and as the Local Government Board had no power to deal with the matter, he moved that a representation be made to the Home Secretary on the subject. It was ultimately agreed that copies of the different reports should be sent to the Home Secretary. The return of fever patients in the several hospitals of the Managers for the past fortnight showed a decrease of thirty in the total number remaining under treatment. The total number of small-pox patients was eighty-four, or a decrease of fourteen on the aggregate for the previous two weeks.

THE PARIS WEEKLY RETURN.

The number of deaths for the fourteenth week of 1883, terminating April 5, was 1312, and of these there were from typhoid fever 27, small-pox 9, measles 31, scarlatina 1, pertussis 11, diphtheria and croup 44, erysipelas 5, and puerperal infections 8. There were also 66 deaths from tubercular and acute meningitis, 250 from phthisis, 57 from acute bronchitis, 145 from pneumonia, 72 from infantile athrepsia (29 of the infants having been wholly or partially suckled), and 39 violent deaths. The number of deaths much exceeds the mean of the last four weeks. The births for the week were 1353.

THE NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

The annual general meeting of the above Association was recently held at Manchester, Dr. W. H. Hughes, Ashton-under-Lyne, presiding. Dr. J. M. Fox (Mid-Cheshire) was elected President for the ensuing year, and delivered an address, in which he reviewed the position and attainments of sanitary work. Speaking of the official position of medical officers of health, he objected to the attitude of the Local Government Board with regard to the notification of infectious diseases, as unwise. The authoritative declaration was, and had been, that any place which desired power for compulsory notification could have it, but that the Local Government Board were not prepared at present to make the provision compulsory upon every subdivision and sanitary district in the country. It had always appeared to him that the question had been allowed to receive a very serious and obstructive complication from its being made a material part of the arrangement that the information should come from the medical attendant, and he affirmed that it was not necessary to import the medical attendant into the question at all. He suggested the desirableness of enlarging the functions of the offices already existing, such as those of the

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registrars of births and deaths, and the relieving officers, rather than the creation of fresh machinery. The notification of sickness that had been of the most service to him in the course of his experience as a medical officer of health had always come from registrars or relieving officers. He afterwards referred to the question of hospitals for the treatment by isolation of infectious diseases.

VOTE OF THANKS TO DR. SEATON.

At a meeting of the Health Committee of the borough of Nottingham, held on December 8, 1882, the following resolution, which had been prepared by the Town Clerk, was moved by the chairman, seconded by the vice-chairman, and carried unanimously:—"That this Committee desires to record its sense of the tact, judgment, and energy displayed by Dr. Seaton, the Medical Officer of Health for this borough, in dealing with the recent outbreak of small-pox. He has secured compliance with the provisions of the local Act requiring notification of infectious disease, and has induced a large number of persons to be vaccinated. He has also succeeded in carrying out the necessary means for proper isolation and for removal to hospital of the sick, where necessary, by persuasion and without recourse to legal proceedings. The Committee desire to record their high appreciation of the manner in which this has been done by the Medical Officer of Health, assisted by Mr. Richards, the chief Inspector of Nuisances, whose services are deserving of the warmest praise."

SUPPOSED DEATH FROM NITRITE OF AMYL.

Our attention has been called to an inquest held in the early part of this year at Hong-kong in a case where it was thought by some that the patient had died from the effects of nitrite of amyl. Briefly, the facts are these: A certain Captain Lee, who was suffering from phthisis, and had been told so by several medical men both in Hong-kong and elsewhere, consulted an American practitioner named Fisher, who told him that he was suffering from an affection of the heart, and that there was nothing wrong with his lungs; and gave him some nitrite of amyl to keep by him. [At the inquest Dr. Fisher said he had found signs of disease of the lungs on percussion of the patient's chest, but from the evidence of Captain Lee's acquaintances there can hardly be any doubt that he had been led by Dr. Fisher to believe that there was nothing wrong with his lungs, and his spirits had risen proportionately.] A short time afterwards he was found dead in his bed one morning, having gone to bed, it was believed, in his usual health. Dr. Clouth, who was called in, found the body lying in the normal position of a sleeping man. There was a handkerchief in the right hand, and three bottles containing nitrite of amyl were found in the saloon adjoining the cabin. In these circumstances Dr. Clouth declined to give a certificate of death, and the coroner ordered a post-mortem examination. This was made by Dr. Marques, in the presence of Dr. Clouth and Dr. Wharry. Extensive phthisis was found, there being cavities in both apices. As regards the state of the heart the witnesses did not quite agree, two of them stating that the left ventricle was empty; but Dr. Wharry (who admitted that he was not present when the heart was opened) said that the left ventricle contained some blood. The valves and muscular substance were found to be natural. These witnesses were practically agreed that death had been due to heart failure, and that this was not accounted for by anything found at the autopsy. Dr. Fisher in his evidence said that he had treated the patient for angina pectoris, that he had found a murmur over the heart indicative of mitral regurgitation, and he had given the patient seven drachms of nitrite of amyl, with instructions for its inhalation. In his opinion the patient had died from angina pectoris. The worth of this witness's opinion may be inferred from the fact that he explained that in mitral regurgitation there was disease of the mitral valve, causing regurgitation into the left ventricle! In the end the jury returned an open verdict; and we do not see how they could have done otherwise, for although it was quite possible that deceased might have died from the effects of nitrite of amyl, it was also equally possible that he might have died from the effects of chloral. Absolute proof in either direction was impossible. One thing, however, is certain, and that is, that nitrite of amyl should always be labelled "poison," and that full and minute directions for its use should be written on the label before the bottle is given to a patient. Of course, the actual quantity that is entrusted to a patient must be determined by circumstances and the requirements of his ailment. By a remarkable coincidence, the *Overland China Mail*, which announces the termination of the inquest, also contains a report of the introduction of a Bill into the Legislative Council for the registration of medical practitioners in the colony. It proposes to establish a register which shall include all medical officers in the Army and Navy in the colony, all persons now in the colony entitled to practise under the Imperial Act, 21 and 22 Vic., cap. 9, all persons registered in any other British colony, and other persons holding diplomas or licences from other bodies where the mode of examination and granting such diploma or licence is held to be satisfactory by a medical board which the Bill also proposes to establish. The unfortunate case to which we have been alluding above shows the urgent need of some such measure, and cannot but facilitate its speedy acceptance by the Legislative Council.

VOLUNTEER MEDICAL CORPS ORGANISATION.

A large and influential meeting in connexion with this organisation was held in the Charing-cross Hospital on April 11. Surgeon-Major Evatt, A.M.D. (the Chairman), read a paper pointing out the advantages to be derived from the formation of a Volunteer Medical Corps on the principle of the Army Hospital Corps. He also suggested that medical students should be trained in ambulance work and form an integral part of the corps. Dr. Platt proposed—"That in the opinion of this meeting it is desirable to form a Volunteer Hospital Corps." Dr. Shepherd seconded the proposition, and the following spoke in favour of the same:—Lieut. Maclure, Dr. Squire, Mr. Crookshank, Mr. Casson, Mr. John Furley, and others. Mr. Cantlie proposed—"That a provisional committee, consisting of surgeons representing the London hospitals, surgeons representing the regular and auxiliary forces, and others, be formed to carry the resolution into effect." Dr. Platt seconded the motion. Dr. Maclachlan and others spoke in favour of it. Both motions were unanimously carried. We understand that Lord Wolseley and other distinguished persons accord their hearty support to the scheme.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

A quarterly court of the directors of this Society was held on Wednesday, April 11, at 5 p.m., in Berners-street; Dr. Pitman, Vice-President, in the chair. Applications were read from fifty-eight widows, five orphans, and three orphans on the Copeland Fund, and the sum of £1227 was recommended to be distributed among them in July next. The expenses of the quarter were £40. The death of a widow was announced, whose first grant had been made in 1857,

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and who had received a total of £1056 10s. from the Society. Another widow no longer required assistance. Three new members were elected. It was resolved that the following gentlemen should be recommended for election, at the annual general meeting, as officers, to supply the vacancies occurring, viz.:—Dr. George Johnson, to be Vice-President, in the place of Sir Thomas Watson, deceased; Mr. Cooper Forster, Mr. Garman, Dr. Garrod, Dr. Grigg, Mr. Freeman, and Mr. Warrington Haward to be directors, in place of the six senior directors, who retire. It was also resolved that Mr. T. K. Upton, Honorary Solicitor, and Mr. John Croft, F.R.C.S., a benefactor, be recommended for election as honorary members. Legacies to the amount of £280 were reported as having been received since the commencement of the year—£200 (less duty) from Mr. Henry Sterry, Vice-President; and £100 from Mrs. Allnutt, part of a sum left by her late husband for charitable purposes. The annual general meeting was fixed to be held at 5 p.m. on May 16.

THE BERLIN POLICLINICAL INSTITUTION.

As a great many of their professional brethren will no doubt visit the Berlin Hygienical Exhibition, the physicians of the Berlin Policlinical Institution request us to direct attention to the fact that clinical lectures are regularly given at the Policlinical Institution, in that city, on otology, rhinoscopy, dermatology, electro-therapeutics, syphilitic affections, neuro-pathology, ophthalmology, etc. Each course of lectures commences on the first of the month and lasts thirty days. The Institution is situated in the Louisenstrasse, No. 51, opposite to the Charity Hospital.

DEATH OF DR. VAN BUREN.

Dr. William Holme van Buren, who for many years has been one of the most prominent teachers of anatomy and surgery in New York, and in the enjoyment of a wide consultation practice, died on March 25, in the sixty-fourth year of his age, after a long illness which supervened on a slight stroke of paralysis. His career had been both laborious and prosperous, and during the American war he impressed the authorities at Washington so favourably that he received the offer of appointment of Surgeon-General, which he declined. One of the most active practitioners in New York, he has left a well-known work on Diseases of the Rectum and a text-book on Diseases of the Genito-Urinary Organs.

TRANSIENT PARALYSES IN ASSOCIATION WITH PARTIAL EPILEPSY.

Some very carefully investigated cases of this association will be found in the *Revue de Médecine* for March, recorded by M. Dutil. The class of cases referred to are those which are familiar to us in this country from the writings of Dr. Hughlings-Jackson, where a person has a convulsive seizure localised to one side of the face or one or both limbs on the same side of the body, followed by a transitory loss of power in the part convulsed, the loss of power lasting from a few minutes to a day or two. It is important not to confound this class of cases with those where a permanent hemiplegia is associated with attacks of partial epilepsy, such being always cases of destructive brain-lesion within the motor area. The group of cases under consideration do not result from a lesion in the motor area; they may be due to lesion somewhere in the neighbourhood of the motor area, or even to a peripheral lesion. M. Dutil accepts Dr. Hughlings-Jackson's view that the paralysis in these cases is due to temporary local exhaustion of that portion of the brain which has been the seat of the discharging lesion, but, curiously enough, he does not see his way to applying the same reasoning to ordinary cases of epilepsy, and refuses to consider the state of complete resolution which supervenes on an epileptic seizure as a total paralysis. The practical point to be gathered from this study—and it is a very important one—is, that if a person dies with some paralysis not long after a convulsion, and no gross lesion of the brain is found, we are not to conclude that there is no truth in the doctrine of cerebral localisation, as the case may be one of partial epilepsy. We cannot help thinking that a good many of the cases recorded by the older writers, which have been quoted as proof of the non-existence of any special motor regions in the brain, would probably receive a correct interpretation by being classed as cases of partial epilepsy associated with transient paralysis.

The Queen has been pleased to confer the honour of Knighthood upon Professor Frederick Augustus Abel, C.B., F.R.S., in recognition of the valuable services rendered by him to the War Department, and to other departments of the Government, in his capacity of Chemist to the War Department.

Her Majesty has also been pleased to confer a similar honour upon Dr. William Siemens, F.R.S., D.C.L., LL.D., who is eminent in almost every branch of applied science, and who is at present President of the British Association for the Advancement of Science.

It is announced that the Prince of Wales will open the Princess Alice Memorial Hospital, Eastbourne, during the month of June next.

It is understood that the Government have appointed Mr. E. H. Osborn, Inspector of Factories, and Dr. Bridges, of the Medical Inspectors' Department of the Local Government Board, to act as a Special Commission for the purpose of inquiring into the effect of the process of oversizing cotton goods upon the health of the operatives so engaged.

At a meeting of the Council of the Poor-law Medical Officers' Association, held on April 3, a vote of sympathy was unanimously accorded to Mr. Whitwell, of Shrewsbury, on his enforced resignation of the post of Medical Officer of the Atcham Union Workhouse.

It is reported that Mrs. William Overend, of Sheffield, has presented the munificent sum of £10,000 to the Sheffield General Infirmary.

The Library of the Royal College of Surgeons of England will be closed on Friday, April 20, for the purpose of the examinations.

Death of a Remarkable Dwarf.—Mrs. Burnell, a remarkable dwarf who has been on exhibition in nearly all the leading museums of the United States, died at New York last Saturday, in the twenty-seventh year of her age. She was born at Richmond, Vermont, in 1856, her father being a dwarf, but her mother a woman of the ordinary size. In January, 1880, she was married, and in September Dr. Elliott Richardson, of Pennsylvania, successfully performed the Porro-Müller Cæsarian operation upon her, and reported the case in the *American Journal of Medical Science*, January, 1881. Her child, through careful nursing, developed into a strong boy, and he has been her constant attendant at the museum at which she has been exhibiting. He is now two years and a half old, and is nearly as large as his mother, who at the time of her death (from Bright's disease) was thirty-nine inches in height, and weighed forty pounds.—*Philadelphia Medical News*, March 3.

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MEDICAL MATTERS IN PARLIAMENT.

HOUSE OF COMMONS—MONDAY, APRIL 16.

The Artisans' Dwellings Act, 1882.—Sir R. Cross again asked the Home Secretary what the Commissioners of Sewers are doing under the Artisans' and Labourers' Dwellings Act, 1882, towards insuring the building of suitable accommodation on the ground cleared under the Act of 1875.—Sir W. Harcourt, in reply, stated that the delay in the matter had been due to the fact that the Commissioners of Sewers, in December last, submitted a scheme which was not considered entirely satisfactory, and the Home Office could not sanction it. On the last day of February last they submitted a second scheme; and that also was not satisfactory. On the 10th inst. a third scheme was submitted, which it was found possible to adopt. There would be no further delay in the matter.

Post-mortem Examinations.—Mr. Blake asked the Chief Secretary to the Lord Lieutenant of Ireland as to the correctness of a statement, "At a meeting of the Governors of the Limerick Lunatic Asylum a letter was read from the Lord Lieutenant, forbidding in all cases post-mortem examinations of lunatic patients, even when ordered by coroners at inquests"; and, if correct, would he say why such an order had been issued, and whether a like order had been sent to all other district asylums in Ireland.—Mr. Trevelyan, in reply, said: The paragraph quoted states only a part of the case, and is therefore misleading. What his Excellency has expressed his disapproval of is, not the holding of a post-mortem examination, but the conducting of such examination by the resident medical officer of the asylum in which the patient died. It is conceivable that a case might arise in which the chief officer of an asylum might be to some extent blamable for the death of a patient, and it therefore appears desirable that whenever a post-mortem examination is considered necessary, it should be conducted by an independent medical authority.

London Water-Supply.—Mr. Frith asked the President of the Local Government Board whether his attention had been directed to the fact that every month reports by London analysts on the character of the London water, purporting to be addressed to him, were widely circulated; although, as stated in the House last year, they were neither authorised nor paid for by the Local Government Board, but were authorised and paid for by the London water companies.—Sir Charles Dilke said that it was a fact that the reports alluded to were not made under the authority of the Local Government Board. He agreed with his hon. friend in thinking that such reports, purporting to be addressed to the President of that Board, are misleading; and he should expect that after that expression of opinion they would be discontinued.

TUESDAY, APRIL 17.

Glanders in the Bengal Cavalry.—Dr. Cameron inquired whether the Under-Secretary for India could inform the House as to the extent to which glanders had affected, on its voyage back to India and since then, the Bengal Cavalry regiment which carried the disease to Egypt.—Mr. Cross replied that a report on the subject had been called for from the Government of India. That Government had telegraphed that their report would be despatched by next mail.

Contagious Diseases Acts.—Mr. Tottenham asked the Secretary of State for War whether he would lay upon the table a return of admissions, for diseases referred to in the Contagious Diseases Acts, of soldiers in the fourteen protected and all unprotected stations in the year 1881.—Sir A. Hayter replied that the return asked for had been just laid upon the table, and the printing of it should be hastened as much as possible.

HYDROPHOBIA IN PARIS IN 1882.—At the last meeting of the Conseil d'Hygiène Publique, the report on the subject of hydrophobia stated that the number of cases of rabies had greatly diminished in 1882. While there were 156 persons bitten in 1881, there were only 66 in 1882; and the cases of hydrophobia, which were 23 in 1881, diminished to 11 in 1882.—*Gazette Méd.*, April 7.

FROM ABROAD.

PRIZES AND PRIZE-QUESTIONS AT THE ACADÉMIE DES SCIENCES.

AT its annual public meeting, held on April 2, the Academy announced the awards it had made of prizes for 1883. We can only notice those which have relation to medical science; but both these and those appertaining to other branches of science are published in the *Comptes-Rendus* of the above date, accompanied by the reports of the various committees appointed for recommending the awards, and which are accompanied by the reasons for their decisions, stated sometimes at considerable length.

In the section of *Anatomy and Zoology* no awards were made for the Grand Prix and the Savigny Prize. The *Thore* Prize was adjudged to M. André for his monograph on the Tenthrédinidæ, forming part of his work on the Hymenoptera of Europe and Algeria; and the *Gama Machado* Prize, awarded for the first time, has been adjudged to M. Hermann, of Lille, for an important memoir on the Male Apparatus in Cartilaginous Fishes, and the exact determination of the mode of appearance and development of Spermatozoa in these vertebrates. In *Medicine and Surgery*, a Montyon Prize has been given to Dr. Maillot for his works on the Fevers of Hot and Marshy Countries; another Montyon Prize is given to Drs. Dieulafoy and Krishaber for their researches on Inoculation of the Ape with Tubercle; and a third to M. Hayem for his recent work, Modification of the Blood under the Influence of Medicinal Agents and Therapeutical Procedures. "Honourable mentions," with sums of money, have been awarded to MM. Gréhant and Quinquaud for their memoir on the Mensuration of the Quantity of Blood in the Living Animal; to Dr. Girard-Teulon, for his Vision and its Anomalies; and to M. Mégnin, for his work on Parasites and Parasitic Diseases in Man and in Domestic and Wild Animals. "Honourable citations" are accorded to M. Borius for his Diseases of Senegal; to M. Cadiat for his treatise, General Anatomy applied to Medicine; to MM. Dubar and Rémy for their Absorption by the Peritoneum; to M. Fournié for his First Aid to the Wounded on the Field of Battle; to M. Gavoy for his Atlas of the Topographical Anatomy of the Brain and of Cerebral Localisations; and to M. Léloir for his Structure of the Different Affections of the Skin, and the Influence of the Nervous System in their Production. No reward, as usual, has been made of the *Bréant* Prize for the discovery of the cure of Asiatic Cholera, but the interest of the prize (5000 francs) is adjudged to MM. Arloing, Cornevin, and Thomas for their memoir on Inoculation as a Prophylactic in Symptomatic Charbon. The *Godard* Prize is given to M. Reclus for his two works on Tubercle and on Syphilis of the Testis. The *Lallemand* Prize, for encouragement of works on the Nervous System, is adjudged to Drs. Bourneville and Regnard for their Photographic Iconography of Salpêtrière. And "honourable mentions" are awarded to M. Lamarre for his work on the part taken by the Nervous System in Affections of the Heart; and to M. Liegeois for his Neuropathy of the Heart and the Respiratory Apparatus. The *Montyon* Prize in *Experimental Physiology* is adjudged to Prof. Dastre, of the Paris Faculty of Science, for his memoir on the Physiological Action of Sugar of Milk, a "honourable citation" being awarded to M. Delaunay for his memoir on the Influence of Nutrition in Poisoning by Strychnia. The *Cuvier* Prize has usually been awarded to distinguished foreign naturalists, and so it continues to be in 1882, having been decreed to Prof. Oscar Heer, of Zürich, for his important researches in Palæontology, which have been carried on during half a century.

Among the large number of prize-questions proposed in almost every branch of scientific investigation, we may notice the following from their bearing on Medicine:—1. The *Grand Prix des Sciences Physiques* for 1883 (a medal, 3000 fr. in value)—"The Histological Development of Insects during their Metamorphoses." The same prize for 1884 has for its subject "The Mode of Distribution of Marine Animals on the Shores of France." 2. The *Bordin* Prize for 1883 (a medal of 3000 fr.)—"Researches relating to the Botanical or Zoological Palæontology of France or Algeria." 3. The *Thore* Prize for 1883 and 1884 (200 fr.), on alternate

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years, "The Cellular Cryptogams of Europe" and "The Habits or Anatomy of some species of European Insect." 4. The *Gama Machado* Prize of 1885 (a medal of 1200 fr.), to be awarded to the author of the best memoir on "The Coloured Portions of the Tegumentary System of Animals," or "The Fecundating Material of Animated Beings." 5. *Montyon* Prizes in *Medicine and Surgery* will be annually awarded to the authors of the works regarded as of most utility to the art of healing or in the discovery of the means of rendering occupations less injurious to health. 6. The *Bréant* Prize, of 100,000 fr., to be awarded for the discovery of the cure, complete prophylaxis, or cause of Asiatic Cholera; and, until this has been awarded, the interest of the prize is to be annually given to those who have most advanced our knowledge of cholera or other epidemic diseases, or have discovered a radical cure for *dartres*. 7. The *Godard* Annual Prize (1000 fr.), for the best memoir on the Anatomy, Physiology, or Pathology of the Genito-Urinary Organs. 8. The *Serres* Triennial Prize (7500 fr.), to be awarded in 1884 for the best memoir on "General Embryology applied, as far as possible, to Physiology and Medicine." 9. The *Chaussier* Prize of 10,000 fr. will be awarded in 1883 to the author of the work which seems most to have advanced medicine during the preceding four years, whether as regards Legal Medicine or Practical Medicine. 10. The *Dusgate* Quinquennial Prize (2500 fr.) will be awarded, for the second time, in 1885 to the author of the best work on the "Diagnostic Signs of Death, and the means of Preventing Premature Interments." 11. The *Lallemand* Annual Prize (1800 fr.) will be given for the recompense and encouragement of works relating to the Nervous System in the largest acceptation of the words. 12. The *Montyon* Prize in *Experimental Physiology* (750 fr.) will be annually awarded for the best printed or manuscript work on the subject. 13. The *Lacase* Prizes (10,000 fr. each) will be adjudged in 1883 to the author of the works or memoirs which have most contributed to the progress of Physiology, Physics, and Chemistry. 14. The *Cuvier* Triennial Prize (1500 fr.) will be adjudged in 1885 to the author of the most remarkable work on the Animal Kingdom or Geology which may have appeared between January 1, 1881, and December 31, 1884. [All works or MS. memoirs are to be sent in on or before June 1 of the respective years.]

The Paris Hospice des Enfants Assistés.

In consequence of a debate in the Académie de Médecine, originated by Dr. Marjolin, the Minister of the Interior somewhat more than a year since appointed Drs. Lunier and Foville to make a thorough inspection of the Hospice des Enfants Assistés, and the report which they have just issued is pronounced by the *Gazettes Médicale* and *Hebdomadaire* to be an able and exhaustive document, suggesting the most radical changes in the organisation and partial reconstruction of the Hospice—which fortunately stands on grounds spacious enough to admit of any desired improvements. During the decennial period 1872-82 the Hospice has admitted annually from 5500 to 9700 children; and, as many of these make but a very short stay, the movement is active, so that there are from twenty to thirty admissions and discharges daily; the mean population being from 300 to 350 children, their ages varying from a few days to twelve years and upwards. In 1881 there were admitted 1758 below one month; 906 from one month to one year; 591 from one to two years; 1367 from two to six years; 1628 from six to twelve years; and 576 above twelve years. The children taken altogether present a mortality of 16·6 times higher than that of Parisian children of the same age in the ordinary conditions of life. Dr. Lunier states that 40 per cent. of the deaths are caused by non-contagious diseases contracted for the most part by the children before admission; and of the 60 per cent. who succumb to contagious affections, and especially to measles and diphtheria, 44 per cent. enter the infirmary during the first twelve days, which allows of the supposition that the greater portion of them were already contaminated when they entered the Hospice. But a third of the children at least who died contracted their fatal contagious diseases in the Hospice itself.

In 1880 the Académie de Médecine opposed with almost violence a project of the Municipal Council for the establishment of a nursery for artificial suckling of a portion of the children. This was carried out in 1881, and the results have been satisfactory. Goats and asses were tried, but the former have been abandoned. At present five she-asses are employed, their foals accompanying them, their presence being necessary to keep up the secretion of milk. Each ass will suckle three infants, who are so held by the nurses as to suckle conveniently from the teats. When the three infants have had their meal, the foal sucks what remains, receiving also additional food. The infants suckle five times during the day and three times in the night, absorbing at each suckling from thirty to two hundred grammes of milk. This mode of suckling is confined to syphilitic infants. Formerly, these were brought up by the bottle, and almost the whole of them died. Since they have been suckled by asses 70 per cent. have been saved. The reporters recommend that the number of asses should be greatly increased.

GENERAL CORRESPONDENCE.

THE SUBCUTANEOUS INJECTION OF NITRO-GLYCERINE.

[To the Editor of the Medical Times and Gazette.]

Sir,—I was lately attending a case of remittent fever of a low type, in which I had determined to use quinine by hypodermic injection, as well as by large doses during the remission. By mistake a bottle containing a 1 per cent. solution of nitro-glycerine was substituted for the quinine solution, and thirty minims of this was injected into the patient's arm. The mistake was not discovered till the following day. During the interval I saw the patient four times, and not the slightest unusual symptom appeared to attract the attention either of the patient, myself, or his attendants. When I discovered the mistake that had been made, I was astonished at the absence of any serious effects of it. There was but slight irritation of the arm at the point of injection, which soon passed away. No symptoms attributable to nitro-glycerine had been observed, and I concluded the solution was worthless. There remained a little over half an ounce; this I sent to be analysed, and from it three drops of nitro-glycerine were obtained and exploded. It was therefore evident that there was nothing wrong with the solution, which I had been using in a case of angina with apparently good effect. I am at a loss to understand this want of action in a drug that is reported as having such powerful effects when taken even in very small doses; and as I can find no mention of its having been tried hypodermically either in man or beast, I desire to record the circumstance. The patient is now in good health.

I am, &c., Medicus.

[From inquiries we have made, we have not been able to learn that nitro-glycerine has ever been injected under the skin as a method of treatment.—Ed. *Med. Times and Gaz.*]

A CASE FOR GENERAL SYMPATHY.

Letter from H. C. Burdett.

[To the Editor of the Medical Times and Gazette.]

Sir,—May I venture to direct the attention of the medical profession to the sad case of Dr. Hurford, the circumstances of which are set forth at length in the annexed statement:—

"The sympathy and assistance of members of the medical profession, and of benevolent persons in general, are earnestly solicited by the friends of Dr. Cedric H. Hurford; and, in making known the following facts, it is hoped that many may see their way to help the unfortunate family in their distress. Cedric Herbert Hurford, M.D., B.A., Trinity College, Dublin, aged thirty-four, filled the office of House-Surgeon for five years at Dr. Stilwell's Asylum, Hillingdon, and in 1880 he obtained an appointment in the British Guiana Medical Service, and, having married, proceeded to Demerara. At the expiration of two years and a half, through the ill effects of the climate, he became mentally deranged, was compelled to resign his appointment, and, with his wife, to return to England. After three months' detention at Bethlehem Hospital he apparently recovered and was discharged. Subsequently, with the assistance of friends, he furnished a house and purchased a small practice; but soon again his mind gave way, and it became necessary to place him a second time in Bethlehem Hospital, and to break up the recently acquired home. The opinion of the medical men at the institution is that he will never be fit for his work again. He and his wife are entirely without means, and there are two children, one aged two years, and a baby nine months. Dr. Hurford's father has but a small Government pension, three of his sisters earn their livelihood as governesses, while his wife has only

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a mother with very limited means. It is proposed to raise a fund which will, it is hoped, suffice to provide a home for the family upon whom this crushing blow has fallen. Cheques may be paid into the National Provincial Bank of England (Limited), to the credit of W. Cuthbert Quilter and Samuel Lovelock, for the Hurford Fund."

Dr. Hurford's case has been brought before Earl Derby, who has consented to refer it to the Governor and Council of British Guiana, with the view of ascertaining if a special grant can be made. The Colonial Office, however, point out that the prospects of a grant of even £20 being made are not good, because these appointments are conferred upon medical men on the understanding that they have no claim for pension, and in Dr. Hurford's case much expense has already been incurred by the colonial authorities. My excuse, if excuse be needed, for directing the attention of the medical profession to Dr. Hurford's case is its peculiar and exceptional sadness. A capable, earnest, and robust worker is suddenly cut off from his career by an attack of what is probably general paralysis of the insane, which renders him unfit for duty, though in the prime of life, which makes it impossible that he shall ever again contribute to the support of his family. Thus, by an act of Providence, which Dr. Hurford was powerless to anticipate or provide against, a whole family is left in distressing circumstances, and, unless those who have and to spare will come forward and lend a hand, the result must be sad indeed.

I will only add that the Medical Benevolent Fund has given a donation of £20; other friends about £150, in sums of half a guinea and upwards; and that I shall be glad to receive and acknowledge any contribution, however small, towards the fund which is now being raised for Mrs. Hurford and the children.

I am, &c.,

HENRY C. BURDETT.

39, Gloucester-road, Regent's-park, N.W., April 11.

CHLORAL HYDRATE AS A VESICANT.—In a communication to Dr. Gaillard Thomas, Dr. Ritter states that he accidentally discovered, three years ago, that chloral hydrate is possessed of prompt and active vesicant action far surpassing that of cantharides. To obtain this, he sprinkles the powdered chloral on some adhesive plaster, and exposes it to a heat sufficient to cause the plaster to adhere to the skin. In about three minutes a gentle heat is felt, which increases in intensity for another three minutes, and then gradually passes off, so that at the end of ten minutes the parts are free from pain. If the plaster is then removed, as effectual a denudation of surface is found to have been produced as by a blister in six hours. It does not require dressing, for the original plaster may be kept on until the sore heals, when the plaster loosens and comes off. —*New York Medical Journal*, March 24.

COLLEGE GYMNASIUMS.—No one who has visited the magnificent gymnasium at Harvard College will hesitate to listen to anything that Dr. D. A. Sargent, its director, has to say as to physical education in colleges; and no one will rise from reading his article in the February number of the *North American Review* without approval of his views, founded, as they are, on reason and common sense. Some facts that he gives surprise us. The maximum of time for physical education required in the best of our colleges is but four hours and a half a week, and that for only a small part of the year. At Harvard, Princetown, Yale, and Cornell, less than 5 per cent. of the students are rowing men. Not over 10 per cent. of college students pay any attention to physical education, and less than 6 per cent. do it systematically. That their development is lop-sided is no wonder, the athletes running chiefly to muscle, and the scholars to mind. Each alike forgets that a symmetrical development of both is necessary to make a complete man. The remedy Dr. Sargent proposes is simple, sensible, and efficient. It is—(1) a good gymnasium, (2) that physical exercise should be a required study throughout the course, and (3) that there be an instructor, who ought to be a college graduate, a gymnast, and a doctor. He should have competent authority in this department, adapt the exercise both in kind and degree to the individual student, and keep systematic records of the progress of each student. Those who know the value of the "Sargent system" will appreciate what immense service such a course would be to the physically neglected young men in our colleges.—*Phil. Med. News*, March 17.

PROVINCIAL CORRESPONDENCE.

MANCHESTER.

April 18.

THE MEDICAL CHARTER OF THE VICTORIA UNIVERSITY: PROBABLE REQUIREMENTS FOR THE NEW DEGREES—MANCHESTER MEDICAL SOCIETY: ROSS'S CASE OF RUPTURE OF THE BRACHIAL PLEXUS.

THE immediate promise of a Medical Charter for the Victoria University took the University authorities themselves by suprise. Not having been let into the secret any more than anybody else, they were naturally somewhat at a loss to account for their unexpected good fortune. The appearance of the Government Medical Bill a few days later explained the mystery; it was obviously desirable that before the publication of a Bill which recognised the right of the Victoria University to confer degrees in medicine, the University should be in actual possession of the charter granting that right. One effect, however, of this unlooked-for haste on the part of the Government is in many respects to be regretted. In fulfilment of an understanding with the authorities of the University College of Liverpool, the promoters of the supplementary charter had intended to obtain, if possible, the insertion of certain additional clauses, by which from the date of the charter professional study at any college not yet affiliated would, if affiliation took place within three years, be held to qualify equally with attendance at the Owens College itself for admission to medical degrees. The charter having, however, been prepared and agreed to in its original form, it was found impracticable to press the proposed alterations. It has been explained to Liverpool that there has been no intentional breach of faith on the part of Manchester, and the Council of the University still hopes that a way may be devised by which the wishes of the Liverpool teachers can be met.

Speculation is now, of course, rife as to the requirements for the new degrees. It may at once be stated that as the Medical Board of Studies has not yet been appointed, no definite scheme has been decided upon or even discussed. It is pretty well understood, however, in the first place, that the standard of qualifications will be a high one, and that the degrees will not be much, if at all, inferior to those of London, though they will differ somewhat in character. It is, further, quite certain that no candidate will be admitted to examination for the degrees who has not received part of his professional education at a college of the University. Only in this way can it be insured that the training of the candidates shall have been of a satisfactory and efficient character. The examinations for the degree of Bachelor of Medicine are intended to be three in number, including a preliminary examination in science, and there is a strong feeling that long intervals between the successive examinations should be avoided or, at any rate, not made absolutely compulsory. There is another important point in which it is probable that the example of the University of London will not be followed—namely, in requiring candidates for the Doctor's degree to pass a further examination. It is felt that it will be a stimulus to original work to demand for the doctorate the presentation of a thesis of real merit, embodying the results of personal observation or research. Should it be decided to include a surgical degree in the scheme, it may be regarded as certain that candidates will be required to give evidence of solid surgical attainments, and that, unlike the C.M. of the Scotch universities, it will not be "thrown in" with the M.B. for the mere purpose of bestowing a registrable qualification in surgery.

Several external examiners are to be appointed, who will be associated with the examiners selected from the professors and lecturers of the University. Any suspicion of undue leniency of a teacher to his own pupils will in this way be avoided, while the co-operation of members of the University staff will insure to candidates an examination which shall be within the scope of the opportunities of instruction that have been afforded them. The election of external examiners is now being proceeded with, in order that a Board of Medical Studies may be formed, and regulations agreed upon and published with the least possible delay. Amongst other matters with which this Board will

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have to deal will be the question whether certain extra facilities should not be granted in the case of former students of the Owens College, who, having already become qualified practitioners, may now be desirous of obtaining the degrees of the Victoria University. Such an act of grace would not be without precedent.

At the last meeting of the Medical Society, Dr. James Ross showed a boy of seventeen who had ruptured his brachial plexus in a mill accident eight months previously. The left arm was caught between a strap and a revolving wheel, and the whole body lifted from the ground and carried round to the opposite side. When the shock had passed off the left arm was found to be powerless, as it has since remained. All the muscles of the upper arm, forearm, and hand are completely paralysed and atrophied. The latissimus dorsi and the lower two-thirds of the pectoralis major muscles are also paralysed and atrophied, while the upper third of the pectoralis major and the pectoralis minor, as well as the external and internal rotators of the humerus, are unaffected. The nerves of the brachial plexus give no electrical reaction. Faradic contractility is lost in the affected muscles, while galvanic contractility is increased. Sensation of all kinds is abolished in the hand, in the forearm (with the exception of one small patch near the elbow), and in the lower half of the front of the upper arm. There are also symptoms proving implication of the sympathetic: thus, the left pupil is smaller than the right, the palpebral fissure more contracted, and the eyeball less tense. In remarking upon the case, Dr. Ross said he had no doubt that at least the eighth cervical and first dorsal nerves, and the anterior roots of the fifth cervical nerve, were ruptured; and he considered it most probable that the sixth and seventh cervical, and the posterior roots of the fifth, were likewise involved. In a clinical lecture, published in the *Medical Times and Gazette*, March 26, 1864, Sir James Paget mentions two cases of rupture of the brachial plexus, and instances have since been recorded by Seeligmüller and Mr. Jonathan Hutchinson, but the accident remains one of extreme rarity and interest.

Rheumatism as a Neurotic Disease.—In the *Philadelphia Med. News*, of February 24, Dr. Webster Smith communicates an interesting and rare example of a case of acute articular rheumatism occurring in a child two years and a half old. Commenting on the case, the editor observes that, "Dr. Smith very acutely says that the question of cerebro-spinal meningitis was considered in making up the diagnosis. The joint-changes which ensue in cases of meningitis have been described by Prof. Charcot and others. The late Prof. J. K. Mitchell advocated the neurotic origin of rheumatism, and his son, Dr. Weir Mitchell, has published many observations proving the dependence of joint-changes on spinal and nerve lesions. It is now, indeed, established that changes in the joints, which cannot be distinguished from those of acute rheumatism, occur in cases of disease of and in lesions of the spinal cord, the membranes, and the nerve-trunks. This admitted, the case of Dr. Smith may be regarded from this point of view. The joint inflammation, the hyperpyrexia, the opisthotonos, and the muscular (choreic) spasms, the whole concluding with coma, may be regarded as due to a common factor—meningitis. Whether one or the other view be taken, the case admirably illustrates the remarkable correspondence between acute rheumatism and certain spinal affections, and goes far to prove their community of origin. This admitted, acute rheumatism becomes not merely an inflammation of the fibrous tissues, but a neurotic affection.

Alcohol from Smoke.—The latest instance of the utilisation of waste products is that effected at Elk Rapids, Michigan, with the gaseous matter given forth by a blast furnace in which are manufactured fifty tons of charcoal iron a day. In the case to which we refer, the vast amount of smoke from the pits, formerly lost in the air, is now turned to account by being driven by suction or draught into stills surrounded by cold water, the results of the condensation being—first, acetate of lime; second, methyl alcohol; third, tar; the fourth part produces gas, which is consumed under the boilers. Each cord of wood produces 29,000 cubic feet of smoke, 2,900,000 feet of smoke handled in the twenty-four hours producing 12,000 lbs. of acetate of lime, 200 gallons of alcohol, and 25 lbs. of tar.—*Louisville Med. News*, March 17.

REPORTS OF SOCIETIES.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

Friday, March 16.

Dr. Wm. Moore, President of the Section, in the Chair.

The Hæmorrhagic Diathesis.

Dr. Fraser read a paper mentioning some instances of serious bleeding following trifling injuries, and then described two cases of sudden death from sanguineous apoplexy occurring in individuals who had previously suffered from bleeding of the nose, lungs, etc.

Dr. Henry Kennedy related a fatal case of purpura, in which the post-mortem examination revealed an extensive effusion of blood over the surface of the brain; and he referred to Latour's observations on hæmorrhage.

Dr. Cox referred to a gentleman, the subject of hæmorrhagic diathesis, in which a chill appeared to be invariably the exciting cause of the hæmorrhage. In this case there was a well-marked family history of the diathesis.

The President mentioned a case of an old lady who suffered from severe epistaxis, and shortly afterwards became completely demented.

Dr. Fraser, in reply, said that he introduced the first two cases merely to show that he was not overlooking the subject of hæmorrhagic diathesis. In such cases the blood was very watery; but in the case of the gentleman pointedly alluded to, he never saw better clotting blood. The hæmorrhage in his case was not produced by chill, but he appeared to form more blood than was required, and this was eliminated by nose, lungs, or kidneys.

Muscular Spasm.

Dr. R. McDonnell showed to the Section a patient, a young man, aged twenty-two years, whose right arm was subject to muscular spasms. The patient was a sailor by trade, and had been since he was eleven years old more or less hard at work at this occupation. The spasmodic jerkings of the muscles, which interfered with his occupation, began about seventeen months ago, and after the first three months became so violent that he had to give up work altogether. The case was one of functional spasm unaccompanied by pain, and was an affection very similar to writers' or scriveners' cramp, although all the muscles supplied by the brachial plexus were probably affected, and those around the shoulder-joint, especially the great pectoral, seemed to be most so. The treatment consisted in regular, orderly, and rhythmical movements of the limb, as was so successful in a very similar case reported by Dr. G. V. Poore in the *Practitioner*, September, 1872.

Dr. Foot said that this man had been under his care for a considerable period, during which time there was a marked improvement in his symptoms. He did not consider it at all a wonderful case. He thought it was analogous to other cases, such as telegraphists, milkers, violin and pianoforte players. He was not aware that it differed from several cases recorded by Dr. Frank Smith, of Birmingham, which was a centre of nail-making. He never thought there was any approach to chorea, as when in bed the muscles were perfectly quiet.

Dr. Henry Kennedy remarked that Dr. Harley had succeeded in curing similar cases by large doses of a. conii—ʒij. at a single dose.

The President and Dr. C. F. Moore having also taken part in the discussion,

Dr. McDonnell replied. He said that there were two points raised by Dr. Foot in reference to the case. First, there was no difference of opinion as to the nature of the case, which belonged to the category of scriveners' palsy, but differed from the tremor of piano players, etc. His case also differed from those of Dr. Frank Smith, in not having general paralysis. Dr. Smith's cases bore no relation whatever to scriveners' cramp, or hammer-cramp. The second point was that Dr. Foot did not seem to think that the case belonged to chorea, because the patient was quiet at night. But so far as his (Dr. McDonnell's) experience went, in any except the most exaggerated cases of chorea the movements were entirely stopped during sleep.

The Section adjourned.

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THE CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 13.

ANDREW CLARK, M.D., President, in the Chair.

REMOVAL BY INTERNAL OPERATION OF A PIN FROM THE LARYNX OF A BOY AGED THIRTEEN, IN WHICH IT HAD BEEN IMPACTED THIRTEEN MONTHS, AND HAD CAUSED TEMPORARY FIXATION OF THE LEFT CRICO-ARYTÆNOID ARTICULATION.

DR. FELIX SÉMON read notes of this case. The patient was a boy aged thirteen, who, on November 25, 1881, held a pin head foremost between his teeth, when, during the act of laughing, it slipped to the back of his tongue. In his endeavours to get it out he pushed it still further down, and it became fixed in the left side of his throat. No immediate serious symptoms followed, but during the next twelve months he had several paroxysms of pain in the left side of his throat, difficulty of swallowing solids, and spasmodic cough. These attacks were separated from each other by perfectly free intervals; they got, however, more and more severe, and finally on two occasions short and slight paroxysms of dyspnœa were associated with them. The boy was then (October 30, 1882) brought to St. Thomas's Hospital, and admitted under Mr. Sydney Jones, who examined him under chloroform, and felt the point of a pin through the mucous membrane of the lower part of the pharynx on the left side. Dr. Sémon then made a laryngoscopic examination, which resulted in the discovery that the pin was not, as had been so far supposed, impacted in the œsophagus, but in the larynx, and that its point only projected into the gullet. The point, vividly contrasting in colour with the surrounding bright red mucous membrane, was seen to project about one-eighth of an inch out of the arytænoid end of the left ary-epiglottic ligament in close proximity to the base of the left arytænoid cartilage. All the parts in its immediate neighbourhood (left border of the epiglottis, left ary-epiglottic fold, and left arytænoid cartilage) were seen to be considerably tumefied, and the left arytænoid cartilage remained immobile during phonation and respiration. The voice was perfectly normal; there was no dyspnœa. Mr. Sydney Jones consented to attempts at internal removal being made before an external operation was resorted to. After removal of the excessively large tonsils, and after short preliminary practice by means of the laryngeal probe, the boy tolerated the introduction of instruments, and on December 26, 1882, Dr. Sémon succeeded in seizing, under the guidance of the laryngeal mirror, the pin with a pair of lateral serrated forceps, and extracting it. Its length was found to be one inch and a quarter. There was no reaction after the operation. Four days afterwards it was ascertained by laryngoscopic examination that the immobility of the left arytænoid cartilage formed a prominent feature, and the epiglottis being much better elevated after than before the operation, it was seen that both left arytænoid cartilage and left vocal cord remained, on attempted inspiration, immobile in the position of phonation. There was no dyspnœa, though the glottis only opened to half its normal breadth. On the other hand, on attempted phonation, the right vocal cord completely joined its immovable left companion, and the voice was perfectly normal. The boy was dismissed on the fifth day after the operation from the hospital. Dr. Sémon remarked that as yet successful extraction through the mouth of foreign bodies after so long an impaction, and after the production of such considerable lasting changes in the larynx as were observed in this case, had been but rarely reported. Apart from this there were two other points of intrinsic interest in the case. The first was the fact that without any sign of a suppurative process ever having taken place during the time of impaction of the foreign body, yet chronic and important changes had been produced, which distinctly pointed to an inflammation of the perichondrium having formed part of the inflammatory paroxysms spoken of in the history of the case. The process which, in his opinion, had led to these changes was an adhesive perichondritis, the existence of which form of inflammation, so far as the laryngeal cartilages were concerned, was scarcely mentioned or even admitted in text-books on diseases of the larynx, but to which he had already (in 1880) drawn attention in a paper on the subject, published in the *Medical Times and Gazette*. The second and, perhaps, most important point was the fact that so great a change as complete immobility of one-half of the larynx had been produced, and endured for months, without the slightest alteration in either voice or respiration drawing attention to the larynx. Dr. Sémon wished to urge this point, not only for the sake of this individual case, or of joint affections of the larynx, but with regard to a point of still greater importance, namely, the diagnosis of not only laryngeal, but also cerebral and thoracic diseases. He had shown elsewhere ("Archives of Laryngology," 1881) that there existed a distinct proclivity of the *ab*ductor fibres of the recurrent laryngeal nerve to become affected sooner than the *ad*ductor filaments, or even exclusively in cases of acute or chronic, central or peripheral lesions, which affected apparently either the whole of the centres or the whole of the trunks of the motor nerves of the larynx. In such cases the laryngeal changes would consist in an immobility of the vocal cord, the muscles of which are supplied by the affected nerves, in the phonatory position, *i.e.*, in the position occupied by the left vocal cord in this case. It was evident that a similar absence of all symptoms, subjective and objective, might attend such a neuropathic change as existed in this case, in which the immobility was due to mechanical causes; and the natural conclusion from this was that the absence of all abnormal phenomena did not justify the inference of a perfect integrity of the parts; in other words, that limiting the examination of the larynx to those cases only in which certain symptoms imperiously demanded its inspection meant, possibly, depriving oneself of a very important and valuable aid in arriving at a positive diagnosis.

In reply to the President, Dr. SÉMON said that he did not think there would be complete reparation, and that no local application would be of value.

ERYTHEMATOUS ERUPTION IN ENTERIC FEVER.

Dr. WHIPHAM related the particulars of two cases lately under his care in St. George's Hospital, in which an eruption resembling that of scarlatina occurred. The first was in a cabman, aged thirty-six, who had been addicted to drink, but who for twelve months previously to his admission had been a teetotaler. The fever symptoms had commenced fourteen days before, but the bowels had been regular and the motions natural. On admission the man complained of sore-throat and headache, and had a bright erythematous eruption on the trunk, legs, and arms. The right tonsil was much swollen. His tongue was thickly coated, his pulse 128, and his temperature nearly 105°. Next day the eruption was more marked on the arms and legs, and had extended to the feet. On the third day after admission the patient became very restless and delirious, and the bowels, which had been up to this date obstinately constipated, were opened freely by a purge. The diarrhœa thus set up, though somewhat moderated towards the last, continued more or less up to the time of the man's death, *i.e.*, four days after his admission. No typhoid eruption was present. At the autopsy extensive ulceration of Peyer's patches was found. The second case was that of a child, aged four, who was received into hospital on October 6, 1882. He had already suffered from scarlatina, measles, and whooping-cough. Feverish symptoms manifested themselves on the day before his admission, and when he came under observation his temperature was 104·2°, pulse 120. His tongue was red at the tip and edges, and the papillæ protruded from a central white coat. On the day after his admission a red eruption was noticed on the child's legs, and he was therefore isolated. Next day the erythema had greatly extended, and was very brilliant. The tonsils were red and swollen. The bowels were constipated. On October 10 (four days after admission) the eruption had faded considerably. The bowels remained inactive, and a purge of Carlsbad salt was administered, which acted freely. On the 11th the red eruption had disappeared. On the 13th the temperature reached 105°, and the pulse 132. The child was delirious and had fits of screaming. The bowels acted once after castor oil, the motion being partly formed, and of a clay colour. On October 17, characteristic spots of enteric fever appeared, but there never was desquamation at any time. From this date the symptoms were clearly those of enteric fever, and the child died on the nineteenth day after admission. The post-mortem examination revealed extensive ulceration of Peyer's patches and great swelling of the mesenteric glands. Dr. John Harley, in *Medico-Chirurgical Transactions*, vol. lv., gives twenty-eight

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cases in which scarlatina was accompanied by swelling of Peyer's patches, but in only two of which ulceration was found, and also a second series of six cases in which scarlatina preceded enteric fever, and further narrates three cases of "mixed scarlet and enteric fever." He also quotes two similar cases recorded by M. Forget. Dr. Murchison says that in many cases of enteric fever the characteristic eruption is preceded by a delicate scarlet rash, and adds that "this is not peculiar to enteric fever, but occurs in other forms of pyrexia." Sir W. Jenner, speaking of a red rash in enteric fever, says that the disease was mistaken for scarlatina. Dr. Whipham had lately seen a case of variola which was preceded by erythema of the abdomen and thighs. The question is, are these really cases of double poisoning, of mixed scarlet and enteric fevers? The absence of desquamation, and the fact that an erythematous eruption is not uncommon in variola, pyæmia, and other forms of pyrexia, led to the conclusion that they are really instances of enteric fever preceded by erythema, and not mixed cases of scarlatina and enteric fever.

The PRESIDENT asked what explanation could be given of the increased rate of breathing, and what was the probable cause of death in the cases described.

Dr. MAHOMED said that he had seen roseolous eruptions precede several cases of typhoid fever. In the majority of these instances there was a subsequent desquamation of a trivial character. As an exception, however, he had met with a case of enteric fever in which the desquamation was almost as perfect and as free as in a typical instance of scarlet fever. He was in the habit of speaking of four rashes which occurred during the progress of typhoid fever —roseola, rose spots, *taches bleuâtres*, and miliaria. Similar red rashes had been observed to precede nearly all forms of specific fever. Their occurrence was well known in cholera and variola; they had been observed occasionally in typhus.

Dr. CAVAFY thought that rashes of an aspect quite similar to those of scarlatina possessed a very wide range of occurrence. There were the various rashes produced by drugs of different kinds, also those found in association with slight surgical fever, puerperal fever, menstruation. It must be regarded as probable that in all these instances there was some common bond of connexion; this was probably an irritation of the nervous system either by direct traumatic influence or through the blood. In scarlatina he supposed there was paralysis of the vaso-motor centre, due to the action of the poison. In the traumatic eruptions there was immediate irritation of a peripheral nerve. He related an outline of a case that he had communicated to the Clinical Society, in which salicylate of soda seemed to have called forth a remarkable group of symptoms: sore-throat, scarlatiniform rash on thorax, circumscribed erythemata on backs of hands and extensor surfaces of forearms. The rash faded in a day, and the erythema passed on to the formation of herpetic vesicles. Finally there was desquamation of the arms, indistinguishable from that occurring after scarlet fever. The ingestion of quinine has been known to be followed by the development of a scarlatiniform rash. Surveying the subject generally, it would, perhaps, be best to regard the matter as still in abeyance. At all events, he knew of no certain means by which to distinguish such erythemata from true scarlet-fever rash.

The PRESIDENT quite agreed with Dr. Cavafy that the nervous system was operative in the production of the erythemata in question. On examination of the chest of nervous females a diffuse red injection was seen in about seven out of ten cases, especially when the observation was made in front of the window with plenty of light. He was in the habit of recording the various forms which this erythema assumed, and thought that an explanation must be sought in the temperaments and habits of the patients. He was familiar with the presence of the scarlatiniform rash appearing in the actual course of typhoid fever, and had, rightly or wrongly, attributed these to a special affection of the nervous system. He had seen them most frequently in anomalous cases in which the nervous system was specially involved.

Dr. BROADBENT was well acquainted with the delicate erythema which so frequently ran before typhoid fever, but he certainly would never confound this with a true scarlet-fever rash. When a well-marked scarlatinal rash came out in any part of the course of enteric fever he always regarded t as evidence of a concurrence of the two separate diseases. He had seen all forms of combination between scarlatina and enteric fever. Dr. Mahomed had recited one case this evening, and he assuredly regarded Dr. Whipham's first case in the same light. He had lately shown at the Harveian Society a man of weak constitution with decided loss of tone, in whom an erythematous eruption, not at all unlike a syphilitic roseola, appeared every time the patient was stripped. There was in addition a marked *tache cérébrale*, and the muscular irritability was highly marked, each tap causing a well-developed local contraction.

The PRESIDENT added that the erythema medicorum, or doctor's rash, of which he had spoken, sometimes lasted thirty-six hours.

Mr. HERBERT PAGE stated that Hebra had described the cutaneous eruptions as preceding many acute specific diseases, and especially small-pox. Mr. Page had seen an acute papular eruption occupy a large surface of the body and fade away prior to the appearance of an abundant confluent rash on the face of a severe case of small-pox, in which the patient died about the ninth day. He also mentioned a somewhat similar antecedent which happened in one of his own children.

Dr. WHIPHAM, in reply, said that he had brought the cases forward rather with the view of eliciting the opinions of members as to what was the proper course to be adopted. He thought Dr. Cavafy's suggestion to isolate the patient in a separation-ward was the right proceeding. He rather came to the conclusion that his second case was not scarlatina, because the brilliant red eruption had not been followed in nineteen days by desquamation. He had nothing to say against the view that scarlet fever and typhoid were frequently concurrent, as Dr. Broadbent held.

A CASE OF LATERAL CURVATURE OF THE SPINE, ILLUSTRATING ITS TREATMENT WITHOUT THE USE OF MECHANICAL SUPPORTS.

Mr. BERNARD ROTH, F.R.C.S., brought this case forward. The treatment employed has been described in the *British Medical Journal* of May 13, 1882. The following is a summary of that paper:—1. The importance of noticing osseous deformity, if any, of the spine and ribs, and whether the patient can be at once restored to the normal position, and if not, to what extent. 2. If even slight osseous deformity be present, complete cure is impossible. 3. Even severe cases of lateral curvature often have no osseous deformity and can be at once temporarily restored to a normal position. 4. A patient with confirmed curvature, with or without osseous deformity, is so habituated to the vicious position that his attempts to improve the spine increase the deformity unless instructed by the surgeon. 5. Exercises of the spinal muscles with or without resistance by the surgeon while the patient is in the improved position are absolutely necessary. 6. Good positions should be assumed at all times, especially in sitting, by means of suitable chairs. 7. Moderate walking is beneficial. 8. Lying prone or supine is not curative, as the spinal muscles are not strengthened by it. 9. All spinal supports, where the patient can by an effort maintain an improved position of the spine even for a few seconds, are injurious or useless. 10. Swinging by the head does not strengthen the spinal muscles. 11. By avoiding all vicious positions, by good ones being shown and maintained, and suitably prescribed exercises carefully practised, better and quicker results are obtained than by any other treatment hitherto proposed. *Case.*—Miss W., aged eighteen, a student at the London Academy of Music, was first seen on March 4, 1882, with this history:—Up to four years ago strong and well, then without any apparent cause she began to stoop and have backaches. Becoming gradually worse, a hospital surgeon of Brighton examined the spine, and, finding curvature, ordered the patient to lie down for two hours daily. At the end of a year, as the patient became worse, an ordinary steel support with arm crutches was ordered. This had been worn for two years, the patient having become more deformed and suffering more. On examination, the patient presented confirmed lateral curvature, the whole spine being convex to the left, the right scapula more than two inches below the left, with considerable exaggeration of the cervico-dorsal antero-posterior convexity, causing poking of the head, flat chest anteriorly, and undue prominence of the abdomen. There was slight permanent rotation to the left of the lumbar vertebræ, and slight

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increase of the convexity of the left ribs posteriorly. The patient, although so apparently deformed, could be placed in an almost normal position, and maintain it by a great effort for a few seconds. The spinal support was ordered to be left off completely, and a few simple exercises shown. December 8: The patient was seen for the second time. No change had occurred in the state of the spine. On December 20 six photographs were taken, three of which show the posterior, lateral, and anterior views of the patient in her habitual position; the remainder the corresponding views in the best possible position in which Mr. Roth could place her. The contrast between the two sets of photographs is very marked. The improved position always feels very unnatural at first, as in this case. It is maintained that no instrument yet invented can put or keep a patient in the improved position as shown in these three photographs. The prognosis was that she could be so strengthened by three months' daily treatment that this temporary improved position involving such great effort when the photographs were taken, would become a permanent one without any effort, and that all pain would disappear; that is, practically, a complete cure, although a slight permanent rotation of the lumbar vertebræ would remain. On December 23 she began daily treatment. The same prescription of exercises as that quoted from the *British Medical Journal* was used. On January 13 the patient passed the whole day without backache for the first time for two years, and on January 16 the dressmaker had to widen her dress five inches across the chest. Her family notice a decided improvement in her position at home. Her appetite is much better, especially at breakfast. Since January 20 the patient has been practising a prescription of which the "keynote" is a position with the right arm directed upwards, the left arm outwards, while the spine is rotated to the right and slightly flexed laterally to the left. The patient has continued to improve up to the present time, and there is every reason to expect that the prognosis of a practical cure at the end of three months' treatment will prove a correct one. Measurements of the arcs of the different curves in a case of lateral curvature are misleading if a note be not also taken of the improvement which can be effected by the patient's voluntary effort properly directed by the surgeon. Lastly, rough and ready gymnastic treatment, such as advising a patient to swing on a trapeze with one hand higher than the other, or to use a skipping-rope, is not to be compared in efficiency with systematic localised exercises (medical gymnastics) while the patient is placed in the improved position. The latter combined with attention to the avoidance of all injurious positions during the day constitute the most successful and rapid treatment of lateral spinal curvature.

The young lady, the subject of the lateral curvature, was exhibited, and went through the various phases of the "medical gymnastics," which had been practised with the view of bringing about a cure. The muscles, when in action in the different movements, came out very strongly. The case seemed to have undergone marked improvement. Photographs taken by the instantaneous method were exhibited, and demonstrated the various attitudes of the patient.

A Case of Tabetic Arthropathy in which the Tarsal Bones of both Feet were involved.

Mr. Herbert Page read the following account:—This case was originally shown in the museum for living specimens at the International Medical Congress. The patient was a man aged thirty, who, in October, 1880, began to have swelling of his right leg and ankle. The foot gradually increased in size, and when first seen in February, 1881, there was great enlargement in the region of the tarsal bones, which were freely movable on one another in any direction. A month later, broken corns appeared on the sole, with an ulcer on the big toe. These sores were absolutely painless, as, indeed, was manipulation of his foot—a circumstance which led to the discovery that the patient was the subject of tabes dorsalis, the knee-jerk being absent, and the pupils presenting the "Argyll-Robertson phenomenon." There was no ataxia in gait. While under observation the left foot became affected in a similar way to the right, very rapidly and without pain. Four years previously he had severe lightning pains down the limbs, and two years before he had an illness called "nervous debility," of which the most noticeable feature was profuse vomiting every day for nine months, which began and ended quite suddenly without known cause as to its origin or its termination—a true gastric crisis. Attacks of a similar kind have occurred since the patient has been under the author's observation, and each of them has begun with severe rigor, and been marked by the passage of large quantities of blood in the urine, associated, at the same time, with profuse vomiting, diarrhœa, and increased lightning pains. The patient has now been free from these attacks for some months, and the swelling of the feet has subsided. The feet, however, are strangely deformed, owing to an alteration in the relative position of the affected bones. The other symptoms of tabes dorsalis remain the same, but there is still no ataxia. The history of this case having been given at considerable length, the author avoided speculation about it, expressing the belief that he should not do wrong to be content at present with the clinical study of the disease. He pointed out the rarity of this particular form of arthropathy, only one instance of which had been seen by M. Charcot. Though rare, it had, however, many features in common with the arthropathies affecting the larger joints. He laid stress on the practical importance of recognising these diseases in the surgical wards of hospitals where they are most likely to be found, the common symptoms of ataxia being often absent, and therefore rendering the diagnosis more difficult. One foot of his own patient would in all probability have been removed—so bad was it—had not the cause of the affection been accidentally revealed by the symptoms. The arthropathy has subsided, however, and left a useful, though deformed, limb. The occurrence of attacks of paroxysmal hæmaturia was a striking feature in this case, and the association thereof with the other symptoms of a crisis seemed to indicate that it was not less a symptom of the disease than the vomiting, the diarrhœa, and the joint affections. The history may therefore suggest a new line of observation and inquiry in the study of these cases of paroxysmal hæmaturia or hæmatinuria, whose cause and origin are so often obscure.

Dr. Althaus objected to the adjective "tabetic" on etymological grounds; it ought to be, he said, tabic or tabedosic.

Dr. Buzzard thought the remarks of Mr. Page anent the attacks of paroxysmal hæmaturia or hæmatinuria of much import. He had met with no similar case. It was possible that cases of apparently simple paroxysmal hæmoglobinuria were really the only manifestations of tabes dorsalis. He had frequently pointed out the remarkable association of the occurrence of the gastric symptoms and the arthropathies. This was illustrated by reference to the report of a recent case at one of the provincial medical societies. In this instance also there was evidence of a healed perforating ulcer of the foot. Quite recently he had met with an anomalous case in which the left big toe-nail had become the seat of an ecchymosis without any injury; this had caused the separation of the nail, and it turned out that precisely the same thing had happened last summer to the right big toe-nail.

Dr. Mahomed related a case of locomotor ataxy, in which the earliest symptom was atrophy of the optic discs; there were characteristic pains, but no ataxia. In this patient there was marked polyuria, as much as 180 ozs. being passed per diem of a specific gravity of 1004. The polyuria was not permanent.

Mr. Page, in reply, quoted some facts from an American thesis, in which spontaneous loss of nails and peculiar change of the toe-nails had been observed in a number of cases. Regnaud had also described recurrent attacks of nephritic colic closely simulating the violent attacks usually met with in cases of renal calculi. Dr. Buzzard's suggestion that paroxysmal hæmaturia might really be due to tabes dorsalis in some instances was further borne out by Mr. Page's case, for the man had distinct attacks of shivering, which, had it not been for the collateral facts, might have been attributed, as usual, to "cold."

Living Specimens.

Dr. Felix Sémon showed the case of a woman with Anchylosis of the Arytæno-Cricoid Articulations, probably of syphilitic origin. He also showed the boy from whom he had removed the pin; this patient had recovered to a great extent, so that the joint could not now be said to be anchylosed.

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Mr. Barker exhibited his case of Subperiosteal Amputation at the Hip-joint. The patient walked about the room with an artificial limb in a very satisfactory manner.

Mr. Clutton brought forward the child in whom he had cured a Spina Bifida by tapping and injecting the cyst with Morton's fluid.

The meeting then adjourned.

OBITUARY.

WILLIAM FARR, M.D., C.B., F.R.S., D.C.L.

We regret to have to record that Dr. William Farr, who for so many years rendered eminent service to the nation and to sanitary science as Superintendent of the Statistical Department of the Registrar-General's Office, died, at his residence in Maida-vale, on Saturday last, at the age of seventy-five years. Dr. Farr was born at Kenley, in Shropshire, in 1807; was educated at Dorrington and Shrewsbury; entered the University of Paris, and in 1831 proceeded to the University of London. In 1832 he was, for six months, House-Surgeon at the Shrewsbury Infirmary, and then settled in London as a practitioner and teacher of medicine. At this time he also undertook literary work, and was editor of the *Medical Annual*, and of the *British Annals of Medicine*. But from an early age he showed a strong taste and gift for statistical inquiry and the systematising of figures, and in 1838 he was appointed Compiler of Abstracts in the Registrar-General's office, where he organised the Statistical Department, and was made Superintendent of it, in which office he acquired world-wide fame. He assisted the Registrar-General in taking the Census in 1851, 1861, and 1871. He was an important and efficient member of the Royal Commission for inquiry into the Sanitary Condition of the Army in India in 1859, and he was sent by the Government to attend International Statistical Congresses held at various times in the chief capitals of Europe. He contributed many articles to medical journals, wrote the paper on "Vital Statistics" in McCulloch's "Statistics of the British Empire," supplied annual Official Reports on the Public Health, and on the Causes of Death in England (1837-75), and wrote on the "Finance of Life-Assurance," a "Paper on the Income-tax," a Report on the Cholera Epidemic of 1849, and parts of the Census Reports of 1851 and 1861. He contributed many papers to the Statistical Society of London; he framed a new statistical nosology; and he constructed the English life-tables, with values of annuities, and premiums for single and joint lives; and in 1859 he read a paper on the last subject before the Royal Society, describing the application of Scheutz's calculating machine to the purpose. In 1872 he was elected a Corresponding Member of the French Institute.

Such work as Dr. Farr did requires severe and continuous intellectual labour, but he was exceptionally well qualified for it. He had great brain power, and untiring industry; medical training; a logical mind, mathematical gifts, and very considerable administrative capacity; and he loved, and felt his own power for, the work that especially lay before him. When, at the end of 1879, he retired from public life, he had served for more than forty years in the Registrar-General's office, and to him, more than to anyone else, is due the present relatively great excellence of our vital statistics. The methods and system of tabulation, and periodical reports that he formulated, have been adopted in Europe and imitated in America. And his work outside the Registrar-General's office has been everywhere recognised as of the highest quality and the greatest practical value. He was so identified with the work of the Registrar-General's office, that very many of the public and the profession were surprised to learn that he was not, in fact, the Registrar-General; and when that post became vacant at the end of 1879, there was a general wish that he should be appointed to it. Dr. Farr's health had, however, been failing for some while, and he had been obliged to think of the advisability of retiring from public work on the ground of ill-health. The Government of the day felt therefore that it would not be wise to place him in another post of high responsibility. Dr. Farr then retired, and the fact that we have so soon to regret his death seems to approve the decision at which the Government arrived, though at the time it caused considerable disappointment, and excited much unfavourable criticism. On his retirement, Dr. Farr was awarded a somewhat exceptionally large pension, and received the distinction of the Companionship of the Bath—no great rewards, certainly, for such splendid and long-continued services as his were; but, as certainly, not poor rewards, considering the custom and usage of the English Government on like occasions.

MEDICAL NEWS.

University of Edinburgh—First Professional Examination.—The following is the official list of those gentlemen who have passed the First Professional Examination this month:—

A. R. Aldridge, J. A. Armitage, W. S. Armitage, J. W. Astles, O. R. Bain, G. A. Ballingall, W. H. Bansall, H. L. Barker, A. A. Bartholomew, Victor Black, G. M. Brown, James Brown, J. H. Bruce, W. J. Cameron, J. M. Campbell, J. J. Carson, R. L. Caunter, W. W. Chamberlain, P. P. Chetti, W. S. Counsell, Wm. Craig, A. J. Cross, F. E. Crossley, J. E. Davies, H. G. Dickman, Arthur Drury, Thomas Edwards, William Elder, L. G. Fischer, Alexander Fisher, T. H. Fiske, H. S. R. Freeborn, G. V. Gilroy, T. P. Gray (with distinction), J. A. Guthrie, F. J. Hart, J. T. Harvey, T. H. Hayton, F. W. Hennessy, J. R. Hill, Robert Howden, Samuel Hughes, C. W. Hunter, W. H. M. Ingham, G. L. Jenkins, E. J. Jennings, F. M. Johnson, J. J. Johnson, S. G. Kinloch, J. A. Kynoch, R. F. C. Leith, H. R. Littlejohn, Thos. MacDonald, Thos. MacGregor, C. R. M'Gaffin, T. M. Macknight, C. J. R. M'Lean, G. H. Mason, C. H. Melville, W. F. Menzies, S. H. Merryweather, A. van der Merwe, R. H. Mitchell, W. G. Mitchell, Wm. Murphy, Glenmore Osanne, F. G. Phillippo, E. E. Pringle, G. F. Rhodes, J. K. Robinson, Robert Robinson, J. G. da Rocha, Tennent Ronalds, J. R. H. Ross, D. H. Scott, K. M. Scott, F. R. Shepherd, A. W. Shields, R. B. Simmins, J. L. M. Smith, C. E. Southwell, W. C. Spiller, A. J. M. Stenhouse, K. T. Stewart, R. C. Strode, James Strother, G. A. Sutherland, W. H. Sutherland, J. W. Talent, Inglis Taylor, Wilton Evans Thomas, A. E. Thomson, J. K. Tomory, W. H. Turton, W. J. Visser, Henry Ware, Duncan Watters, J. A. Wetherell, J. H. Whiteside, J. C. Williams, James Wilson, W. C. Wilson, Andrew Young.

King and Queen's College of Physicians in Ireland.—At the quarterly examination for the Licence in Sanitary Science, held on Thursday and Friday, April 12 and 13, the following candidate was successful:—

Lane, Thomas, L.K.Q.C.P., 1883.

At the quarterly First Professional Examination, held on Monday, Tuesday, and Wednesday, April 9, 10, and 11, the following candidate passed:—

McGrath, Thomas Joseph.

At the usual monthly examinations for the Licences in Medicine and Midwifery, held on Monday, Tuesday, Wednesday, and Thursday, April 9, 10, 11, and 12, the following candidates passed:—

For the Licence to practise Medicine—

Boyd, Campbell, Tinahely, co. Wicklow.
Boyd, Shepherd, New Ross, co. Wexford.
Carr, Michael, Newtownsandes, co. Kerry.
Hall, Thomas Gibson Henry, Monaghan.
Hoey, Patrick, Dublin.
Hudsmith, Powell, Crosby, near Liverpool.
Kelly, Andrew John Garvey, Navan, co. Meath.
Lennon, Edward Emmanuel, Enfield, co. Meath.
McInerney, Thomas, Gort.
Mackenzie, Alexander, Linton, Bath.
McQuaid, Matthew Joseph, Cootehill, co. Cavan.
Morier, Charles George Drummond, Glasgow.
O'Brien, Henry Joseph, Villierstown, co. Waterford.
Ryan, James Dwyer, Dundrum, co. Tipperary.

For the Licence to practise Midwifery—

Boyd, Campbell.	Lennon, Edward Emmanuel.
Boyd, Shepherd.	McInerney, Thomas.
Carr, Michael.	McQuaid, Matthew Joseph.
Hall, Thomas Gibson Henry.	Morier, Chas. Geo. Drummond.
Hoey, Patrick.	O'Brien, Henry Joseph.
Kelly, Andrew John Garvey.	Ryan, James Dwyer.

At a special examination for the Licences in Medicine and Midwifery, held on Monday and Tuesday, April 2 and 3, the following candidate was successful:—

Morgan, George John, M.R.C.S. Eng., 1868, West Felton, Salop.

The following Licentiate in Medicine of the College, having complied with the by-laws relating to Membership, pursuant to the provisions of the Supplemental Charter of 1878, has been duly admitted a Member of the College:—

O'Reilly, George J., Licentiate 1875, Keswick, Cumberland.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology, at a meeting of the Board of Examiners on the 12th inst., and when eligible will be admitted to the pass examination, viz.:—

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Blachford, Jem, student of the London Hospital.
Booth, W. Henry, of St. Bartholomew's Hospital.
Bradbury, H. Kennersley, of the London Hospital.
Buisson, E. William du, of Guy's Hospital.
Cropley, Alfred, of the London Hospital.
Furnivall, Bryan, of St. Bartholomew's Hospital.
Godfrey, A. Edward, of St. Thomas's Hospital.
Goullet, C. Arthur, of University College Hospital.
Halstead, G. Exra, of Guy's Hospital.
Harris, P. R. Traer, of King's College Hospital.
Hughes, Morgan, of the Westminster Hospital.
Hutton, J. Stuart, of St. Thomas's Hospital.
Lawson, B. Sloane, of the Middlesex Hospital.
Loftus, A. Smith, of the Charing-cross Hospital.
Lynes, John, of the Charing-cross Hospital.
Rawes, William, of the London Hospital.
Renzi, A. Castriot de, of King's College Hospital.
Smithson, A. Ernest, of St. Bartholomew's Hospital.
Trevelyan, E. Fauriel, of St. Bartholomew's Hospital.
Warren, Sydney, of St. Thomas's Hospital.
Williams, T. Henry, of the Middlesex Hospital.

Out of the 222 candidates examined, thirty-four failed to acquit themselves to the satisfaction of the Board of Examiners in Anatomy and Physiology.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 16th inst., viz.:—

Barley, D. Henry, M.B. Durh., Sheffield, student of the Newcastle School.
Betts, J. Howard, M.D. Kingston, Kingston, Canada, of the Toronto School.
Bryant, S. Wm., M.B. Edin., Milner-square North, of the Edinburgh School.
Evans, O. Henry, L.K.& Q.C.P. Ire., Bodederin, Anglesey, of the Dublin School.
Hartley, Isaac, M.B. Durh., Beckermont, Cumberland, of the Newcastle School.
Johnson, G. Arthur, L.R.C.P., Watlington, Oxon, of Guy's Hospital.
Maxwell, P. Wm., M.B. Edin., Irvine, Ayrshire, of the Edinburgh School.
Money, P. Frederick, L.R.C.P. Edin., Lambeth-road, of University College Hospital.
Munckton, Alfred, L.S.A., Wimpole-street, of University College Hospital.
Rowland, J. Jones, L.S.A., Argyle-square, of the Charing-cross Hospital.
Smith, P. Couchman, L.R.C.P. Edin., Woburn, Beds, of St. Thomas's Hospital.
Vinrace, E. Dennis, L.S.A., Birmingham, of the Birmingham School.

Six candidates were approved in Surgery, and, when qualified in Medicine, will be admitted Members of the College; and ten candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies—seven for six months, one for nine months, and two for three months. The following gentlemen passed on the 17th inst., viz.:—

Floyer, F. Anthony, L.S.A., Putney, student of St. Thomas's Hospital.
Heald, Hugh. Liverpool, of the Liverpool School.
Herbert, J. W. Chambers, Swinton, of the Manchester School.
Johnston, G. David, Camberwell, of St. Thomas's Hospital.
Littlewood, Harry, Hempstead, Norfolk, of University College Hospital.
Marten, R. Humphrey, Wolverhampton, of University College Hospital.
Meyer, C. Hartvig L., Cape Colony, South Africa, of Guy's Hospital.
Pinching, G. Henderson, Gravesend, of St. George's Hospital.
Prnen, S. Tristram, Osborne-terrace, Isle of Wight, of the Newcastle School.
Thompson, C. Herbert, Lambeth, of St. Thomas's Hospital.
Williams, D. Lewis, Ferryside, South Wales, of the London Hospital.
Williams, J. H. Hywell, L.S.A., Haverfordwest, of Guy's Hospital.

Eight gentlemen passed in Surgery, and, when qualified in Medicine, will be admitted Members of the College; and four candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months, and two candidates for three months. The following gentlemen passed on the 18th inst., viz.:—

Bostock, J. Yates, B.A. Cantab., Onslow-gardens, student of St. Bartholomew's Hospital.
Braine, G. M. Panton, L.R.C.P., Belsize-park, of the Middlesex Hospital.
Cragg, W. Henry, L.R.C.P., Sydney, New South Wales, of the Middlesex Hospital.
Cresswell, Francis, L.R.C.P., Winchmore Hill, of St. Bartholomew's Hospital.
Humphreys, C. Style, L.S.A., Chichester-street, S.W., of Westminster Hospital.
Jordan, T. Luckman, Greenheys, Manchester, of the Manchester School.
Rudd, W. Edgar, Lee, S.E., of Guy's Hospital.
Vogan, J. Norman, L.R.C.P., Caterham, of St. Bartholomew's Hospital.
Whitcombe, P. Percival, L.S.A., Westbourne-green, of St. Mary's Hospital.
Winter, T. Bassell, L.S.A., Putney, of Guy's Hospital.

Four candidates who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were admitted Members of the College:—

Bentley, J. Whitehead, L.R.C.P. Edin., Manchester, student of the Manchester School.
Bloxam, W. Edward, L.R.C.P., Wimbledon Hill, of St. George's Hospital.
Groom, Harry, B.A. Cantab., L.S.A., Wisbech, of King's College Hospital.
Stone, Frederick W. S., L.R.C.P., Brighton, of St. Thomas's Hospital.

Five candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members. Seven candidates were referred for six months, and two for nine months.

Professional Examinations.—At the Pass Examination for the diploma of Membership of the Royal College of Surgeons, which was commenced on the 13th inst., there were ninety-four candidates, against sixty at the corresponding period last year. To these gentlemen the following questions on Surgical Anatomy and the Principles and Practice of Surgery were submitted, when they were required to answer four (including one of the first two) out of the six questions, between half-past one and half-past four, viz.:—1. Describe the operation of tying the external iliac artery, and state how the blood-supply to the limb is afterwards carried on. 2. Describe the anatomy of the parts concerned in the operations of tracheotomy, laryngotomy, and excision of the thyroid gland.—3. Give the differential diagnosis of ovarian dropsy, pregnancy, and ascites. 4. How do bones unite after simple and compound fracture respectively? Mention the chief causes of non-union. 5. Mention the various forms of urinary calculi, and the appearances and composition of each. 6. Describe the signs and symptoms of disease of the hip-joint in children. The following were the questions on Midwifery and Diseases of Women, when candidates were required to answer three out of the four questions, on the 14th, between half-past twelve and two o'clock, viz.:—1. What causes of danger to the mother are especially apt to complicate pregnancy and labour with twins? The first child of twins having been born, upon what rules would you act in interfering or not to accelerate the birth of the second? 2. What forms of insanity are met with in connexion with pregnancy and childbed? Describe the treatment. 3. In what circumstances is the operation of craniotomy indicated, and how would you complete the delivery when the head has been perforated? 4. Describe prolapsus uteri in its different stages, and state the treatment most suitable in each stage. The following were the questions on the Principles and Practice of Medicine to be answered the same day between half-past twelve and half-past four, when it was requisite to answer three of the four questions, including No. 4, viz.:—1. What are the symptoms, complications, modes of propagation, and treatment of scarlet fever? 2. Enumerate the chief forms of enlarged liver, and point out the characters by which they are severally distinguished. 3. Give the causes, symptoms, physical signs, and treatment of acute lobar pneumonia.—4. Mention the important ingredients in the following officinal preparations, and indicate their therapeutic actions and uses, with their doses:—Vinum antimoniale, mistura ferri composita, liquor hydrargyri perchloridi, pulvis kino compositus, tinctura camphoræ composita, mistura sennæ composita, pulvis elaterii compositus, pilula ipecacuanhæ cum scilla.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 12:—

Merrifield, Sydney Sargent, Gascoyne-place, Plymouth.
Short, Thomas Sydney, Edgbaston, Birmingham.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Best, William James, London Hospital.
Hearnden, Walter Carrington, Guy's Hospital.
Smith, Stephen Francis, London Hospital.

BIRTHS.

BENNETT.—On April 10, at Sunnyside, Moultan, India, the wife of Surgeon Major John Bennett, M.D., H.M. Bengal Army, of a daughter.

CADELL.—On April 12, at 4, Buckingham-terrace, Edinburgh, the wife of Francis Cadell, M.B., etc., of a son.

GRIFFITHS.—On March 26, at 1, Prince Alfred-terrace, Ireland Island, Bermuda, the wife of R. S. P. Griffiths, Staff-Surgeon R.N., of a son.

LANDALE.—On April 14, at 32, St. George's-place, Canterbury, the wife of Brigade-Surgeon Landale, M.D., A.M.D., of a daughter.

WILLEY.—On April 9, at Elmhyrst, Bromley, the wife of Henry Willey, M.D., of a daughter.

MARRIAGES.

BOYER—LANGMORE.—On April 12, at Sydenham Hill, Thomas Charge, eldest son of Joseph Boyer, of Ringwood, Upper Norwood, and of Barton, Yorkshire, to Edith Norbury, younger daughter of William Butler Langmore, M.R.C.S., of Dundaire, Upper Norwood.

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CARR—COWELL.—On April 13, at Brixton, Thomas Carr, M.R.C.S., to Mary Anne, youngest daughter of the late R. Hudson Cowell, of Camberwell.

CHRISTISON—BROWN.—On April 11, at Liverpool, David Christison, M.D., to Susanna Hodgson, second daughter of the late Andrew Cassels Brown, of Formby, Lancashire.

EASTWOOD—JAMES.—On April 12, at Onslow-square, Francis Hurst Eastwood, of 21, Fitzroy-square, to Francis Annie, third daughter of J. James, M.B., F.R.C.S., of Thurloe-square.

HARRIS—KING.—On April 12, at Teignmouth, South Devon, Frederick W. H. Davis Harris, M.R.C.S., L.S.A., to Jessie Maria, third daughter of the late Major King, 2nd Dragoons (the Scots Greys).

MURPHY—DAVIDSON.—On February 21, at Bellary, Ceded Districts, Madras, F. H. S. Murphy, M.D., Surgeon Army Medical Department, to Eveline Constance, only daughter of Lieutenant-Colonel A. A. Davidson, A.K.C.L. and F.L.S., Madras Staff Corps.

PASLEY—MARTIN.—On March 27, at Trinidad, W. J. Claude Burgoyne Pasley, L.R.C.P., M.R.C.S., to Edith Annette, widow of the late A. H. Martin, M.B.

THURLAND—WROTH.—On April 12, at Bigbury, Devon, F. E. Thurland, M.R.C.S., of 1, Wilmington-square, London, to Mary Elisabeth, second daughter of John Wroth, Esq., of Combe, Bigbury.

VINEY—CREASY.—On April 14, at Ealing, J. Ernest Viney, B.A., M.B., to Bessie L., third daughter of the late Sir Edward S. Creasy, Chief Justice of Ceylon.

DEATHS.

BATT, AUGUSTINE, M.D., of Witney, Oxfordshire, at Bournemouth, on April 16, aged 54.

BUTTS, CATHARINE NORVAL MAGDALENE DYSART, wife of H. G. Butts, M.D., of Demerara, at Eastbourne, on April 15.

CAREY, ROBERT GLEDSTANES, M.D., at Hauteville, Guernsey, on March 31, in his 71st year.

DUFF, WILLIAM HENRY, M.R.C.S., L.S.A., at 201, Gray's-inn-road, W.C., on April 15, aged 67.

FARR, WILLIAM, M.D., C.B., D.C.L., late of the General Register Office, Somerset House, at 78, Portsdown-road, Maida-vale, W., on April 14, aged 75.

HICKES, THOMAS, M.R.C.S., late of Gloucester, at The Parsonage, St. Michael's Home, Cheddar, on April 17, aged 77.

MACDONALD, JEMIMA STEELE LOGAN, wife of F. R. MacDonald, M.D., at Inverary, Argyllshire, on April 9.

RICHARDS, HARRIETTE SARAH, wife of Samuel Atkinson Richards, L.R.C.P., at 3, Gwydyr-houses, Brixton Rise, on April 13, aged 45.

TOUCH, Dr. EDWARD, Staff-Surgeon (half-pay), at Inverary, Argyllshire, on March 22.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

CHILDREN'S HOSPITAL, BIRMINGHAM.—Resident Medical Officer, and an Assistant Resident Medical Officer. Salary £80 and £40 per annum respectively, with board, washing, and attendance in the Institution. Candidates must be registered members of the medical profession, in accordance with the Act 21 Vic., cap. 90. Certificates of registration, with testimonials, to be sent to the Secretary, Children's Hospital, Steelhouse-lane, Birmingham, not later than May 3. The election will take place on May 7.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. (*For particulars see Advertisement.*)

LINCOLN COUNTY HOSPITAL.—House-Surgeon. Salary £100 per annum, with board, lodging, and washing. Candidates must be Members or Licentiates of one of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, and Licentiates of the Apothecaries' Company, or of one of the Royal Colleges of Physicians, or graduates in medicine of one of the Universities of Great Britain or Ireland, and duly registered under the Medical Act, under forty years of age, and unmarried. Testimonials as to qualifications and character to be sent to the Secretary on or before April 23.

LIVERPOOL ROYAL INFIRMARY.—Resident Medical Officer. Salary £100 per annum, with board, lodging, and washing. Candidates' names must be on the Medical Register of Great Britain, and they must possess at least one medical and one surgical diploma, licence, or degree recognised by the Medical Council, and be unmarried. Applications, with testimonials, to be sent to the Chairman of the Committee on or before April 25.

NORWICH FRIENDLY SOCIETIES' MEDICAL INSTITUTE, NORWICH.—Surgeon. (*For particulars see Advertisement.*)

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, DYKE-ROAD, BRIGHTON.—House-Surgeon. (*For particulars see Advertisement.*)

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY AND FEVER HOSPITAL.—House-Surgeon. Salary £150 per annum, with residence in the Infirmary, without board. Candidates must be legally registered practitioners, qualified both in surgery and medicine, and unmarried. Applications, with testimonials (prepaid), to be made to the Secretary before May 1.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Huddersfield Union.—Mr. Andrew Brown has resigned the Kirkheaton District: area 2848; population 8816; salary £30 per annum.

APPOINTMENTS.

Alnwick Union.—Alex. J. Main, M.D. Edin., L.R.C.S. Edin., to the Lesbury District.

Bromsgrove Union.—John P. Gaunt, M.R.C.S. Eng., L.R.C.P. Edin., to the Alvechurch District.

Congleton Union.—Walter Kent, L.R.C.P., L.R.C.S., to the Biddulph District.

Eastry Union.—Thos. Horne, L.R.C.P. Edin., L.R.C.S. Edin., to the Ash District.

Milford and Lounditch Union.—Robt. Heald, M.R.C.S. Eng., L.S.A., to the Hardingham District.

TESTIMONIAL TO MR. J. ISMAY ATKINSON, M.R.C.S. ENG., L.S.A.—This gentleman, who has practised so long and so successfully at Wylam, Northumberland, has been presented by his friends with a testimonial, consisting of a miniature brougham, a silver inkstand, and an illuminated address, as a token of their appreciation of his services during the forty-four years he has resided at Wylam-on-Tyne.

THE PARKES MUSEUM.—At the last meeting of the Council of this Museum, on April 16, Inspector-General R. Lawson, Dr. Frederick Roberts, and Dr. Frederick Cock were elected life members, and Dr. William Travers and Mr. Bernard Reth, F.R.C.S., were elected annual members.

THE Obstetrical Society's Library is now closed during the removal from 291, Regent-street, and will be reopened at 54, Berners-street, in about a fortnight, of which due notice will be given.

APPOINTMENTS FOR THE WEEK.

April 21. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Mr. A. Geikie, "On Geographical Evolution."

23. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 3 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Robert Lee, "On the Relation of Spinal Deformity and Fragility of Bones to Insanity (postponed)." Mr. Hugh Smith, "On a Case of Foreign Body in the Pericardium." Dr. Day, "On a Fatal Case of Supposed Pyæmia in a Child associated with Extensive Changes in both Kidneys and Bladder."

24. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

ANTHROPOLOGICAL INSTITUTE (4, St. Martin's-place, W.C.), 8 p.m. Mr. W. M. Flinders Petrie, "On the Mechanical Methods of the Egyptians." Mr. F. C. J. Spurrell, "On some Palæolithic Knapping Tools and Modes of Using them."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Percy Kidd, "On Two Cases of Congenital Syphilis of the Larynx." Dr. Samuel West, (1) "On a Case of Purulent Pericarditis treated by Paracentesis and by Free Incisions, with Recovery"; (2) "On the Statistics of Paracentesis."

25. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

HUNTERIAN SOCIETY (London Institution), 8 p.m. Adjourned discussion (to be opened by Dr. Stephen Mackenzie) on paper by Dr. Stewart, "On the Nature and Treatment of Infantile Eczema." Dr. Bedford Fenwick, "On Medical Common Sense in the Treatment of Chest Complaints."

26. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 3 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

ROYAL INSTITUTION, 3 p.m. Dr. Waldstein, "On the Art of Pheidias."

27. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

CLINICAL SOCIETY OF LONDON, 8½ p.m. Dr. Tyson (Folkestone), "On a Case of Tubercular Leprosy" (the patient will be exhibited). Mr. Barwell, "On Removal of Large Portions of the Upper Lip without Deformity of the Face." Dr. Southey, "On Tachotée or Erythema Gangrænosum." Dr. Stephen Mackenzie, "On a Case of Subcutaneous Nodules occurring in a Patient the subject of Syphilis, and with very Indefinite Connexion with Rheumatism." Dr. Duckworth, "On a Case of Rheumatismal Cutaneous, Subcutaneous, and Periosteal Nodules."

ROYAL INSTITUTION (Council Meeting, 8 p.m.), 9 p.m. Mr. C. W. Siemens, "On Solar Physics."

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VITAL STATISTICS OF LONDON.

Week ending Saturday, April 14, 1883.

BIRTHS.

Births of Boys, 1349; Girls, 1349; Total, 2698.
Corrected weekly average in the 10 years 1873-82, 2690·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	944	859	1803
Weekly average of the ten years 1873-82, corrected to increased population ...	903·9	858·3	1761·2
Deaths of people aged 80 and upwards ...	...	...	76

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	6	1	4	4	...	2	1	4
North ...	905947	...	14	1	8	8	...	4	...	...
Central ...	282238	...	4	2	3	2	...	3	...	...
East	692738	1	22	1	1	7	...	5	1	1
South	1265927	1	11	9	4	15	2	2	...	3
Total	3816483	2	57	14	20	36	2	16	2	8

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·032 in.
Mean temperature	44·0°
Highest point of thermometer	59·8°
Lowest point of thermometer	28·2°
Mean dew-point temperature	37·8°
General direction of wind	Variable.
Whole amount of rain in the week	0·00 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 14, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending April 14.	Deaths Registered during the week ending April 14.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values.	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2598	1803	23·8	59·3	28·2	44·0	6·67	0·00	0·00
Brighton	111262	62	49	23·0	54·0	33·8	42·8	6·00	0·00	0·00
Portsmouth ...	131478	99	57	22·6	...	...	...	...	...	...
Norwich	89612	57	40	23·3	...	...	...	...	...	...
Plymouth	74977	53	30	20·9	60·0	35·6	46·8	8·23	0·07	0·18
Bristol	212779	126	69	16·9	59·5	32·4	45·4	7·44	0·02	0·05
Wolverhampton .	77557	65	33	22·2	59·0	28·6	43·8	6·56	0·01	0·03
Birmingham ...	414846	316	190	23·9	...	...	...	...	...	...
Leicester	129483	83	46	18·5	...	...	...	...	...	...
Nottingham ...	199349	159	97	25·4	61·7	29·0	45·2	7·33	0·00	0·00
Derby	85574	70	33	20·1	...	...	...	...	...	...
Birkenhead ...	88700	59	43	25·3	...	...	...	...	...	...
Liverpool	566753	444	327	30·1	54·7	41·4	46·1	7·84	0·00	0·00
Bolton	107862	93	44	21·3	59·6	34·1	44·4	6·89	0·03	0·08
Manchester ...	339252	246	198	30·5	...	...	...	...	...	...
Salford	190465	129	87	23·8	...	...	...	...	...	...
Oldham	119071	85	59	25·9	...	...	...	...	...	...
Blackburn	108460	95	69	33·2	...	...	...	...	...	...
Preston	98564	78	54	28·6	...	...	...	...	...	...
Huddersfield ...	84701	47	44	27·1	...	...	...	...	...	...
Halifax	75591	41	39	28·9	...	...	...	...	...	...
Bradford	204807	132	85	21·7	63·8	34·0	46·5	8·06	0·01	0·03
Leeds	321611	227	173	28·1	64·0	31·0	46·2	7·89	0·00	0·00
Sheffield	295497	202	147	26·0	62·0	30·0	45·8	7·67	0·03	0·08
Hull	176296	121	115	34·0	62·0	31·0	43·7	6·50	0·04	0·10
Sunderland ...	121117	113	59	25·4	59·0	36·0	44·2	6·78	0·00	0·00
Newcastle	149464	118	55	19·2	...	...	...	...	...	...
Cardiff	90033	68	40	23·2	...	...	...	...	...	...
For 28 towns ...	8620975	5986	4085	24·7	64·0	28·2	45·0	7·22	0·02	0·05
Edinburgh	235946	131	96	21·2	58·8	36·9	48·7	9·28	0·00	0·00
Glasgow	515589	449	333	33·7	60·0	33·0	46·9	8·28	0·00	0·00
Dublin	349885	175	220	32·8	62·8	27·8	45·1	7·28	0·02	0·05

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·03 in. The highest reading was 30·41 in. at the beginning of the week, and the lowest 29·66 in. on Friday afternoon.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Fellow by Exam.—Messrs. Huxley and Tomes, who were elected Honorary Fellows of the College at the last meeting of the Council, are both Fellows of the Royal Society, and have done good suit and service in the College.

An Incident connected with the Pulling Down of Northumberland House.—A contemporary states that when this mansion had to be pulled down for the new thoroughfare leading from Trafalgar-square to the Embankment a question arose as to what should be done with the stock of wines. The noble owner said it would be useless to take it to Alnwick, which was already well stocked, and he was not anxious to sell a few thousand bottles of wine. His Grace therefore resolved to distribute the whole of the wine amongst the London hospitals. "But," he said, "I wish nothing to be said about it." This wish has hitherto been strictly complied with; but ten years having now elapsed since this interesting incident happened, such an act of kindness on the part of a considerate nobleman may fairly be mentioned.

Invalid Kitchens.—A correspondent advocates the establishment of "invalid kitchens" (there is one for the Jewish community in Bishopsgate, supported by the Baroness Lionel de Rothschild). Sick kitchens, it is urged, would be useful (they ought to be considered indispensable) adjuncts to our hospitals and dispensaries, as they would do a vast deal towards hastening the recovery of the sick poor.

Heston.—The result of the poll for the united parishes of St. Giles and St. George, Bloomsbury, with respect to triennial election of guardians, was a majority of 400 in favour of three years. The Local Government Board has sanctioned the election of guardians to sit for three years.

The Boating Season.—Boating has commenced, and a fatal collision already occurred. Boating fatalities have become steady accompaniments to the boating season. Regulations seem to be lamentably defective, or the owners and hirers of pleasure-boats set all men at defiance. At an inquest on the body of a young man who was drowned a few days ago in a collision on the River Lea, it was stated that fourteen boats had been upset about the same spot since last Good Friday, and fourteen or fifteen lives had been saved.

C. Stafford W.—Within the last six years the expenditure per occupied bed in the University College Hospital has been reduced from £93 to £71 per annum. The year 1882 closed with a debt of about £9000. The annual subscriptions do not amount to £2000, and these, with the very small dividends on permanent investments, form almost the only means of reliable income.

The Wolverhampton Corporation Waterworks.—During the year 1882 a profit of £1963 had been made, which was £309 over the year preceding; but for exceptional circumstances it would have been larger. The total income in 1868, when the Corporation became the owners of the waterworks, was £13,263, as compared with £20,697 now. The committee were now levying rates 20 per cent. *below* the amount they are entitled to do under their parliamentary powers.

Accident Fund: Volunteer Service Society.—This Society was established in 1862. During the year 1882, 186 claims had been received, and grants of money varying from 10s. to £37 had been made to 165 claimants; the remaining twenty-one having either withdrawn their applications or failed to comply with the rules of the Society. Since its establishment the Society has made grants of money amounting to upwards of £10,500 to 2308 claimants. The annual subscription is only 1s., and for this each member is entitled, when injured, on making a claim in accordance with the rules, to receive a sum not exceeding £1 for each week of total disability, for a period of not more than forty weeks. A sum not exceeding £200 is paid to the representatives of a member killed by accident, and special grants varying from £25 to £100 are made in cases of serious and permanent injury.

Unsafe Scaffolding, Paris.—The Prefect of Police has issued new and special instructions in order to reduce the too frequent occurrence of accidents in the building of houses, etc. The local chiefs of the police are ordered to visit every scaffold in their district before work is begun. In the event of any workman or pedestrian being wounded, the building contractors are to be at once prosecuted before the police or correctional tribunals.

Consumption in Victoria.—In a recent treatise, Mr. William Thomson, a well-known medical man in Melbourne, shows from statistics that the mortality from consumption in Victoria is greatly on the increase. Thus, taking all ages, it has increased from 11·49 per 10,000 in 1871 to 13·90 in 1881; and it is pointed out that this is not to be accounted for by any influx of dying visitors to the colony, but is largely due to an increasing death-rate among Victoria-born persons. Mr. Thomson maintains that phthisis is a specific poison disease; that it is never of climatic origin, nor due to dampness of soil or depressing circumstances of life; that it has been imported into Australia by invalids from Europe, etc.

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Sigma.—By official returns for the year ending March 31, 1881, the number of licences to sell patent medicines was 18,754, for which £4668 10s. was paid. The amount for the stamps for patent medicines during the same period was £139,762 18s. 10½d. These stamps numbered not less than 17,198,442.

Lord Wolseley's Testotalism.—Replying to a letter on this question, his lordship says—"Although I take a deep interest in all things relating to temperance, I am not a total abstainer, and have never claimed the character for myself, but whenever it has been found necessary to enforce on the troops in my command a total abstention from alcohol, I have invariably observed the practice."

Female Opium-Smokers, Philadelphia.—Miss Kate Chisom is the proprietress of the only opium parlour in this city. She resides in a small house on Mount Vernon-street. She is a pale, refined-looking woman of about thirty-five years, and her appearance does not indicate a victim to the opium habit. She claims that many of the frequenters of her place on Mount Vernon-street move in good society, and reside in the fashionable quarters of the city, and she seems to consider herself a public benefactress in offering a quiet retreat to women victims of the opium habit, where they can indulge in safety and comfort, and is quite satisfied she will do very well there.

Vaccination Fees, Greenwich.—The Local Government Board have sanctioned an increase of salary of the vaccination officer, but inform the guardians that they are of opinion that the advisability should be considered of remunerating their officers by a fee for each successful vaccination.

The Infirmary Visiting Committee of St. Pancras.—This Committee has reported to the Board of Guardians that they have taken over the management of the infirmary, and placed in charge Dr. McCann, the medical superintendent, and they recommended that so soon as the order for management is received from the Local Government Board, Dr. McCann be formally appointed medical superintendent.

Vaccination Returns, West Bromwich.—Touching the discrepancy between the number of small-pox cases reported by the Vaccination Officer, and those returned by the Medical Officer of Health to the Corporation (to which we lately alluded), the Board of Guardians at their last meeting appeared to be of opinion that some means should be devised whereby the two officers should work more in harmony with each other, but after some discussion it was considered that that was rather the business of the Corporation officers, and a motion to that effect was adopted.

Typhus Fever, Constantinople.—The prevalence of typhus fever in this city is officially announced. It is stated the hospitals are overcrowded, and the disease is fast assuming epidemic proportions.

The High Price of Fish in London.—It is stated, on the authority of one of the most experienced salesmen in Billingsgate Market, that the Great Western Railway Company carry coals to London for 8s. 6d. per ton, while for fish they charge 65s.; the Great Northern Railway Company bring potatoes to London for 30s. per ton, but for fish they charge 75s. If this be so it seems as if the Fish Supply Committee of the City Corporation have a good case to lay before the Railway Commissioners.

A Boy Poisoning a Ship's Crew.—At the Hull Borough Sessions, a fisher lad, aged seventeen, has been sentenced to six months' imprisonment for having administered poison to the crew of a smack on which he was employed, in revenge for some rough usage he had received.

Tit for Tat.—Dr. S. Gibbon, Medical Officer of Health for the Holborn District, touching the complaint of Dr. Sedgwick Saunders noticed by us lately, in his report states that "in consequence of a complaint to the City Commissioners of Sewers that meat was sold in Charterhouse-street that was unfit for food, I have on several occasions during the past fortnight carefully examined all meat exposed for sale in that street, and found it perfectly free from disease and quite fit for human food. Some of the carcases, both of sheep and oxen, are of poor quality, but I hold that it would be unjustifiable and a sin to condemn such wholesome food. The inspector performs in a very diligent and satisfactory manner the duty of inspecting all meat sold in the district. We do not condemn calves which are slaughtered when under three weeks of age, and under 48 lbs. in weight. I hold that this is in the interest of the general public, and trust that it will not be altered to please the City Corporation and their officers."

Longevity.—A contemporary states that the ages of six persons recently deceased at Littlehampton make up the enormous total of 530 years, or an average of nearly ninety years per individual.

A Prosecutor without a Grievance.—Dr. Pearse, of Brierley Hill, Staffordshire, summoned a national schoolmistress at Brierley Hill Police-court for taking a scarlet fever patient from home to school for an examination. The stipendiary magistrate, however, informed the doctor that he was not an aggrieved person, and could not prosecute.

New Factory Law in Russia.—A new law will come into operation throughout the Russian Empire on May 1 next, regulating the employment of minors in factories. Children under twelve years of age are not to be employed on any pretence whatever, while from the ages of twelve to fifteen they must not be allowed to work during more than eight hours a day. In the latter case, moreover, they must attend school at least three hours a day.

St. John Ambulance Association.—The following ladies having passed the examination conducted by Mr. James Cantlie, F.R.C.S., one of the surgeons to Charing-cross Hospital, were reported eligible for certificates for "first aid to the injured," viz.:—The Marchioness of Bath, the Marchioness of Lansdowne, Countess Granville, Countess Cowper, Countess of Ilchester, the Ladies Alice, Beatrice, and Katherine Thynne, the Misses Baup, Wissmann, Barber, and Pope, and Emma Countess de Vesci (at whose residence, Carlton House-terrace, the examinations were held).

A Common-sense Caution.—Touching the death of a child at Brighton from an overdose of a medicine supplied by a chemist, which on analysis was shown to contain morphia and antimony, it appeared that double the quantity had been administered that should have been, the directions not being sufficiently explicit. The jury added to their verdict that chemists in dispensing patent drugs should give clear detailed directions as to their use.

The Drainage of Naples.—A scheme for the drainage of the city, on the Warine system, has been placed before the Syndic and assessors.

The Lambeth Baths Meetings.—During the past winter season 208 meetings had been held, against 176 last year, and it was anticipated that the number of pledges taken would reach 2500, and the blue ribbons donned 4500. At the closing meeting some scores of persons came to the platform and donned the blue ribbon, which Mr. S. Morley, M.P., pinned on each.

Philanthropist.—From the financial statement of the trustees of the Peabody Fund, the average weekly earnings of each family in residence were £1 3s. 6¼d. The average weekly rent of each dwelling was 4s. 7d., and of each room 2s. 1d., the rents in each case including the free use of water, laundries, scullieries, and bath-rooms. The returns, after payment of all expenses, give a percentage of 3 per cent. profit.

Noteworthy.—Persons who have been in the habit of buying casks of wine abroad, and obliging friends in England with a few dozens, have lately been officially informed that they render themselves liable to a heavy fine for selling wines without licence. The law, it appears, makes no distinction between sales of wine for profit, and sales of wine from which no profit is realised; and thus the disposing of wine at cost price by an unlicensed person would be an infringement of the law.

The Smoke Nuisance.—A contemporary states that the earliest mention made of the smoke nuisance is stated to be recorded in the annals of Dunstable, and is to the effect that Queen Eleanor, wife of Henry III., had to leave that town, and go to Tutbury Castle, on account of the smoke produced by the sea-coal (as the mineral was then called) being so objectionable to the royal lady. This was in 1257.

COMMUNICATIONS have been received from—

The Registrar of the University of Edinburgh, Edinburgh; The Registrar of the Apothecaries' Hall, London; Mr. H. C. Burdett, London; Dr. T. Colcott Fox, London; The Honorary Secretary of the Royal Medical and Chirurgical Society of London; Dr. C. J. Cullingworth, Manchester; Dr. J. W. Moore, Dublin; The Honorary Secretary of the Obstetrical Society of London; Mr. J. Chatto, London; Dr. Willoughby, London; The Honorary Secretary of the Medical Society of London; Dr. Lucas, Bombay; Mr. J. W. Wheeler, Ilfracombe; Dr. J. W. Langmore, London; Dr. R. H. Semple, London; Dr. Ludwig Loewe, Berlin; The Sanitary Commissioner for the Punjaub, Lahore; The Registrar-General for Scotland, Edinburgh; Dr. E. C. Seaton, Nottingham; The Director of the Anthropological Institute of Great Britain and Ireland, London; The Honorary Secretary of the Clinical Society of London; Mr. Cantlie, London; The Secretary of the Royal Institution, London; Mr. Noel A. Humphreys, London; The Secretary of the Society for Relief of Widows and Orphans of Medical Men, London; Mr. J. Ismay Atkinson, Wylam-on-Tyne; Mr. H. Sell, London.

BOOKS, ETC., RECEIVED—

Ueber die Wirkungen der Verdünnten auf den Organisme, von Dr. A. Fraenkel und Dr. J. Geppert—Transactions of the Epidemiological Society of London—On Cataract, by G. Cowell, F.R.C.S.—Review of the Drug Trade of New York for the Year 1882—Contribution à l'Étude et au Diagnostic des Formes Frustes de la Maladie de Basedow, par M. le Dr. Pierre Marié—Sessional Proceedings of the National Association for the Promotion of Social Science—Disease and Putrescent Air, by Thomas Rowan—The Medical and Sanitary Administration of Atlantic Steamships and the Position of Ship-Surgeons—Food and Home Cookery, by Catherine M. Buckton.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Chemist and Druggist—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—National Anti-Compulsory Vaccination Reporter—Health—Ciencias Médicas—Detroit Lancet—Manchester Guardian, April 13, 1883—North Carolina Medical Journal—Revue des Sciences Médicales—Journal of Cutaneous and Venereal Diseases—Journal of the Vigilance Association—Journal of the British Dental Association—Weekblad—Canada Lancet—Dublin Journal of Medical Science—Italian Times, April 14—Practitioner—Brain—Archives of Medicine—Boston Home Journal, April 7—Christian—Revue de Médecine—Revue de Chirurgie—Western Medical Reporter—Therapeutic Gazette.

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ORIGINAL LECTURES.

GULSTONIAN LECTURES ON STERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London.

By J. MATTHEWS DUNCAN, M.D., F.R.C.P.L.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, etc.

LECTURE III., PART I.—ITS PREVENTION AND CURE.

MR. PRESIDENT, VICE-PRESIDENT, AND GENTLEMEN,—As in past ages, so also in modern, sterility has been an object of great interest, of study, and of experiment. The acquisition of wealth has at all times stimulated the agriculturist, the gardener, and the breeder; and the desire of offspring has no less stimulated men and women. At no time has the subject had more importance than at present, for the growth of science and the love of daring speculation bring now on the field a class of men of trained intellect, who invade it, not to make money or secure offspring, but in search of knowledge. It is to such men that Nature opens her secrets, and the divulging of truth through them is the just pride of philosophy.

A true theory of sterility, even though it be lamentably incomplete, is of very great importance in medical practice. Thousands of women are seeking what they call cure, and their advisers should surely take care to know what they can offer in return for the confidence placed in them. According as medical men have their course illuminated by knowledge, so will they be wise in advising; and if increase of knowledge, acting directly or by dispelling illusions, destroys faith in remedies, it may yet, in this negative way, add to the usefulness of the adviser. It has been said by Brodie of John Hunter that by teaching us when we are not to interfere with the ordinary course of events he has contributed more towards the advancement of the healing art than all the inventors of remedies who had gone before him.

The course and the details of the argument in these lectures point to a law or laws of sterility not yet clearly formulated; and it is to be expected that progress will be obtained from inquiries such as have been here described, as well as from investigations of the intimate state of the reproductive organs, including those parts of the nervous system which govern them or are governed by them.

Deficient reproductive energy or want of sexual vigour is a theory too vague to be satisfactory. It is only a general idea which loosely binds together, meantime at least, the items of knowledge we have acquired as to sterility. Of course it is a general idea to whose entertainment no known fact is hostile. But it is flimsy, like a ghost, and a fact might find it difficult to prove its steel; for, like a ghost, it might be cut by a sword without being destroyed or even damaged in the eyes of those who see it. Deficient reproductive energy is held to be proved by all the conditions which produce or which attend sterility in plants, animals, and man. In woman it is shown by absolute sterility, by relative sterility, by excessive production, and by imperfect production, which may be abortion, or miscarriage, or morbid pregnancy, or children diseased or difficult to rear, or destined to peculiar diseases during extra-uterine life. Deficient reproductive energy cannot be regarded as a substantive disease with specific characters, course, and remedies. It is a constitutional condition, which, according to its cause, may affect a population or affect certain classes. Cold or heat may render a whole population sterile. Underfeeding or overfeeding, or premature or post-mature marriage, may cause sterility in certain classes within a population. Sterility, the result of deficient reproductive energy, is an imperfection which does not show itself by measurable, tangible qualities such as a dwarf exhibits, but by absence of function, or a stunted or otherwise imperfect performance of function.

The consideration of the great causes of sterility, exhibited as they are in their results in populations and in classes of women, makes it almost certain that local causes, whether acting as impediments to conception or as unfavourable to pregnancy and to intra-uterine life, have very little scope for operation. These local causes have a clinical interest as affecting individuals; for they have not been supposed, far less shown, to have any connexion, or even accidental association, with the great causes whose scope is wide and certain. In the production of cancer of the womb there may be great operating causes, such as age and multiparity, and there may be minor local causes, such as the so-called ulceration of the cervix uteri and its injudicious treatment; and these minor causes, although doing little harm to a population or a class of women, may be of the highest practical importance to individuals.

In women, the chief and best demonstrated sources of, or attendants on, sterility are juvenility or prematurity, elderliness or post-maturity, dysmenorrhœa, and disorder of sexual appetite and pleasure. Of these, the influence of age has been most fully shown, and it is that which is most under control with a view to prevention.

As in cases of constitutional diseases or of epidemic fevers, so here, the good done by prevention immeasurably exceeds, or may immeasurably exceed, any possible good by cure; and this, whether the good done is to a population or class or to an individual. The superiority of prevention is partly because the good is to a population or class, not to mere individuals. Prevention is to be, in part, effected by avoidance of unions of immature women or of elderly women: in other words, by securing that women are married at the age of nubility, or best age of marriage, with a view to fertility and the rearing of healthy children, and the safety of the mothers; and this age is fairly well ascertained to be, for a population or mass of women, not under twenty and not above twenty-five.

In the breeding of domestic animals and of animals in confinement, man can interfere easily and without restraint, except from his own interests, but it is otherwise in woman. She enjoys liberty within wide limits, and she is more or less subject to the restraint of social, moral, and religious law or custom. These restraints diminish the power of the medical adviser to guide; and, in general, he can do most good by diffusing knowledge as to the prognostics from marriage entered into under various conditions.

At present, the law of England legitimises marriage at a very early, a too early, age; and it, wisely no doubt, does not interfere with late marriages. "Without the sanction," says Major Graham, "of the laws of physiology, or of common sense, a girl may—but in the present day rarely does—marry at the age of twelve, a boy at the age of fourteen, under the existing laws of England; but the consent of parents and guardians is required in certain cases where either party has not attained the age of twenty-one; and the proportional number of either boys or girls who marry under the age of twenty is happily small. . . . The age," he adds, "of marriage cannot be directly fixed by laws; but legislation, by prescribing the minimum age of marriage, and the age of majority, does exercise a considerable influence on good numbers of the people directly, and on all indirectly. It becomes the custom or the fashion not to marry below the age of majority. Thus, in England about 9000 young persons of the age of twenty and under twenty-one married in the year 1851; while about 139,000 married in the four years after they were of age, as it is called, or in the years of age, twenty-one to twenty-five. The age of majority is twenty-five years in France; and the age of twenty-five divided the minores from the majores in Roman law. The advanced age of majority, or of what becomes practically the lowest age of marriage, retards marriage indefinitely in many cases, and will probably be found, on investigation, to account, at least partially, for the comparatively small number of children to a marriage in France. By raising or depressing the age of majority, the Legislature then has the power to exercise considerable control over the population." These remarks by Major Graham are valuable in themselves, and indicate the view taken by a politician. The law of majority has, no doubt, great influence, and by it the State can modify the age at marriage to some extent; but the laws of love, of self-interest, and of social convenience are much more powerful.

The sterility of near relations, of interbreeding, or of breeding in and in, as it is often called, is generally recog-

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nised, though far from well proved in man, and forms what seems a contradiction in terms, an inherited sterility. It is believed to be shown not only by absolute sterility and its accompaniments, but also by the production of idiots and ill-formed children. Restraint by knowledge of these risks of intermarriage is, no doubt, a powerful preventive of sterility, but not so potent as it ought to be.

There is, as already pointed out, a sterility dependent on some inscrutable incompatibility of the parties, as in Augustus and Livia, Napoleon and Josephine. Cases like the following are not very rare, and I have actually observed them. A man marries successively three childless widows, and has children by each of them. A woman is married successively, and within childbearing limits, to three men, and has children by only one of them. Such cases, if very rare, might carry little weight, but they are so common as to have occurred within the knowledge of most observant people. Sterility of this kind we cannot foresee and prevent; and religion, morals, and law continue to interdict the cure that might result from a change of husband. Unfortunately, however, among large classes—chiefly, I am told, in Wales and some parts of Scotland—custom permits, and local morals do not interdict, a practice which produces many illustrations of this mutual incompatibility. The practice is called bundling, or keeping company, and consists in parents permitting daughters to cohabit with an eligible man on the understanding that, if pregnancy ensues, the legal marriage tie is made. A woman, proving sterile, may be deserted by her follower, and gets another with whom the result is different.

In ancient times, much was known and taught regarding the avoidance of sterility, and most of it was in accord with what is still taught, but little was done with a view to the cure. The physiology of reproduction was little advanced, and its primary or elementary conditions quite unknown. When certain winds were believed to cause sterility, and fecundation was supposed to be effected by an aura seminalis, we could not look for rationality in practice. Accordingly, such cures of sterility as were then practised appear to us ridiculous or fantastic.

In modern times, the physiology of reproduction is comparatively far advanced, and the necessity of the physical conjunction of the male and female elements is especially recognised. But it may be doubted whether the cures of sterility are much more rational than those of the ancients, for the laws of sterility have been investigated with no great amount of success; and especially do we remain uncertain as to the physiology of the conveyance of the spermatozoa to the Fallopian tubes.

During the last thirty years gynæcology has made great and rapid strides of substantial progress, and naturally sterility, as part of it, has swollen in bulk; but the growth of it has not been satisfactory, for it has not a sure foundation. While our general knowledge of sterility in woman has made little advance, and especially that part of it which might be turned to practical account, the curing of sterility has reached great dimensions. As in other departments of therapeutics, there has been a great failure of logic; the *post hoc* and the *propter hoc* have been confused—a coincidence has been regarded as a consequence. The credulity of patients and of doctors has been a basis for useless and often injurious practice.

It is scarcely an exaggeration to say that, in recent practical works on sterility, there is exhibited entire ignorance or entire neglect of the laws of fertility. Every woman from fifteen to forty-five is regarded as likely to breed. If she is sterile, a cure is at once set agoing; and if a child is not born, the failure is not debited to the nature of the case, but to the want of ingenuity in the doctor. A reputation for curing sterility is spoken of as if it were founded on substantial claims. The prevalent methods of curing sterility are founded on an implied theory that it in most cases arises from impediments in the way of the spermatozoa reaching the ovum. Without sufficient evidence strictures are assumed to exist, versions and flexions of the womb are held so to distort the interior passage as to prevent progress of the spermatozoa, cervical catarrh is believed to stop them by mechanical obstruction, or by chemically poisoning them; and for these real or imagined evils sterile women are made the subjects of treatment. It is the theory of mechanical obstruction that by its simplicity and directness has possessed the profession and the public, and accordingly many operations and modifications of operations, and very many instruments, have been devised to do away with the obstruction. The theory has had real rational support, in the fact that dysmenorrhœa of a spasmodic kind does, as already shown, frequently accompany the sterility, and in the supposition that the same obstruction which causes sterility by impeding the entrance of semen causes also dysmenorrhœa by impeding the exit of menstrual blood, or *vice versâ*. It has had still more satisfactory support in the observation that the cure of the dysmenorrhœa does occasionally bring with it cure of the sterility.

The very zeal with which the mechanical theory of sterility has been fostered, and its treatment in many ways pursued, has led to its present decadence, and there is now increased attention paid to other departments of fertility than conception. Especially and justly, the difficulties of naturally starting and healthily continuing pregnancy are brought prominently into view. The mechanical obstruction theory has begun to shrivel, because of the impression produced by the enormous, though inexactly ascertained, proportion of the failures of the attempts to cure founded on it. Even the ignorant sterile women could see that, if the theory of causation were true, there was an easy and plain theory of cure, and they could also see that the failure of the so-called cure was prejudicial to, if not destructive of, the theory. The importance of the difficulties of pregnancy now brought into prominence will, on account of its great reconditeness, be received with no enthusiasm, such as welcomed the obstruction theory, and the physicians who entertain it can offer no such brilliant prospects of cure to their confiding patients. It is, however, a decided step of progress in a subject of great practical importance.

It is in Germany that this department of sterility has been chiefly studied, and Grünewaldt of St. Petersburg is its best exponent. Recognising the importance of this work, I take the liberty of using it to show the great incompleteness of even the most advanced accounts of the subject. For Grünewaldt, sterility is truly never a disease, but a symptom of a disease. Nature has, he says, set no limits to female breeding other than the natural changes in the sexual organs that are observed in the senile state. Sterility is one of the most frequently occurring disturbances of function caused by diseases of the female sexual organs. In these views, and in his whole work, it is implied that sterility depends on disease of the sexual organs, including chiefly endometritis, mesometritis, perimetritis, and parametritis. The difficulties of conception, he says, have only a slight importance compared with the disorders of the more important vital processes of pregnancy, and these disorders affect chiefly the tissues of the uterus.

It would involve a useless recapitulation of the substance of these lectures were I to set about showing how partial and imperfect is that theory of sterility which makes it depend on local disorder or disease, whether the disease impedes conception or interferes with the progress of pregnancy. Taken together, the obstruction theory and the theory of Grünewaldt do but cover a small part of sterility, which may be described as the part affecting scattered and sparse individuals, and giving thus its importance to these individuals, and to their advisers.

The obstruction theory and the theory of Grünewaldt make no room for that kind of prevention which we have described as of paramount importance. On the other hand, they open up great, indeed almost unlimited, fields for the activity of curers. But the failure of curers is so notorious and the curing of sterility has so bad an odour in the nostrils of many, probably of the majority, of the best in the profession, that it is worth while to ask the question, Is sterility curable?

Before this question there comes another which is of great importance, Should sterility be cured, as it is called? That, in the interest of the community, it should be prevented, I have no doubt; but, in this department of the subject, statesmen and economists have taken much interest, and I shall not meddle in it. I am of opinion also that it should, if possible, be cured. Yet a good argument may be made out for not curing it, in many cases at least. For the laws of sterility show that if it is, what is called, cured, there is a risk of some of its alternatives or attendants—morbid pregnancy, abortion, miscarriage, weakly children, excessive family, death of the mother, and others. But the practitioner hopes, by appropriate cures, to conduct his patient and her offspring in safety through these perils; and we do not

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meantime, feel disposed to cavil with this perhaps over-estimated view of his rational expectations.

It will be admitted that reputation, even with well-informed medical men, is not sufficient to prove the reality of a so-called cure, and we are constantly meeting with instances of exaggerated credulity in reported cures of young women married between twenty and twenty-five, and who had not lived three years in the married state, for it is common for such ardent young women to thus prematurely regard themselves as doomed to persistent sterility, and seek advice with a view to averting their dreaded fate. But there can, I think, be no doubt that sterility is often cured, and such cases as the following do all but absolutely prove that cure is possible, and the sufficiency of the proof will not be controverted by anyone if it is added that such cases, though rare, are sufficiently numerous to prevent by their number, apart from their other circumstances, the confusion of a coincidence with a consequence.

A. B., married at twenty years of age; menstruated regularly since thirteen; has had dysmenorrhœa most of her life, but not very severe; has never been pregnant. Has had no uterine treatment till now, when the cervix was canalised by bougies in the usual way twenty-two years after marriage. No known change was made in her conjugal or other habits. She became pregnant at once after the treatment, and had a living healthy child at forty-two years of age. Now, five years after the birth, pregnancy has not recurred.

C. D., married at nineteen years of age; began to menstruate at thirteen, and is regular, with pain for a short time on the first day. After fifteen years of married life has had no pregnancy. Has had much uterine treatment. Cervix canalised by bougies, and for the first time, according to her. No change made in conjugal or other habits. On resumption of cohabitation, two months after the treatment, became pregnant, and had a healthy child at thirty-five years of age. Since this birth three years have elapsed, and she has been twice pregnant.

It is, however, desirable to go further than merely prove that cure is possible,—that a cure has been effected; and I believe the most important means of curing sterility or relative sterility is improvement of the general health. In the case of plants, the value of digging about and dunging is well known, and so is the value of proper exposure to the sun, and so is the value and, indeed, the necessity of good air, not the air of large cities; and the use of these, when previously withheld, is certainly curative of sterility in many kinds. The cure is sometimes, as in apple or pear trees removed from the shady side of a wall to a better exposure, accompanied by other changes in leafage and in growth of wood, which make better general health evident to the eye. But the cure may have no accompaniment of other signs of better general health, for some London trees which are sterile have a fine outward show of healthy vigour, and it can scarcely be doubted that return to a purer atmosphere would restore their fertility, though it could do little to improve their appearance. In the case of animals, a similar influence of general health may be noted. The starving of fowls diminishes or even arrests their fertility. We cannot doubt that the agouti, released from confinement and restored to its natural habitat, would produce healthy offspring instead of dead and ill-formed; and that, similarly treated, the lioness would have cubs without cleft-palate.

In the case of woman, the restoration to, or improvement of, general health involves such a variety of considerations as renders it very difficult of treatment, and the whole matter comes as much under the care of the general physician as of the gynæcologist. But it may be mentioned that special means have been recommended, and are much used, such as the waters and baths of Germany. These are of different kinds: and the Schwalbach, Spa, Franzensbad, Ems, and Marienbad have great reputation. That they are often of some kind of service I have no doubt, just as I daresay that horse-riding, said to be recommended by Boerhaave against abortion, may also be sometimes valuable as a remedy of that tendency.

It may well be objected that general health is too vague a term, and that it would be better to profess ignorance than to ascribe to it such important and definite a result as sterility, and it will be justly asserted that the great mass of sterile women have the appearance of good health. The difficulty of the subject is well expressed by Darwin in a passage I have quoted treating of the causes of sterility in animals. After all, I think it best, in the present imperfect state of our knowledge, to group a large number of injurious, ill-defined influences under the head of general health, and to consider its improvement a means of cure. Although an animal sterile under confinement appears healthy, one cannot positively object to the statement that sterility is evidence that it is actually unhealthy, and the cure by restoration of freedom seems to confirm that view. Whatever may be the objections to the term "general health," everyone will recognise the importance of investigating the subject with a view to increasing our power over it; for it carries with it a strong influence not only towards the cure of simple sterility, but also towards the safety of the mother, the avoidance of morbid pregnancy, of miscarriage, of dead, ill-formed, and unhealthy children, and of excessive families.

Over-feeding and the production of fat are often spoken of as if they were identical; but this is plainly not the case, for many excessive feeders are not fat. What is the influence on sterility of over-feeding or feeding by particular foods without fattening, I do not know; but there are analogies which dispose the mind to suspect that influence may be thus exerted. Plants are habitually spoken of by gardeners as overfed by rich soils and manures, but they do not get fat. Mr. Thomson, recently showing me his tomato plants, pointed out some, set among strong manure, growing luxuriantly in wood and leaves, but producing little fruit; others, which had been similarly placed, he had restored to due fruit-bearing, with diminished production of branches and leaves, by diminishing the contact of their pots with the rich manure. The growth of stems and leaves some may regard as the equivalent of fat in animals, but in that case stoppage of growth would be equivalent to resorption of fat, which would be driving analogy too far.

Although the injurious influence of fatness in women on fertility is universally admitted, it has not been altogether proved. But universal consent is strong evidence, and it is corroborated by all we know of the power of this same condition in the lower animals. Generally, young women before commencing to breed are fat or at least plump. When they bear children they lose in weight by diminution of fat; again, as they cease to bear children, to resume the fat condition, the fat being now, however, differently disposed of in the body. The fat of the immature and of the post-mature is, within moderate limits, an indication of health. The fat of sterility is not an indication of health, but is, so far as I know, itself healthy, and indicates no active or positive disease. To obesity I only make allusion. I have known grossly fat women bear children; but facts about obesity are too few to justify its separation from the common exaggerated fatness of sterility here referred to.

Spencer makes a distinction between normal plethora and abnormal plethora as indicated by fat, and connects sterility only with the latter. I quote his ingenious remarks not so much for the sake of giving his description of a distinction, the force of which I cannot see, as for the sake of stating his general argument regarding overfeeding or plethora as indicated by fatness. Medicine recognises no normal plethora. For physicians plethora is always an abnormal condition, whether accompanied by much deposit of fat or not. "Many facts," says Spencer, "may be brought to prove that fatness is not accompanied by fertility, but by barrenness; and the inference drawn is that high feeding is unfavourable to genesis. . . . There is a distinction between what maybe called normal plethora and an abnormal plethora, liable to be confounded with it. The one is a mark of constitutional wealth; and this is the plethora which we have found to be associated with unusual fecundity. Abnormal plethora, which, as truly alleged, is accompanied by infecundity, is a superfluity of force evolving materials joined with either a positive or a relative deficiency of tissue-forming materials: the increased bulk indicating this state being really the bulk of so much inert or dead matter. Note, first, a few of the facts which show us that obesity implies physiological impoverishment. . . . Neither in brutes nor men does it ordinarily occur either in youth or in that early maturity during which the vigour is the greatest and the digestion the best; it does not habitually accompany the highest power of taking up nutritive materials. When fatness arises in the prime of life, whether from peculiarity of food or other circumstances, it is not the sign of an increased total vitality. . . . . Of like meaning is the fact that women who have had several children, and animals after they have gone on bearing

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young for some time, frequently become fat and lose their fecundity as they do this. In such cases, the fatness is not to be taken as the cause of the infecundity; but the constitutional exhaustion which the previous production of offspring has left shows itself at once in the failing fecundity and the commencing fatness."

The fatness of sterility is not apparently a matter of high or of low general health, and seems to be of a different origin from that fatness which comes on men and women at the great climacteric, and on the latter whether they have borne children or not. Whatever may be its natural history it is known to be in some degree under the control of the physician. Not by medicine, but by diet and exercise, he can restrain its production or cause its removal. For success in removing fat the co-operation of the patient is necessary, for on her part there is required change of habits and restraint of appetite. Little can be said regarding the cure of sterility by reduction of fat, but experience has furnished no reason to doubt the favourable influence generally expected from it.

ANTISEPTICS AT VIENNA.—A correspondent of the *Canada Medical Journal* for February observes that irrigation now used in Professors Billroth's and Albert's wards is quite as troublesome as the spray. Carbolic acid (one to thirty) is always employed, the parts to be operated upon being thoroughly washed and kept irrigated with this until the knife is used. In amputations the flaps are thoroughly irrigated for two or three minutes before they are brought together; and even after the parts are adjusted, the cavity of the stump is again washed through drainage-tubes previously introduced, all superfluous acid being squeezed out. Whatever antiseptic is used in the subsequent dressings, the previous irrigation is always performed with carbolic acid. Iodoform is always used as *iodoform gauze*, which is prepared by drawing gauze through an alcoholic solution of resin, to which half its quantity of glycerine has been added. The iodine is then dusted on as long as it will adhere. An ounce of iodoform is sufficient for thirty yards of the gauze. It is used in nearly all operations, but especially in those about the mouth and throat; and Billroth considers that in these it is the direct cause of saving many lives. It is a well-known fact that after these operations death often follows from pneumonia and general septicæmia, the former of these being very insidious and rapid in its course. There is no doubt whatever of the high antiseptic qualities of iodoform. Billroth declares that there is no antiseptic which is so trustworthy in rendering a foul wound sweet, carbolic acid being preferred only because of its convenience and cheapness. Great stress is also laid upon the so-called anti-tuberculous properties of iodoform, which, according to Mosetig-Morhof, has peculiar power in destroying the tuberculous granules and setting up healthy granulations in their place.

THE TEACHING OF PSYCHIATRY.—A committee of the "National Association for the Protection of the Insane and the Prevention of Insanity" calls attention to the need which medical students have of more instruction, didactic and clinical, in mental diseases. They say that since the incipient stage of mental disease must always be passed under the observation of the general practitioner before the patient is finally committed to the expert as insane, it is extremely important that a knowledge of such diseases should be widely diffused throughout the profession. Usually the diagnosis of insanity is stated incorrectly or imperfectly in medical certificates, and a rational attempt to treat the patient at home is not made because the physician shrinks from assuming a responsibility for which he has never been prepared. Medico-legal cases are often complicated and rendered obscure by the ignorance of the physicians who are called in to testify in regard to them. Many cases of impending insanity are allowed to progress, when an adequate knowledge of the subject might have enabled the family physician to ward off the catastrophe. A training in psychiatry would, in the Committee's opinion, fit the general practitioner for more successful treatment of mental symptoms in patients not actually insane. They believe that the time has come when in this country no course of medicine should be considered complete without attendance upon lectures and clinics on mental diseases; and that no student should be allowed to graduate without passing an examination in psychiatry.—*New York Med. Jour.*, March 3.

THIRTY-FOURTH SESSION OF THE
GENERAL MEDICAL COUNCIL.

HELD AT THEIR HOUSE, OXFORD-STREET, W.

FIRST DAY—THURSDAY, APRIL 19.

AFTER the delivery of the President's opening speech, which was reported last week, the usual committees were appointed.

Dr. PITMAN then moved—"That the tables on pages 2 and 3 of the programme of business, showing the results of professional examinations held in 1882 for degrees, diplomas, and licences, be received and entered on the Minutes."

The motion was seconded by Mr. TURNER.

Dr. A. SMITH said that he thought that there was some very important information to be deduced from these tables. Compared with the lists of a few years ago they showed that there had been considerable progress in the results of the examinations; in other words, the percentage of rejections had increased very considerably. The President, in his address, had alluded to the very remarkable returns from the Army and Navy Departments. Unfortunately those returns were not as complete as could be desired, but they showed that the rejections of candidates for medical appointments in those Services last year were almost *nil*. The percentage of rejections at the final examination of the Royal College of Surgeons of England in 1875 was 25·9; in the present return it was 38. The percentage at the Royal College of Surgeons of Edinburgh in 1875 was 28; in the present return it was 34. The returns of the Royal College of Surgeons in Ireland also showed some increase. Either the examinations had been raised, or the educational status of the students had fallen off. The rejections at the various Colleges of Physicians had also increased, but not to so great an extent.

Mr. MACNAMARA thought that the subject which had been brought before them by Dr. Aquilla Smith was a very important one. It was desirable that the percentages which he had drawn out should be introduced into the Minutes, or in some way appended to the returns. As to the percentages of rejections at the Colleges of Surgeons being so very large in contrast with those at the Colleges of Physicians, he did not think that this was due to any deterioration in the education. Speaking from his experience in Ireland, he thought that it should always be borne in mind that a student generally presented himself at the College of Surgeons first, and if he passed the examination of that body he gave a pretty good guarantee that he knew his business all round tolerably well. It was very rare for a student to try his "'prentice hand" at the College of Physicians first. Therefore the College of Surgeons acted as a winnowing machine for the College of Physicians. It must not be inferred from the large percentage of rejections of the College of Surgeons in Ireland that the education of the students had deteriorated. At the examinations of that body the percentage of marks which a man must get in order to pass was very high. If a candidate did not get twenty out of forty possible marks he was rejected. It was remarkable that at the late examinations a number of the men got nineteen marks, but the examiners were unable to pass them on that number.

The REGISTRAR pointed out that the Minutes of a former year contained a statement of the percentages of the rejections at the final examinations of the various licensing bodies down to the year 1878.

Mr. MACNAMARA moved that the Registrar prepare a statement of similar percentages, from the year 1879 to the year 1882 inclusive.

The motion was seconded by Dr. AQUILLA SMITH, and carried unanimously.

A table showing the number of exceptional cases that occurred during the year 1882 under Clause 20 of the Council's "Recommendations on Education and Examination," together with the action taken thereon by the several licensing bodies, was laid before the Council.

On the motion of Mr. SIMON, the table in question was ordered to be entered upon the Minutes.

Returns from the Army and Navy Medical Departments, showing the degrees, diplomas, and licences of the candidates for commissions in the medical departments of those forces, were submitted, and entered upon the Minutes.

A table showing the results of professional examinations,

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held in 1882, for qualifications granted under the Dentists Act, was the next item on the programme of business.

Dr. PITMAN moved, and Mr. MARSHALL seconded, that the returns be received and entered on the Minutes.

Dr. FERGUS wished to ask when the examinations without curriculum were to cease. He was under the impression that they were not to have extended beyond August, 1881.

Mr. SIMON said that the largest number had taken place in the Royal College of Surgeons in Ireland.

Mr. MACNAMARA said that the practice of the College of Surgeons in Ireland hitherto had been to examine *sine curriculo* all whose names had been put on the Dental Register. They felt that it was highly to the credit of such gentlemen to submit themselves to a searching examination.

Dr. QUAIN suggested that Mr. Macnamara should postpone any further observations on the subject, as the Council always appointed a distinct time for the discussion of dental business.

On the motion of Dr. STORRAR, the proposition that the returns in question be received was postponed for consideration on a future day.

The report of the English Branch Council on the case of Mr. Richard Albert Shipman Prosser, of Birmingham, M.R.C.S. Eng., L.S.A. Lond., which was referred to them by the General Council on July 6 last year, was then presented. It was as follows:—"That the Branch Council, in accordance with the resolution of the General Council of July 6, 1882 (Minutes, vol. xix., page 100), having obtained the information contained in the preceding statements and considered these statements, and having also heard the opinion of the solicitor to the Council, resolve that there are not grounds for finding Mr. Prosser guilty of infamous conduct in a professional respect."

The foregoing was accompanied by the following report, made to the Branch Council by Mr. Farrer, solicitor to the General Council:—

Complaint is made by the President and Fellows of the King and Queen's College of Physicians in Ireland (Minutes, vol. xviii., page 266), that "at an inquest held on the body of Ellen Alley, at the Coroners' Court, Moor-street, Birmingham, on June 10, 1880, Mr. Prosser swore to having made a post-mortem examination of the body, and to having examined the kidneys and all the abdominal viscera; and that he also swore that the kidneys were healthy, and gave his opinion that death was caused by the negligence of the medical practitioner who had attended her the day but one before her death."

That "on this evidence Mr. Edward Hyacinth O'Leary, L.K.Q.C.P.I., was committed for manslaughter by the coroner."

That "a subsequent post-mortem examination having been conducted by James Maclachlan, M.D., and Robert Saundby, it was shown that the kidneys had not been disturbed from their place, and that the examination of the other viscera had been most incomplete," and that "when this fact was disclosed before the Stipendiary Magistrate's Court on June 23, the prisoner was discharged, and the grand jury threw out the bill at the Warwick Assize."

The College also expressed its opinion that, "should the facts be found on inquiry to be as stated, the conduct of Mr. Prosser, socially and professionally, deserves to be termed infamous, and requests the Council forthwith to make due inquiry into the case, with a view to exercising their power, under Section 29 of the Medical Act, as to erasing from the Register the name of Mr. Prosser."

I have carefully considered the case, and have perused the depositions taken before the coroner, also those taken before the magistrates, and am of opinion that the charge against Mr. Prosser is not proven; and that there are not grounds for finding Mr. Prosser guilty of infamous conduct in a professional respect. (Signed) W. J. FARRER.

The report also included a record of the coroner's inquest and other proceedings in the case.

On the motion of Dr. PITMAN it was resolved that the report of the English Branch Council be received and entered on the Minutes.

Dr. PITMAN next moved that the report just received be adopted. He said that if the Council agreed to this motion, they would be acting in accordance with the opinion of the solicitor.

The motion was seconded by Mr. MARSHALL.

Mr. TURNER said that, on reading the papers appertaining to the case, it seemed to him that they had not before them all the information that they might have. There was a statement given by Mr. Prosser of what he alleged to have found at the post-mortem examination of the woman in question, and there was a statement that a subsequent post-mortem examination had been made by Dr. Maclachlan and Dr. Saundby; but there was no report of the second post-mortem examination. He submitted that, in order to come to a proper conclusion, the Council ought to have before them particulars of what was found by the gentlemen who conducted the second post-mortem examination.

Dr. A. SMITH agreed with Mr. Turner that there was an omission in this respect. The case was one of long standing.

Mr. MACNAMARA said that he thought that if they adopted the resolution in its bald nakedness they would be scarcely giving expression to the feelings which he believed actuated several of the members round that table. Here was a brother professional man who swore that he examined the kidneys, and that they were healthy, and it was afterwards clearly proved that he did not examine them, and he was not in a position to state whether they were healthy or not. Mr. Prosser also went further, and stated in evidence that death was caused by the negligence of the medical practitioner who attended the woman. The conduct of Mr. Prosser was most serious. Even if, in the opinion of Mr. Farrer, it was not infamous in a professional respect, certainly it was a gross breach of the professional confidence which was due from one practitioner to another. He should like to add to the motion some words expressive of the opinion of the Council that Mr. Prosser's conduct was unprofessional and highly to be reprehended.

Dr. A. SMITH suggested that the motion should stand over until to-morrow, and that Mr. Farrer, the solicitor to the Council, should be asked to attend.

Dr. PITMAN: From the evidence before the coroner and the magistrates, Mr. Farrer comes to the opinion that the charge against Mr. Prosser is not proved.

Dr. A. SMITH asked why, if that was the case, Mr. Farrer had tried to obtain a copy of the proceedings at the coroner's inquest after making his report to the Branch Council.

Dr. LYONS said there certainly appeared to have been a very grievous wrong done to Mr. O'Leary, who was accused of neglect by Mr. Prosser. He (Dr. Lyons) supposed that Mr. Farrer had considered the case from a strictly legal point of view, and in that way had come to the conclusion that the Council would not be in a position to sustain the charge of infamous professional conduct against Mr. Prosser; but the whole matter was one of such gravity that the Council ought not to pass away from it with merely the words contained in the motion before the chair. To adopt the report would be tantamount to giving the matter the go-by for ever. A gentleman, of good antecedents, and known to members of the Council, had been placed in a most unfortunate position in being committed for trial on a charge of manslaughter, and most grievous personal indignity and wrong had been done to him. Under these circumstances he did not see how the Council could leave the matter until they had had a full explanation from Mr. Farrer as to the legal aspect of the case. He would move, as an amendment, that Mr. Farrer be requested to attend the Council, and be asked to give his reasons for the report which he had made to the Branch Council.

Mr. SIMON, as a member of the Branch Council, said that that body had not founded their report simply on a legal statement. They had considered the case on its merits. He had himself carefully considered the papers, and his own opinion was not founded on technical considerations, and certainly not on the opinion of the solicitor. The real question before the coroner was whether the practitioner in charge of the case had neglected his patient, and it was not a question concerning the condition of the kidneys. If the main question at issue in the case was as to the condition of the kidneys, the case against Mr. Prosser might have been different. But the condition of the kidneys was a subordinate question in the inquiry. Mr. Prosser, in giving his evidence, had said "kidneys and all the abdominal viscera healthy," and upon a subsequent examination it was found that the kidneys had not been disturbed from their place. It was quite possible that the examination of the kidneys was a thoroughly slovenly one, but that was not the essential matter. The statement of Mr. Prosser who made the first post mortem-examination, and the statement of the doctors who made the second, were reconcilable upon the supposition that Mr. Prosser meant "I looked at the kidneys and I called them healthy." Were they prepared to say that a man who made a statement of that sort in a slovenly way was to be removed from the Register because of his slovenliness? The main question upon which Mr. Prosser's evidence was given was as to the neglect of the patient.

Mr. MACNAMARA said that the way in which Mr. Simon had stated the matter did not meet his (Mr. Macnamara's) sense of it. Mr. Prosser had sworn that it was the fault of the practitioner that the woman had died, she having been

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neglected; and then, with a view to strengthening that statement, he said, "I examined the kidneys and found them healthy." This illustrated the animus of the man. It turned out that he could not be said to have examined the kidneys, for he had not removed them. He thought that the opinion which Mr. Farrer had given to the Branch Council was due to his not having estimated the gravity of the charge which Mr. Prosser had brought against a brother professional man, and to his being unable to estimate the necessity for removing the kidneys in order to justify his assertion that they were healthy. He did not want to go to the whole length of removing Mr. Prosser's name from the Medical Register, but he thought that the Council ought not to content itself with taking no notice of his conduct.

Dr. HUMPHRY said that the case had not been fully and clearly put by Mr. Macnamara. It was this: A medical man was required to make a post-mortem examination by the coroner. He made that examination, and he stated the cause of death to have been inflammation and congestion of the lungs, and that the abdominal viscera and kidneys were healthy. He also stated that, in his opinion, if proper medical treatment had been given, the life of the woman might have been prolonged. There was no evidence to contradict his statement as to the cause of death, and there was no evidence to show that the abdominal viscera were healthy. The only statement was that there had been an imperfect examination of them. They knew perfectly well that in post-mortem examinations the statement was often made that the abdominal viscera were healthy, without a thorough examination of the intestines and of the pancreas. He did not think that any other serious ground of complaint had been made out against Mr. Prosser. As to the alleged neglect, if he was of opinion that neglect had existed, he was bound to state it in his evidence before the coroner.

The PRESIDENT pointed out that if the General Council wished to take the opinion of the solicitor on the subject, the standing order would have to be suspended. The ordinary course, if a report was unsatisfactory, was to refer it back to the Branch Council.

The amendment to the effect that Mr. Farrer be requested to attend was put to the vote, and supported by five members. A majority of the Council voted against it.

Dr. AQUILLA SMITH then moved, as a further amendment, that the report be referred back to the Branch Council.

Dr. LYONS seconded the amendment.

Dr. HUMPHRY said that the matter had already been twice referred to the Branch Council, and they had carefully investigated it. There was no reason to think that they might modify their opinion.

Mr. SIMON entirely agreed with what had been said by Professor Humphry.

The amendment, on being submitted, was supported by four votes, and negatived by a considerable majority.

The motion for the adoption of the report was carried *nem. con.*

The Council next went on to consider a petition submitted by the Executive Committee to the General Council on July 5, 1882, and postponed to the then next Council meeting. The petition was one which had been presented by a medical practitioner whose name was erased from the Medical Register on May 11, 1877, by order of the Council, in consequence of his having been convicted of a crime and sentenced to imprisonment. The applicant was originally registered with the qualifications Mem. R. Coll. Surg. Eng. 1854, Lic. Soc. Apoth. Lond. 1854, whereof he now sought the restoration of the latter only; and, in support of his petition, he sent various documents showing the esteem in which he was held prior to his conviction, and also a certificate in regard to his state of health at the time he committed the offence with which he was charged.

The REGISTRAR, in connexion with this subject, read a case which, pursuant to a resolution of July 5, 1882, had been laid before counsel, and also the opinion of counsel thereon, as to the power of the Medical Council to restore the name of the petitioner. The case asked whether the Council had power to re-enrol a name which had been erased by order of the Council, under Section 29 of the Medical Act of 1858. The opinion on the case submitted was that the Council clearly had power to do so. The power seemed to be implied in the general authority over the Register which was conferred by Section 29. It was by no means obligatory on the Council to direct that a practitioner's name be erased in all the cases of which they might take cognisance. On the contrary, the erasure was left entirely in the discretion of the Council, and in the discretionary power thus given was included the power to direct that the name be restored. Counsel was of opinion that this view was confirmed by the other provisions of the statute.

Dr. PITMAN inquired of Mr. Bradford whether the Society of Apothecaries had under their Act power to remove a name from their register.

Mr. BRADFORD said that they had that power conferred upon them in 1874. They had not possessed it previously.

Dr. PITMAN: They have not exercised that power in this particular case.

Mr. BRADFORD said that he thought he could venture to say that they had not done so. He did not think that there had been any instance in which the Society had applied the power since it had been conferred upon them.

Dr. CHAMBERS moved that the opinion of counsel, which had been read by the Registrar, be entered on the Minutes.

Dr. PYLE seconded the motion.

Mr. SIMON said that it was quite contrary to practice to enter legal opinions on the Minutes. Perhaps this was a case in which there would be less objection than usual, as the opinion was on a general question, and not on a particular case.

Dr. STORRAR said that the solicitor had pointed out to him at the last meeting that it was unusual to enter a legal opinion on the Minutes, and that such a course might be attended with great disadvantage.

The motion was put and negatived.

Dr. STORRAR said that from the evidence in possession of the Council it appeared that they were justified in removing the name of the petitioner from the Register; but the petitioner now alleged a certain condition of mind at the time of the commission of the crime, which rendered him more fit for a lunatic asylum than for any other position.

Strangers were directed to withdraw from the room in order that the case might be discussed in private. Upon the public being re-admitted,

The PRESIDENT said that the Council having fully considered the case, it had been resolved by motion put from the chair that they did not feel that they would be justified in complying with the request for the restoration of the name of the petitioner to the Medical Register.

The following communication, from the College of Preceptors, pursuant to a resolution passed by the Executive Committee on November 10 last, were laid before the Council:—

RESULTS OF EXAMINATION IN SEPTEMBER, 1882.

42, Queen-square, London, W.C., October 30, 1882.

Dear Sir,—In compliance with your request, I send you a statement of the results of the preliminary examination for medical students and others, held by this College in September last.

The number of candidates who presented themselves for examination was 223, of whom 174 sat at the London centre, 22 at Bristol, 12 at Birmingham, and 15 at Leeds.

Of the total number examined, 74 (or about one-third) obtained certificates qualifying for registration as medical students, and three passed in "elementary mechanics of solids and fluids," as a separate subject.

Of the 146 who failed to obtain qualifying certificates, 18 passed in all the obligatory subjects, but did not obtain the minimum aggregate of marks necessary for a place in the second division of the second class, as required by the Medical Council.

Of the remaining 128 rejected candidates, 35 failed in one obligatory subject, 29 failed in two obligatory subjects, 20 failed in three obligatory subjects, and 42 failed in four (and more) obligatory subjects. Thirty-eight were reported by the examiners for defective spelling; but as many of these failed in one or more obligatory subjects, I do not find that any candidate was rejected on that account alone.

It will be seen from the above statement that about half the rejected candidates (or a third of the total number examined) were very ignorant, and I notice that several of these had been rejected at previous examinations.

I am, dear Sir, yours faithfully,

W. J. C. Miller, Esq. C. R. HODGSON, Secretary.

RESULTS OF EXAMINATION IN MARCH, 1883.

College of Preceptors, Incorporated by Royal Charter,
42, Queen-square, London, W.C., March 29, 1883.

Dear Sir,—I beg to submit to you a statement of the results of the preliminary examination held by this College on March 6, 7, and 8.

The number of candidates examined was 234, of whom 178 sat at the London centre, 25 at Bristol, 12 at Birmingham, 18 at Leeds, and 9 at Liverpool.

Of the total number examined, 81 (rather more than a third) obtained certificates qualifying for registration as medical students. Of the 139 who failed to obtain qualifying certificates, 46 failed in one obligatory subject, 23 failed in two obligatory subjects, 25 failed in three obligatory subjects, 45 failed in four (or more) obligatory subjects, while 14 passed in all the necessary subjects, but did not obtain the minimum total of marks required for a place in the second division of the second class.

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Twenty-six of the rejected candidates had presented themselves, and failed, at one or more previous examinations.

I am, dear Sir, yours faithfully,

W. J. C. Miller, Esq. C. R. Hodgson, Secretary.

Dr. Storrar moved—"That the communications from the College of Preceptors of October 13, 1882, and March 29, 1883, be received and entered on the Minutes, and that the thanks of the Council be accorded to the College of Preceptors for their important information."

The motion was seconded by Mr. Turner, and carried.

The Council then went on to deal with the case of a practitioner who had been convicted of fraud. They had received the following communication from the Royal College of Surgeons of England, in reference to a statement forwarded by the South Australian Branch of the British Medical Association, and considered by the Executive Committee on November 10, 1882:—

Royal College of Surgeons of England,
Lincoln's-inn-fields, W.C., April 11, 1883.

Sir,—In pursuance of the provision of the 28th Section of the Medical Act of 1858, I am desired to acquaint you, for the information of the General Medical Council, that the Council of this College adopted on the 8th ult., and confirmed on the 29th ult., the following resolution with respect to Bentham Paynter Morison, of Adelaide, South Australia, admitted a member of the College on July 26, 1871, viz:—

"That, in the opinion of the Council, the offence of which Bentham Paynter Morison has been convicted is of such a nature as to render him unfit to remain a member of the College, and that he accordingly be removed from being a member of the College."

I am, Sir, your obedient Servant,

W. J. C. Miller, Esq. Edward Trimmer, Secretary.

Dr. Pitman: I believe that the ordinary course of business is for the Council to direct the Registrar to remove the qualification as a member of the Royal College of Surgeons of England from the name.

Mr. Simon: Does he remain a licentiate of the other bodies?

Dr. Pitman: Until they take steps to remove him.

Dr. Haldane said that the Royal College of Physicians, Edinburgh, had written to Australia for a copy of the conviction, but had not received it.

Dr. A. Smith asked Mr. Bradford whether the Society of Apothecaries in London had taken any action in reference to the licence which Mr. Morison held from that body.

Mr. Bradford: Not that I am aware of. It has not been brought to their notice.

Dr. Pitman moved that the Registrar be requested to remove from the Register the qualification of member of the Royal College of Surgeons of England formerly held by Mr. Morison.

The motion having been seconded, was carried unanimously.

Mr. Turner said that Dr. Haldane had directed his attention to the Minutes of the Executive Council of May 12, in which there was a letter from the Secretary of the Royal College of Surgeons of Edinburgh, relative to Mr. Jas. Rob. Horton, who was the companion of Morison, and was convicted at the same time of a like offence.

Mr. Horton's case was referred to in a letter from the Secretary of the South Australian Branch of the British Medical Association. A letter from the Secretary of the Royal College of Surgeons of Edinburgh stated that it was the intention of the College to take steps to recall the diploma which they granted to Mr. Horton in 1879, and to declare the same void, and for that purpose they had written for an official certificate of his conviction.

The Council adjourned to Friday, at two o'clock.

Second Day—Friday, April 20.

Immediately after the transaction of the formal business this morning, the Council proceeded to consider the question whether Mr. Wm. Hoar, of The College, Maidstone, had been guilty of infamous conduct in a professional respect, and if so, whether his name should be removed from the Register. The registered qualifications of this gentleman were M.R.C.S. Eng. 1844, and L.S.A. Lond. 1845. The case was now submitted to the General Council, pursuant to the instructions of the English Branch Council and the standing Orders of the General Council. From the report which had been made to the Branch Council by the solicitor, it appeared that the allegation in this case was that Mr. Hoar, being the personal friend and medical attendant of Mr. J. S. Stenning, a solicitor residing at Maidstone, had availed himself of his position as such medical attendant to create disunion between Mr. Stenning and his wife. The mode in which he appears to have proceeded was that he told the husband that his wife was too delicate for him to live with her as a husband, and suggested to the wife that her husband did not care about her, inasmuch as he did not live with her as a husband, and by playing off one thing against another, he managed to alienate the affections of the wife, and to commit adultery with her. On Mr. Stenning finding this out he told his wife that she must leave the house, and she went away, but instead of going to her friends as she said she would, she went away with Dr. Hoar. She was traced from one place to another, and ultimately proceedings were taken by the husband in the Divorce Court against the wife as respondent and Dr. Hoar as co-respondent, and at the trial in June, 1882, the jury found that the respondent and co-respondent had been guilty of adultery, and assessed the damages against the latter at £5500.

A report of the divorce proceedings, copied from the *Kent Messenger and Maidstone Telegraph*, was laid before the Council in the programme of business.

Mr. Hoar had been summoned to appear before the Council at two o'clock this day, and appeared by his solicitor, Mr. Gardner Hastings.

Strangers were requested to withdraw from the council-hall, that the deliberation on the case might take place in private. Mr. Hastings was heard on behalf of Mr. Hoar. After an interval of about an hour and a half the proceedings were thrown open, and

The President said that the following resolution had been passed:—"That Mr. William Hoar is judged, after due inquiry, as having been guilty of infamous conduct in a professional respect;" and, "it having been proved to the satisfaction of the Council that Mr. William Hoar has been guilty of infamous conduct in a professional respect, the Council has, by an order in writing, directed his name to be erased from the Medical Register, and has given orders to the Registrar to erase the name accordingly."

The case of Mr. Arthur Augustus Sadgrove, of Didcot, Licentiate of the Apothecaries' Hall, Dublin, 1880, who had been prosecuted and fined for assuming a medical title to which he had no right, and had also been charged with uttering a forged diploma, was then considered. The circumstances of the case are set forth in the following report, which had been made to the English Branch Council by Mr. Farrer, solicitor to the General Council:—

It will be seen from the statement of the Faculty of Physicians and Surgeons of Glasgow (Minutes, vol. xix., pages 206-211) that the name of this gentleman, who is registered with the above qualification only, appears in the Medical Directory of the year 1881 as "Licentiate of the Royal College of Physicians of London." "Licentiate of the Royal College of Surgeons of Edinburgh," and "Licentiate of the Apothecaries' Hall, Dublin," but that he was not a Licentiate of the Royal College of Physicians of London, nor of the Royal College of Surgeons of Edinburgh, and that the former of those Colleges had instituted a prosecution against him in respect of his assumption of the title of Licentiate of that College, for which offence he was fined on conviction by the Wallingford magistrates.

That he had twice appeared before the Board of Examiners of the Faculty for examination—in January, 1880, and July, 1881,—and had in both cases been rejected.

That at the period of his first appearance for examination a diploma of the Faculty, which had been prepared for a licentiate who had passed at a former period, was taken without authority from the repository in a room in the Faculty Hall, and that to this room Mr. Sadgrove (in common with the other candidates examined at that period) had access.

That Mr. Sadgrove had exhibited to at least two persons in his neighbourhood a document which, as those persons allege, was stated by him to be a diploma of that Faculty, and that their description of the document, so far as it went, tallied with that of a genuine diploma of the Faculty. In both cases the exhibition of the document was made in connexion with an attempt to obtain or to retain a medical appointment. The fact that the persons to whom the document was exhibited held the positions respectively of clergyman of the parish and manager of a company, for whose *employés* Mr. Sadgrove was acting as surgeon, appeared a sufficient guarantee that they were not likely to be mistaken in regard to what they stated.

That the circumstances following on the exhibition of this document to the manager of the company were somewhat remarkable. This gentleman intimated to Mr. Sadgrove his intention to write to the Faculty on the day of his interview with him with the object of satisfying himself with regard to the genuineness of the document shown to him. A letter was written and posted on that day addressed to the Faculty of Physicians and Surgeons, Glasgow, inquiring whether Mr. Sadgrove held the licence of the Faculty. This letter never reached the Faculty, nor was it received by any person connected with the Faculty. Nevertheless, a letter in reply was in due course received by the manager of the company, having the printed heading "Faculty of Physicians and Surgeons, Glasgow," and purporting to be signed by Mr. Duncan, the Secretary of the Faculty, to the effect that Mr. Sadgrove was a Licentiate of the Faculty and duly qualified to practise surgery. That letter was a forgery, and was not written by anyone connected with the business of the Faculty. The paper

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on which it was written, the heading, the handwriting, and the signature were of a kind foreign to anything known in the office of the Faculty.

In view of the above facts, and of others pointing in the same direction, the Council of the Faculty were of opinion that they would be chargeable with a dereliction of duty towards the public and the profession did they shrink, at whatever cost and with whatever result, from instituting a criminal prosecution against Mr. Sadgrove.

He was accordingly charged at the instance of the Faculty with forgery and fraud at common law. He was arrested in the office of the Secretary of the Faculty in Glasgow, on presenting himself a third time for examination, and was brought before the justices of the peace for the county of Berks at Wallingford, and was committed for trial at the Reading Assizes. He was tried at those Assizes in January, 1882. A considerable part of the indictment was thrown out on technical grounds, and the verdict was one of acquittal.

The Branch Council for England have investigated the case, and are of opinion that though Mr. Sadgrove was acquitted of the charge of forgery and fraud, there are other circumstances in his conduct of which the General Medical Council can take cognisance, but in respect of which he is not amenable to a court of law.

Mr. SADGROVE was in attendance, and on being allowed an opportunity of addressing the Council, said that it was with extreme regret that he had to appear before them. He was a young practitioner, and previously to the occurrences which the Council were now investigating he was getting on very well without resorting to any falsification whatever. After a time, a young medical man, who succeeded his father, came to the same neighbourhood, and endeavoured to underrate him and get business out of his hands, and hence he (Mr. Sadgrove) had assumed a title to which he had no right. Some time ago he received a request from Somerset House that on certificates of death he should use only his registered title. He had obeyed that admonition, and ever since, and even before he was summoned before the magistrates for representing himself as a Licentiate of the Royal College of Surgeons, Edinburgh, he had abstained from using any title but that of Licentiate of Apothecaries' Hall, Dublin. He did not wish to attempt to excuse himself in any possible way. He was only sorry that at the time he offended he did not know anything about the Medical Act. He did not know a single section of the Act at the time he was registered, and he had never read it until after he received a summons, under the 40th section of the Act, to appear before the magistrates for using a title to which he had no claim. He had always conducted himself with propriety and decorum until the time of the occurrences with which he was now charged. He was not merely sorry, but completely overwhelmed, at the proceedings which were now being brought against him. But as it was now nearly two years ago since the prosecutions were instituted against him he thought that the matter had been settled, and that he should be allowed to go on in the practice of his profession if he conducted himself with propriety. He had a wife and six children, and they were almost frantic to think that he had to appear now before the Council. He admitted that he had been foolish and acted dishonourably, and he felt his position most deeply; but he hoped that the Council would not take an unmerciful view of the case. He was now engaged as assistant to Mr. Cuthbert Henry Cooke Huddart, of Greenhithe, Kent. Mr. Sadgrove handed in copies of testimonials in his favour, including one from the Vicar of Hagbourne, near Didcot. He also produced a letter from Mr. Huddart, his present employer, saying that if his name was removed from the Register he would have to resign his present situation. Mr. Huddart described himself as medical officer to the training-ships *Arethusa* and *Chichester*, and on behalf of Mr. Sadgrove he solicited the Council to mercifully consider the fault which Mr. Sadgrove had committed, and for which he had already been punished.

In answer to questions put by Mr. Farrer, solicitor to the Council, Mr. Sadgrove stated that there was no plate on his employer's premises containing the words "Dr. Sadgrove." There was a small plate marked simply "Mr. Sadgrove," and that was placed at the side of the door. He reiterated this assertion. In reply to Dr. Scott Orr he admitted that he had told a person that he was a Member of the College of Surgeons of Glasgow. He alleged that he was driven to do so. On the same occasion he exhibited a Latin certificate connected with the Order of the Knights of Malta, and represented that it was a medical diploma. He was interrogated by other members of the Council, and professed himself to be unable to give any explanation of the forged letter purporting to come from Mr. Duncan, Secretary of the Faculty of Physicians and Surgeons, Glasgow, stating that he was a Licentiate of that Faculty. He had gone to Glasgow to attend the examination at the Faculty, and had failed, and while at the Waverley Hotel, in that city, he had met with a young man named Duncan, who sympathised with him on having failed, and told him that he possessed influence by which he could get him a special examination. He had since corresponded with this Mr. Duncan, and one of Mr. Duncan's letters was in the hands of his solicitor. He could obtain it for production if the Council desired.

A lengthy deliberation in private then took place, and the standing orders were suspended in order that the Council might prolong its sitting. Shortly before seven o'clock the public were readmitted, the Council having passed the following resolution:—"That the further consideration in Mr. Sadgrove's case, on the subject of the offence for which he has been summoned to appear, be adjourned till Tuesday (24th inst.), at two o'clock, in order that he may have an opportunity of satisfying the Council as to the two following points:—1. As to a letter of September 10, 1881, alleged to have been written by A. Duncan, Secretary of the Faculty of Physicians and Surgeons of Glasgow. 2. As to the allegation that he had falsely claimed to be a licentiate of the Faculty of Physicians and Surgeons, Glasgow."

The following report of the Committee on the Employment of Unqualified Assistants by Registered Practitioners, together with certain documents appended thereto, was received and ordered for entry on the Minutes:—

One hundred and eighty-eight letters and other communications on the subjects referred to the Committee have been laid before and circulated amongst the members of the Committee by the Chairman. An abstract of the most relevant portions of these documents has been prepared by the Chairman in the form of a "statement" founded on them, which is appended to this report.

The Committee has held five meetings, in the intervals of which the documents above referred to have been passed round to each of the members.

The Committee has also had the advantage at one of their meetings of the personal attendance of Mr. R. H. S. Carpenter, Honorary Secretary to the Medical Alliance Association, who, at considerable inconvenience to himself, gave evidence by word of mouth, accompanied by documentary proofs, of the prevalence in the metropolis of certain practices, to the adoption of which in the provinces the greater part of the writers of the above-named letters bear witness.

From the evidence collected by the Chairman, and from such other information as we have, we find it clearly established as fact, that the employment of unqualified assistants on duties which ought only to be devolved on persons legally qualified is an abuse which prevails extensively in England and Wales, and that general practice on a very large scale (as in regard of masses of mining and manufacturing population) is often thus carried on in great part by unqualified persons whom members of the profession engage as assistants, and employ as if they were qualified.

We cannot but believe that, through this abuse of the employment of assistants, much injustice is done to the public, as regards the quality of medical service they are entitled to expect when they apply to a member of the medical profession, and that, again and again, the profession has very serious discredit brought on it through the incompetence of persons who are thus allowed to practise in its name. We do not think it requisite to dwell on particular facts which are stated to us in illustration of these results of the system. We prefer to insist on the consideration that the system must inevitably tend to produce such results, and that, in relation both to the public and the profession, it is in principle unjustifiable and dishonest.

We take as our principle, that no member of the medical profession can rightly employ anyone who is not a member of the profession to act for him as his deputy or substitute in any function which involves an exercise of professional discretion or skill. We are of opinion that any such substitution (wilfully made) of unprofessional for professional service, in practice conducted for gain, is of the nature of a fraud on the public, and ought, therefore, at least in its grosser forms, to be made subject to legal penalty. We are further of opinion that, where such substitution is habitual, it can only be regarded as systematic wrong practised by the employer with a view to gain; and that such conduct, whether punishable or not punishable as a public offence, ought to be punishable under the laws and by-laws of the profession, as conduct professionally disgraceful.

In submitting our opinions as above, we desire particularly to advert to two classes of cases to which they are not meant to apply. First, as regards certain subordinate functions which are ministerial to professional practice, and do not in themselves require an immediate exercise of professional skill or discretion—such functions as habitually and properly fall within the province of the dispenser or nurse or dresser, acting under skilled direction, and such as, when the system of apprenticeship was still in force, used often to be more or less devolved upon the apothecary's or surgeon's apprentice—it is not any part of our intention to suggest that an assistant employed only for uses such as those (with or without clerical work) should be required to be a person with legal qualification to practise. Secondly, we do not in any way propose, and indeed would most earnestly deprecate, that measures aimed at the abuse of unqualified assistants should be allowed to interfere unnecessarily with the induction of pupils into professional practice, as to hinder such induction within its proper limits. The principle ought, however, in our opinion, to be clearly understood, that the pupil is not privileged to do any professional act except in the presence and under the immediate guidance of the legally qualified practitioner who is teaching him, or, if acting in the absence of his teacher, is only to perform particular subordinate acts which his teacher has expressly directed and limited, and has satisfied himself that the pupil is fully competent to perform.

We beg leave to draw the attention of the Council to the representations made in our Chairman's statement, and in Dr. William Ogle's remarks, which follow it, to the effect that in certain instances unqualified persons, practising on their own account, have as their accomplices members of the profession, who, by acting as "covers" for them on occasions when certificates of causes of death, and various other professional certificates, have

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to be given, shield these pretended assistants from inconveniences which the law intends to attach to their position. By doing this they virtually abet an imposition on the public. Though conduct of that sort is not strictly within the terms of the reference made to us by the Council, we think it sufficiently within the spirit of the reference to require us to express our opinion upon it. We therefore beg to say that, in our judgment, it is misconduct of equal culpability with that which has been more particularly referred to us. As regards the public, and as regards the profession, it is but another form of the same dishonesty; and it seems to us that both forms have to be judged by the same standard of right and wrong. The fundamental intention of the Act which gives legal status and unity to the medical profession of the United Kingdom is, "that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners"; and the man who, as a member of the profession, would frustrate that intention by assisting unqualified persons to pass with the public as qualified, abuses his professional privilege to the detriment of the profession and the public, and in our opinion deserves to be deprived of his professional status.

Lest we should appear to have taken too severe a view of the class of professional offences to which our report relates, we beg leave to bring under notice of the Council the judgment which the Legislature pronounces on analogous offences when committed in the profession of the law. The terms in which such offences are dealt with in Section 32 of the Statute 6th and 7th Vict., cap. 73, which regulates the practice of attorneys and solicitors, are as follows:—"And be it enacted, that if any attorney or solicitor shall wilfully and knowingly act as agent in any action or suit in any court of law or equity, or matter in bankruptcy, for any person not duly qualified to act as an attorney or solicitor as aforesaid, or permit or suffer his name to be anyways made use of in any such action, suit, or matter upon the account or for the profit of any unqualified person, or send any process to such unqualified person, or do any act thereby to enable such unqualified person to appear, act, or practise in any respect as an attorney or solicitor in any suit at law or in equity, knowing such person not to be duly qualified as aforesaid, and complaint shall be made thereof in a summary way to any of the said superior courts wherein such attorney or solicitor has been admitted, and proof made thereof upon oath to the satisfaction of the court that such attorney or solicitor hath wilfully and knowingly offended therein as aforesaid, then and in such case every such attorney or solicitor so offending shall and may be struck off the roll, and for ever after disabled from practising as an attorney or solicitor; and in that case, and upon such complaint and proof made as aforesaid, it shall and may be lawful to and for the said court to commit such unqualified person so acting or practising as aforesaid to the prison of the said court without bail or mainprize, for any term not exceeding one year."

Before concluding this report, we think it our duty to state to the Council that, while conducting the inquiry committed to us, we have repeatedly had representations made to us on a point which is of concern to medical education. We find it frequently alleged as an excuse for the improper employment of unqualified assistants, that the subordinate who is without professional title may often be of more convenience to his employer than a legally qualified assistant would be; that not only his inferiority of social rank carries with it some elements of such convenience, but, still more, that many unqualified assistants are abler for certain of the duties which have to be done than many who have a statutory qualification would be.(a) Especially, it is stated, that the freshly licensed men are often unfamiliar with midwifery, and with the routine of dispensing and surgery attendance. It does not in any degree appear to us that the argument to which we refer is valid, or even pertinent, as an excuse for the offence committed. If the practitioner needed his assistant only for uses which might rightly be fulfilled by a person without legal qualification to practise, clearly he would be under no obligation to prefer the professional licentiate, and might at his discretion engage any unlicensed person whom he found better suited to such uses. But unqualified assistants evidently do not exist in their present number with a view only to legitimate uses; and, indeed, their existence as a sort of profession seems to depend in great part on the fact of their being so largely used for purposes which are not legitimate. It appears to us that in proportion as this is the case, each unqualified assistant is more or less excluding from employment some junior member of the profession; and that, apart from any question of the pecuniary earnings thus diverted from the qualified to the unqualified practitioner, the abuse tends to deprive junior members of the profession of very valuable opportunities of early experience, and thus to aggravate the very evil which is alleged to be the apology for its existence.

The educational evil, according to the statements which we have received, is, that many freshly licensed men who offer themselves for employment as qualified assistants are strikingly in want of those particular elements of education which an assistantship under favourable auspices would supply, and which formerly, under the system of apprenticeships, used to be acquired as a matter of course in the early stages of the education of all who were destined for general practice. It is not for us, as a Committee on the uses and abuses of unqualified assistantships, to enter on the purely educational questions which may be suggested by the statements which we quote; and we confine ourselves to indicating the educational consequence which in our opinion would result from a rule, strictly enforced, that assistants without statutory qualification must not be employed as deputies in professional practice. If that illegitimate use of the unqualified man were stopped, the legitimate use would in many cases not suffice to make it worth while to retain him, and circumstances would often make it indispensable that a qualified assistant should be appointed in his stead. We think it certain that in this way there would by degrees result a greatly diminished demand for unqualified assistants, and a correspondingly increased demand for assistants of the other class; subject, however, to the important condition, that the legally qualified assistant would be expected either to have already learnt, or else at least to show himself very ready to acquire, those accomplishments of a subordinate kind in which he is now said to be frequently deficient. We think it probable that, with the circumstances thus changed, the medical student of the future, if intending to follow general practice, would commonly not consider his course of study complete unless he had devoted at least some two or three months to learning, as a pupil, the ordinary routine of an unqualified assistant's duties, as formerly learnt by the apothecary's apprentice; and that, for the purpose in question, general practitioners would very often be asked to receive as pupils, for some such limited time, students who might well desire to utilise those opportunities of learning, which in former times attached to the system of apprenticeships.

In conclusion, we submit to the Council the following recommendations:—

(*a*) That the Council ask for legislation to the effect that any registered practitioner, practising for gain, who knowingly and wilfully deputes a person not registered or qualified to be registered under the Medical Act, to professionally treat on his behalf, in any matter requiring professional discretion or skill, any sick or injured person, shall be subject to the same legal liabilities as a person who falsely represents himself to be a legally qualified medical practitioner; but with special proviso that such enactment shall not hinder any duly regulated training of pupils by qualified teachers, nor any legitimate action of nurses, midwives, or dispensers.

(*b*) That communications be entered into by the Council with the Registrar-General with the view of procuring such amendments of the Registration Act as will diminish the present frequent evasions of the Registration Act in the certification of causes of death.

(*c*) That the Council record on its Minutes, for the information of those whom it may concern, that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purposes of any law or lawful contract, are, if brought before the Council, regarded by the Council as charges of infamous conduct under the Medical Act.

THOMAS K. CHAMBERS, M.D., Chairman.

The foregoing report was followed by a statement which had been prepared by the chairman, founded on documentary evidence laid before the Committee on the employment of unqualified assistants by registered practitioners. The statement contained remarks on the rise and progress of the system of employing assistants, and on the characteristics, uses, and abuses of unqualified assistants. Among the abuses were the following:—(1) Unqualified assistants are made agents in dishonourable pecuniary dealings; (2) unqualified assistants are left in sole charge of patients; (3) encouragement is given to the issue of false certificates and to forgery; (4) the employment of unqualified assistants lowers the character of the profession; (5) the employment of unqualified assistants is an impediment to systematic education. Some remarks by Dr. W. Ogle on a portion of the statement were appended to it.

The Council adjourned at about seven o'clock, having sat nearly an hour beyond its ordinary time.

THIRD DAY—SATURDAY, APRIL 21.

The REGISTRAR read, *in extenso*, the report of the Committee on the Employment of Unqualified Assistants by Registered Practitioners, which appears in the report of yesterday's proceedings.

Dr. CHAMBERS, Chairman of the Committee, moved the following resolution, the first of a series of three proposals embodying the recommendations of the Committee:—"(*a*) That the Council ask for legislation to the effect that any registered practitioner, practising for gain, who knowingly and wilfully deputes a person not registered or qualified to be registered under the Medical Act, to professionally treat on his behalf, in any matter requiring professional discretion or skill, any sick or injured person, shall be subject to the same legal liabilities as a person who falsely represents himself to be a legally qualified medical practitioner: but with special proviso that such enactment shall not hinder any duly regulated training of pupils in medical schools or otherwise by legally qualified practitioners, nor any legitimate action of nurses, midwives, or dispensers." He said that at the time the Committee was appointed it was proposed that its duty should be to consider the abuses arising from the employment of unqualified assistants; but on further consideration it was thought that a resolution in that form would limit the Committee to an inquiry into cases of scandal and abuse. This consideration had led to their dealing with the subject of the uses as well as the abuses of unqualified assistants. This proved to be an exceedingly wise extension of the inquiry. They found that unqualified assistants were by no means a single class. In the first place, there was the student *in statu pupillari*, who was the *bonâ fide* pupil of a medical man. He assisted his master in his practice, and acted under his superintendence, and generally lived in or near the house

(a) As regards the comparative efficiency of qualified and unqualified assistants, we should, of course, expect that the freshly licensed qualified assistant would in certain respects compare disadvantageously with the person who had made "unqualified assistantship" his profession, and had had some years of experience in it; but we presume that the respects in which the legally qualified person might fail to show himself the superior would not be those in which professional skill and discretion are required (for in those respects the unqualified assistant could not, except by gross abuse, have acquired the experience on which to found superiority), and it evidently would not be admissible that, for any greater efficiency which he may have as a dispenser or surgery assistant, he should be deemed a proper substitute for his employer in the responsibilities which are distinctively professional.

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of the practitioner. He practised in the surgery or the dispensary of his master, and every case which came before him he regarded as his master's patient. Then there was the unqualified assistant, who received a salary, acted as dresser, extracted teeth, dispensed medicines, and performed various ministerial functions in his master's house. Next there was the unqualified assistant who was non-resident, and who lived at a dispensary some distance off, and attended to patients without his master's superintendence, calling in his employer only in serious cases or those in which death was expected. Then there was the man who was not paid any salary, but attended to patients on his own account, and retained all the money which was paid for attendance, and only called in the qualified practitioner as a sort of "cover." Here the relations of master and servant seemed to be reversed. The qualified man was, in fact, the servant of the keeper of the dispensary, and was very often paid for coming in to sign death certificates. Many of the correspondents to whom the Committee referred for information had urged that qualified assistants were not sufficiently educated for the purposes of the general practitioner. The Committee had referred to this difficulty in the last paragraph of their report, but they felt that they could not enter into the subject very largely. As regarded the legislation which it might be desirable to promote on this subject, the Committee thought that it would be unjust to interfere with the use of unqualified men in ministerial offices, such as nursing, dispensing, and dressing; but they drew the line at the proctorial deputation of the duties and responsibilities of the master to such assistants. That distinction might be made use of as the basis of legislation. They held that it was just as great an offence morally for a qualified practitioner to take an unqualified person and represent him as qualified, as for such unqualified person so to represent himself.

Mr. Simon seconded the motion.

Mr. Collins said that the resolution which had been moved was a very important one. If an assistant or an apprentice who had been with his master for three or four years attended a case of fever or measles or any other disease during his master's absence, or visited a patient for his master in the evening, he would apparently bring his master under the operation of the stringent legislation which was proposed in the resolution. The proposal would apply unjustly to a great many practitioners who now employed unqualified assistants or pupils to help them in a legitimate way. If there was such a very large number of unqualified men throughout England as they were led to suppose, it might not be very easy to get qualified assistants, and some time should be allowed for the purpose. While he was a student he was sent out from a midwifery hospital to attend cases of midwifery. He had one of the senior pupils to be with him in the first case that he attended, but afterwards he was sent out to attend the cases without any further help. Of course he was expected to call in some of the persons connected with the hospital if a case turned out dangerous. Was not this just as bad as some of the minor abuses connected with the employment of unqualified men? The subject was a very important one, and should not be dealt with too stringently or too hastily.

On the motion of Mr. Simon, the Council went into Committee that they might the more conveniently discuss the subject.

Mr. Simon said that they did not want to stop any legitimate action such as was referred to by Mr. Collins. A great deal of the work done by assistants might be done by any unqualified person; but they wanted to draw the line somewhere, and after very careful consideration the Committee had attempted to draw it at the point at which what they called "professional discretion" was called into exercise. They strongly protested against the right of any medical practitioner to depute an unqualified assistant to treat a case of fever.

Dr. A. Smith remarked that from such attention as he had been able to give to the report he thought that the Committee had given great attention to the subject, and had made a very clear distinction between ministerial and other duties. He understood that Mr. Collins did not deny the existence of abuses. As to the suggestion that some persons would be inconvenienced by the proposed change, it was to be borne in mind that the very persons who had vested interests in the abuses were the persons by whom those abuses had been created. He regarded the resolution as very efficient as far as it went.

Dr. Pitman wished to ask the representative of the Apothecaries' Society of London whether that body was not in the habit of granting certificates to a class of persons who were termed assistants to apothecaries, and who were not qualified to be registered under the Medical Act, and would, therefore, be unqualified in the sense of the resolution, though qualified in the sense of the grantors of the certificates. In what sense did the resolution look on persons of that class? Would they be punishable under the legislation which it was desired to obtain?

Mr. Bradford said that the class of persons to whom the Society granted certificates as assistants to apothecaries was established under a clause in the Act of 1815. That clause imposed upon the Society the duty of licensing young men to assist in compounding and dispensing medicines. He had no doubt that a great many men who became assistants in that form afterwards went on to actually practise the profession. They were required to have a knowledge of pharmacy and drugs and a rudimentary knowledge of chemistry.

Dr. A. Smith said that they were assistant shopmen under the Act.

Dr. Pitman: But is their practice limited simply to the dispensing of medicines? That is the question. Are they not, in the sense in which we are considering this subject, unqualified assistants who act as medical men?

Mr. Bradford: There can be no doubt that those men who are qualified in that manner have a legal status. They receive a certificate from the Court of Examiners as assistants to apothecaries, but the examination does not go beyond the knowledge of pharmacy, as I said just now.

Mr. Macnamara said that he rose with great diffidence to propose not so much an amendment as an addition to the resolution. He felt very strongly what Mr. Collins had said. The legislation which was proposed was extremely stringent. There could be no doubt that they were all anxious to put an end to the trade in unqualified assistants. Several cases had been brought under their notice in which great misery had been inflicted on the sick poor and in which abuses had been perpetrated by the employment of unqualified practitioners. But he was convinced that the Committee had not the slightest intention of preventing his sending an apprentice to look after a bad abscess, or sending a clinical clerk from a lying-in hospital to look after a bad case of fever. But the clause as it now stood might be so construed; whereas the cases which he had mentioned would be covered if, after the words "duly qualified practitioner," the following words were introduced:—"Nor the use of trained pupils in partially treating the sick or injured under the direct supervision and responsibility of such practitioners." At a lying-in hospital with which he was connected, his colleagues made it a rule—and he believed that it was a very proper rule—that their clinical clerk should pay afternoon visits. Sometimes an apprentice paid the second or third visit from a lying-in hospital. The additional words which he had proposed would guard against the name of a registered practitioner being made use of by an unqualified person; and it would enable pupils to be employed without danger of a forced construction of the enactment.

Mr. Turner said that he felt very great hesitation in giving an opinion upon this subject, because it lay outside the range of his experience, for he was not a practitioner; but they would not be doing justice to the Committee if they did not express their obligation to them for the extreme care which they had taken in the preparation of the report, and in acquiring an enormous mass of materials from all quarters for the purpose of enabling the Council to come to a conclusion on the subject. But he shared very much with Mr. Collins and Mr. Macnamara in the feeling that the motion as originally submitted to the Council was not quite satisfactory. One point occurred to him in connexion with the special proviso at the end, and that was that there were two classes of assistants. There was the assistant who went to a principal with the object of being taught, that he might afterwards become qualified; and there was the assistant who went to a principal in order that he might help him in his work and extend his business, and who received a salary for his services. It appeared to him that this distinction was hardly sufficiently brought out in the

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motion as it was originally drafted. It might be a question for the Council to consider whether those two classes should not be put upon a different footing in the resolution. Mr. *Macnamara's* amendment seemed to meet this distinction to some extent. Another point which occurred to him was that, after all, there might be too much stringency in *the earlier* part of the motion, and that sufficient consideration might not have been given to what might be called the exigencies of practice among the poor where *qualified* assistants were not to be had. In the poorer districts of London and other large towns, where practices were not very remunerative, the employment of unqualified assistants, who had a certain measure of knowledge, and who acted, not independently, but under a qualified practitioner, might enable the sick poor to obtain medical attendance superior to that which would be procured by them if no such assistants were at the disposal of the practitioner. He was struck very strongly during the sitting of the recent Medical Acts Commission by some evidence which was tendered by a Mr. Cripp, a person calling himself a medical herbalist. It would be found on page 364 of the Minutes of the evidence taken before that Commission. To him (Mr. Turner) the evidence of that man was certainly a revelation. He had no conception that there existed in England such a systematic organisation of medical herbalists as appeared from that evidence. Mr. Cripps gave a list of the names and addresses and other particulars of ninety-two medical herbalists, not one of whom possessed a qualification, although they practised very largely amongst the sick poor, and held appointments in connexion with friendly societies and associations formed by the artisan class. The certificates of these herbalists were accepted by the Odd Fellows, the Foresters, and other bodies, and also by employers of labour, as a sufficient guarantee that the persons mentioned in the certificate were unfit to attend to their work. The evidence showed that there was at the present time a considerable number of persons who acted as practitioners, and who might be said to be trusted practitioners, and yet were not qualified in the legal sense of the word. They professed to go through a certain education and to undergo a certain kind of examination. These facts appeared to have an application to the motion which was now before the Council. If they rendered it too difficult for the qualified practitioner to avail himself of the assistance of unqualified persons who would act under his supervision, the artisan and poorer classes would be thrown to a still greater extent into the hands of medical herbalists and such like persons.

Dr. HUMPHRY: Are none of the herbalists "covered" by a qualified practitioner?

Mr. TURNER replied in the negative. One of them stated that he had had two inquests held on his patients, and he had been twice tried at the assizes for manslaughter, but acquitted on both occasions. Another said that inquests had been held on two of his patients, and that he was held free from blame. They seemed to boast of these facts.

Dr. STORRAR endorsed the remarks of Mr. Turner as to the intelligence and pains bestowed by the Committee on the report. The subject, however, was one of exceeding difficulty. In connexion with the remarks of Mr. Macnamara, Mr. Collins, and Mr. Turner, let them consider the case of a country practitioner who had a very wide circuit to work, and who employed the services of what was called an unqualified assistant. Up to a certain point that assistant might not be entirely unqualified, for he might be one of that numerous class of men who had attended one, two, or three years at a medical school, and was pretty well advanced in his studies. Supposing that the practitioner was absent from home for a day or two, and a message came that he was wanted by a patient: was such an assistant as he had described to be wholly debarred from doing what his experience and intelligence would enable him to do by way of a "stop-gap"? They must bear in mind the existence of the druggist who prescribed medicines. Why should he be allowed to prescribe castor oil, black draught, rhubarb and magnesia, or chalk mixture over the counter, and the unqualified assistant of the medical practitioner be debarred from doing so? Perhaps a country gentleman would go into the dispensary of a practitioner, and, finding that the principal was absent, ask the assistant to give him some medicine, as there was something wrong with him. Possibly the assistant might give some remedy which the practitioner had himself prescribed for the same patient on a former occasion for a similar attack. He knew a medical practitioner in Yorkshire whose assistant was his wife. She was a very intelligent woman, and made up the medicines for her husband. She once told him (Dr. Storrar), with a laugh, "If a patient comes to me, and my husband is not at home, I always give a pill and black draught." He wished the Council not to commit themselves to asking for more than it was reasonable to expect. He agreed with Mr. Turner in the opinion that there could not be a greater mistake than to suppose that the practice of the medical herbalists was confined to the poor and the ignorant. In 1857 he was present in the House of Commons during a discussion on the Medical Bill, when the late Mr. Thomas Duncombe set the House in roars of laughter by a speech in opposition to the Bill. He afterwards interviewed Mr. Duncombe, and he found him suffering from chronic phthisis. The honourable gentleman told him (Dr. Storrar) that he was then taking decoctions of herbs, under the advice of a herbalist. First he had tried the legitimate practitioners, then he had gone on to homœopathy, and subsequently he had transferred his affections to the herbalists. He was under the fullest conviction that he had been kept alive for months, and would be kept alive, by a persistent continuance in the use of the herbal decoctions. The fact was that faith, whether it was in medicine or in theology, was by no means limited to the poor and ignorant. They often found the most accomplished lending themselves to extreme absurdities. He wished that some mode of expression might be used in the resolution which would admit of the employment of the services of an assistant who, though not qualified in the legal sense, was nevertheless qualified by education up to a certain point. He was afraid that if they tied matters up too closely, they would add to the shoals of persons who resorted to the prescribing chemist.

Mr. SIMON thought that the Committee might congratulate themselves on the fact that all who had spoken were in agreement with the object at which the Committee had aimed. The question was a very important practical one as regarded both the inconvenience of the practitioner and the wrong done to the public by the employment of unqualified persons.

Dr. HALDANE said that nothing in the nature of the employment of untrained assistants took place in Scotland, or at all events in Edinburgh. There were students in connexion with dispensaries who attended patients at their own houses under the supervision of qualified medical men.

Dr. A. SMITH said that the object of the Committee was to prevent qualified medical practitioners from delegating their duties to unqualified men. As to the herbalists, they did not pretend to be qualified, and they boasted that they were not. They were outside the pale of legislation. It would be impossible to frame any law which would prevent persons from taking the advice of such men. He thought that it would be dangerous to give any sanction of law to the use of unqualified assistants. In all important changes for the benefit of the public there were always some inconveniences or losses entailed by the alteration. He held that if unqualified assistants were entirely extinguished by legislation, there would be no lack of qualified men. He thought that the Committee had accomplished very good work in framing such a wide resolution, and that the proposal was better calculated to cover the whole question than anything else which had been suggested. He did not regard it as at all too stringent.

Professor HUMPHRY hoped that medical councils of the future might be able to produce better work, and to show more wisdom and more care in dealing with any subject than had been exemplified by the Committee in this instance. The question was a very serious one, and one which had often been present to his mind. He well remembered the anxieties to which he was sometimes subjected as a lad in treating cases which perhaps ought scarcely to have been left to him. And then he must mention the very great assistance which he had himself received from earnest pupils in his private practice, who took the partial charge of cases. He was extremely glad that the additional words had been proposed in connexion with the resolution as originally moved. With regard to the practice of herbalists, undoubtedly the amount of work which was being done by them throughout the country was extensive; and one very curious thing in connexion with them was the manner in which

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money was forthcoming for the payment of such men. Poor patients who came to hospital had sometimes been under the treatment of herbalists for months, and paid them considerable sums. He thought that perhaps the Committee had scarcely taken sufficiently into consideration the great amount of help which was rendered to medical practitioners throughout the country by old unqualified assistants. He supposed that no Bill could be passed to produce a great good without doing some evil; and no doubt legislation of the kind which was now proposed would render the practice of the medical profession in the country more difficult. It would necessitate the employment of younger qualified men, and this would necessitate a frequent change of assistants on the part of the practitioners. He had no doubt that not unfrequently an old unqualified assistant would be of more value to the medical man than a young qualified one. The young qualified men were often very unfit to undertake the ordinary work of a practitioner. They would perhaps be unable to distinguish a case of measles from one of small-pox, and yet they would have more trusted to them than unqualified but older men. He felt that the change should not be brought about too suddenly, though legislation of some kind was absolutely necessary, especially as regarded the question of signing death-certificates. The matter wanted careful weighing.

Mr. SIMON said that the whole case of the Committee as regarded the change was contained in a footnote which appeared in the report. No doubt there would be a period during which, as had been alleged, the raw licentiate would not be so well up in some performances as an unqualified assistant. But their contention was, that they could not assume that the difference would be in favour of the professional skill of the unqualified man. The Committee pointed out that this was a difficulty which would cure itself very rapidly by the pressure which would be put upon all medical students to qualify themselves in what the report called the ministerial work.

Dr. CHAMBERS was of opinion that the trouble caused by the change would be of very short duration, and at the same time the practitioner would be a gainer by being able to obtain an influence and authority over the young qualified man which he would never gain over an old unqualified assistant. He did not know any relation between man and man of a more improving character than the relation between teacher and pupil.

The PRESIDENT, before putting the resolution, took occasion to thank the Committee for the extreme care which they had bestowed upon one of the most difficult and important subjects which had ever been before the Council. As had been said in the course of the discussion, there was no doubt that the services of some of the unqualified men, both in the country and in town, were of very great use, but the practice of employing them was entangled with one of the grossest abuses which was connected with the profession. They all knew as a fact that, notwithstanding the high training which was given in great medical schools, it was heard in all quarters that young men who passed rarely possessed the qualifications for ordinary daily work; and that was a defect which they desired to obviate. Whether the mode now proposed was the best possible solution, was another question; but no doubt the subject was one which they were bound to represent to the Government.

The original motion with the additional words proposed by Mr. Macnamara was then agreed to and passed in the following form:—"(*a*) That the Council ask for legislation to the effect that any registered practitioner, practising for gain, who knowingly and wilfully deputes a person, not registered or qualified to be registered under the Medical Act, to professionally treat on his behalf, in any matter requiring professional discretion or skill, any sick or injured person, shall be subject to the same legal liabilities as a person who falsely represents himself to be a legally qualified medical practitioner; but with special proviso that such enactment shall not hinder any duly regulated training of pupils in medical schools or otherwise by legally qualified practitioners, nor the use of trained pupils in partially treating the sick or injured, under the direction, supervision, and responsibility of such practitioners, nor any legitimate employment of nurses, midwives, or dispensers."

Dr. CHAMBERS then moved the second of the resolutions prepared by the Committee, namely:—"(*b*) That communications be entered into by the Council with the Registrar-General with the view of procuring such amendments of the Registration Act of England as will diminish the present frequent evasions of the Act in the certification of causes of death."

The motion was seconded by Mr. Simon.

In connexion with this resolution, the Registrar read the following remarks by Dr. W. Ogle:—

The statement that the Registration Office encourages violations of the Registration Act by its unwillingness to prosecute, is a charge which I venture to think should not be made by the Committee of the Medical Council, unless they have evidence to substantiate it. Let it at any rate be stated what were "the cases reported in the daily papers," by which the Committee are led to believe that such a charge is true. To the best of my knowledge and belief, the charge is entirely unwarranted by facts. Many prosecutions are yearly instituted by the Registrar-General's authority, and, as a matter of fact, I only know myself of one single case since my acquaintance with the office, where there was reason to believe that the Act had been violated, and yet the Registrar-General, on complaint being made, declined to prosecute. Of that case, and the reasons for such refusal, I shall have something to say presently. There have, however, been many cases where complaint has been made to the Registrar-General, and he has declined to authorise a prosecution, simply because the alleged offence was *not* a violation of the Act.

These are the cases which newspaper writers, without troubling themselves as to the law on the matter, report as "refusals of the Registrar-General to enforce the Act," and which the Committee also appear to accept as such without further investigation.

By the Registration Act, a registered medical practitioner who has been in attendance on a person in his last illness is, in case of that person's death, bound to give a certificate, stating, to the best of his knowledge, the cause of death; and the Registrar-General is bound to furnish such registered practitioner with printed forms of certificates. But there is not a single word in the Act saying that a registered or unregistered practitioner, or, indeed, anyone else, shall not give a certificate of cause of death in cases where he was not in attendance or which he never saw. So far as the Registration Act, and therefore the Registrar-General, is concerned, the ordinary proceeding of a "cover" in signing a certificate of cause of death when he never visited the patient himself is not an illegality. It may be "infamous conduct" on the part of the "cover," as the statement argues, as I think, with justice, but it is not illegal; and it is the business and in the power of the Medical Council to deal with "infamous conduct" on the part of registered practitioners, and not the business nor in the power of the Registrar-General.

It sometimes, however, happens that the "cover" *does* break the law by stating that he has been in attendance upon the deceased, when in reality he never visited him. When such cases are reported by complainants to this office the Registrar-General invariably, so far as my knowledge goes, sanctions a prosecution. And the consequence of this action on the part of the Registration Office has been as follows:—The "cover" leaves the spaces, in the form of certificate issued by this office, relating to attendance on the deceased, blank, or prints and uses a special form of certificate of his own, in which nothing is said as to attendance on the deceased. There is nothing illegal in this. Legal opinion has been asked for by this office from the proper law officers, as to whether a registered medical practitioner is bound to use for his certificate the form which the Registrar-General is bound to supply him with, and the answer has been that there is no such obligation.(a) The most, therefore, that the Registrar-General can do, is to direct his subordinates, the local registrars, to deal with such cases as though they were uncertified, and this he has done. If the registrar alluded to in the statement accepted the certificate there described, he acted in opposition to this direction of the Registrar-General, as also did the registrar in the case of the certificates signed by the obstetrical officer of a medical school, in cases which had not been visited by himself in person, but only by unqualified students. It is strange that while the statement finds fault with the Registrar-General for not prosecuting "covers," it apparently finds fault with him for refusing to sanction a similar act of "covering" on the part of an officer of a great hospital; and yet such an act, done deliberately and habitually in a great medical school, is infinitely more mischievous than when done elsewhere; for it leads the students, the future certifying practitioners of the country, to carry away with them, as part of their education, the loosest views as to their duty in the matter of certificates.

Sometimes, again, the Registration Act is violated not by the "cover," but by the unlicenced practitioner, who signs the certificate with the coverer's name. Usually this is done with the connivance of the coverer, and in such case it is not only very doubtful whether a conviction could be obtained, but it is manifest that, even if it could, the real offender is, as the statement allows, not the covered but the coverer. It is the latter that should in justice be punished for "infamous conduct."

Sometimes, but very rarely, it may happen that the certificate is signed with the name of a registered practitioner without the latter's permission. This, of course, is a simple forgery, and any such case brought to the knowledge of the Registrar-General would most assuredly be prosecuted if it turned out on preliminary investigation that there was sufficient evidence to insure a conviction. This latter condition is an important one. For the Registrar-General to authorise a prosecution at the public expense, without a moral certainty of obtaining a conviction, would, I think, be most unadvisable, and do much mischief. And this brings me to the case alluded to before as the one in which the Registrar-General refused to prosecute. This was the case of one Mr. A., who signed the name of Dr. B., and, according to Dr. B., without his authority, under circumstances with which you will doubtless be familiar. The Medical Council, after full examination into the case, found Dr. B. guilty of infamous conduct, but discharged him finally without punishment, sending, however, the documents on to this office, in order that Mr. A. might, if it was thought fit, be prosecuted. In that case the Registrar-General did not think fit to prosecute, and, as I think, was right in so deciding.

For (1) it was extremely unlikely that a conviction could have been obtained, seeing that the chief witness would have been Dr. B., already found guilty by the Council of "infamous conduct," and whose evidence therefore would have been open to much suspicion. I think a magistrate would have come to the conclusion that in all probability Dr. B. had given Mr. A. a general authority to sign his name for him, and in such case the

(a) Neither is there any legal obligation by which the registered medical man is bound to state on his certificate whether he attended the deceased.

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charge of forgery would have fallen to the ground. But (2) besides this, the real offender, or, as the Medical Council styled him, "the greatest offender morally," was Dr. B., and the Council, in the exercise of their discretion, had thought fit not to punish him. Under those circumstances, it would have been most inequitable to visit the less guilty subordinate with legal penalties.

This Dr. B., be it said, is one of those registered practitioners who uses a printed form of certificate, in which all mention of "attendance" is omitted, with what purpose may be easily conjectured.

I think I have now conclusively answered the charge that the Registration Office, by its unwillingness to prosecute, encourages malpractices in the matter of certificates of death, and I feel bound to add that in my opinion the accusation might be much more fairly brought against the Medical Council. Again and again the Registrar-General has prosecuted and convicted registered medical practitioners for giving false certificates, and yet the Medical Council have taken no notice whatsoever of this "infamous conduct." The names remain on the Register; and the practitioner, after paying a trumpery fine, continues his practice and his malpractices without any professional disgrace attaching to him.

W. Ogle.

P.S.—In order to prevent any possible misunderstanding, it may, perhaps, be well to state that the above "remarks" simply express my own views, and are given without the authority, or even the cognisance, of the Registrar-General.

October, 1882. W. Ogle.

Dr. Lyons observed that the Committee did not make any specific recommendation as to how the object in view would be best effected. The subject was one of very great importance and very great difficulty. He believed that the present mode of registering death could never be made a perfectly sound or workable one, and there was a very great difficulty experienced in a very large class of cases which fell under the cognisance of insurance companies. There was a very serious want of some well-working system of certifying the occurrence of death. He thought that all gentlemen engaged in practice would bear him out in saying that it was only in a small percentage of cases that the medical man actually saw a patient after death. He had himself been concerned in one or two very extraordinary cases. On one occasion he was sent for by a man to go and see his wife. After this message was sent another message was despatched to him to say that he need not go, as the wife was dead. The second message did not arrive in time to stop him, and upon reaching the house he found the patient very ill, but she recovered, and lived for some years afterwards. If the second message had reached him in time to prevent his going to see the woman, and he had signed a certificate of death upon the representation of the husband that the woman had died, he might have been lending himself to a very nefarious proceeding. In some correspondence which he received some years ago, in consequence of a speech which he had made, it was suggested that verification of death should be made by a public officer.

The motion was carried unanimously.

The following motion—the third of the series—was moved by Dr. Chambers, seconded by Mr. Simon, and carried unanimously:—"(c) That the Council record on its Minutes, for the information of those whom it may concern, that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purposes of any law or lawful contract, are, if brought before the Council, regarded by the Council as charges of infamous conduct under the Medical Act."

The Council then resumed, and the motions passed in committee were brought up and unanimously agreed to.

The report of the Committee on Preliminary Examination was presented, and on the motion of Dr. Storrar, Chairman of the Committee, it was received and entered on the Minutes.

The following report of the Pharmacopœia Committee was presented and received:—

The Pharmacopœia Committee appointed at their first meeting, on July 8, 1882, a Sub-committee, with power to take such steps as they thought necessary towards preparing a new edition of the Pharmacopœia, and to submit a report to a future meeting of the General Committee. The Sub-committee have reported that they held two meetings since their appointment; and that they have communicated with Professors Redwood, Bentley, and Attfield, as to undertaking the duty of preparing a new edition of the Pharmacopœia under the direction of the Committee. These gentlemen have submitted to the Pharmacopœia Committee a report, which, with certain modifications recommended by the Sub-committee, has been approved of. The Committee have arranged that the remuneration to Messrs. Redwood, Bentley, and Attfield is to be £800; this sum to include the cost of any experiments requiring to be made, also the correction of the press, and the preparation of an index, the work being carried through the press to the satisfaction of the Committee and the Medical Council.

The Committee, in conclusion, beg to state that it is their intention to apply to the several medical authorities, to the Pharmaceutical and Chemical Societies, and to such persons as may be likely to furnish useful information, with a view of making the work as complete and perfect as possible.

April 20, 1883. Richard Quain, M.D., Chairman.

The following communication from the King and Queen's College of Physicians in Ireland, in regard to a case reported to the Council last year, was read:—

King and Queen's College of Physicians, Ireland,
"Kildare-street, Dublin, February 5, 1883.

Dear Sir,—I am directed to inform you that, at the meeting of the King and Queen's College of Physicians in Ireland, held on Friday, February 2, 1883, the name of Mr. Robert Gray, Melbourne-terrace, Armagh, was, by resolution of the College, removed from the roll of Licentiates of the College. I am, dear Sir, yours faithfully,

To W. J. C. Miller, Esq., Registrar General Medical Council. J. W. Moore, M.D., Fellow and Registrar.

It was moved by Mr. Macnamara, seconded by Mr. Collins, and resolved—"That the Registrar be directed to erase from the Medical Register the qualifications 'Lic. Midwif. 1873, K. Q. Coll. Phys. Irel.,' formerly held by the aforesaid Mr. Robert Gray."

On the motion of Mr. Marshall, seconded by Mr. Turner, it was resolved with acclamation that the best thanks of the Council be given to the President for his gift of the portrait of Sir Benjamin Brodie, the first President of the Council.

The Council then reverted to the dental business, upon which a motion had been made upon the first day of the sittings, and postponed. The motion in question was that the following table, showing the results of professional examinations in 1882 for qualifications granted under the Dentists Act, be received and entered on the Minutes:—

Name of licensing body.	Diplomas.	Nature of examination.	With curriculum.		Without curriculum.		Total.	
			Number rejected.	Number passed.	Number rejected.	Number passed.	Number rejected.	Number passed.
Royal College of Surgeons of England	Licence in Dental Surgery	Written, oral, and practical	1	21	1	0	2	21
Royal College of Surgeons of Edinburgh	Licence in Dental Surgery	Written and oral	0	1	3	5	3	6
Faculty of Physicians and Surgeons of Glasgow	Licence in Dental Surgery	Written, oral, and practical	0	1	5	3	5	4
Royal College of Surgeons in Ireland	Licence in Dental Surgery	Written, oral, and practical	0	0	15	45	15	45
University of Harvard	D.D.M.	Written & practical	5	3	0	0	5	3
University of Michigan	D.D.S.	Written, oral, and practical	3	32	0	0	3	32
		Totals	9	58	24	53	33	111

Dr. Fergus renewed his question as to when the examinations *sine curriculo* should cease.

Mr. Macnamara said that he should be able to lay before the Council some information on the subject on a future day.

The motion was then carried, and the Council adjourned.

Fourth Day—Monday, April 23.

Dr. Pitman reminded the Council of the question which had been asked as to when the examinations *sine curriculo* under the Dentists Act were to cease?

Dr. Fergus said that he wished to put the question officially to the President.

The President said that he would be answered to-morrow morning.

On the motion of Dr. Quain, the report of the Pharmacopœia Committee was adopted.

The Committee on the Deficiency of Subjects for Ana-

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tomical and Surgical Teaching reported that they were not prepared to report fully, and asked leave to sit again. Mr. Marshall had been appointed honorary secretary.

The report was adopted.

The Finance Committee presented a report, from which we extract the following:—

The Finance Committee reports that the income of the General and Branch Councils for the year 1882 (ending January 1, 1883) has been £7164 7s. 11d.—an amount which exceeds by £685 the income for the year 1881. The expenditure during the year 1882 has been £4820 10s. 1d., which is above the expenditure of 1881 by £33 16s. 1d. The Committee has, however, the satisfaction of reporting that the excess of income over expenditure for the year 1882 amounts to £2343 17s. 10d. The excess of income over expenditure for the previous year, 1881, was £1722 13s. 11d. The chief item of expenditure wherein there has been an increase during the year 1882 is that of the fees to members of General Council, which amounts to £461 9s. 6d., a result due to the greater length of the Council's last session. In the house expenses there has been a slight increase of £26 13s. 2d., owing mainly to repairs effected, and to expenses connected with the ventilating apparatus in the Council room. The principal item of diminished expenditure for the year 1882, as compared with 1881, is in the visitation of examinations. Pursuant to instructions given to them at the meeting of the English Branch Council in 1881, the treasurers have made an additional purchase of £1500 Consols, in the names of the trustees of the Branch Council, thus making a total now invested under this trust of £20,500 Consols. During the year also a sum of £1200 has been invested by the Scottish Branch Council, making a total investment of £3200; and the Irish Branch Council has increased its investments by £150, bringing up its total under this head to £1879 17s. Thus the total amount now invested by the three Branch Councils is £25,569 17s.

Dr. Quain (chairman of the Committee) moved the adoption of the report.

The motion was seconded by Dr. Pitman, and agreed to.

Mr. Macnamara, who had given notice of a motion to the effect that the Medical Act Amendment Bill introduced into the House of Lords by the Lord President be considered at the earliest possible opportunity, with a view to suggesting various amendments which he had specified in detail, asked leave of the Council to substitute the motion that the Council go into committee on the Bill, in the place of the proposition of which he had given notice.

Leave to make the substitution was granted.

Mr. Macnamara accordingly moved that the Council resolve itself into committee for the consideration of the Bill. He said that he was one of those who entertained the conviction that if the members of the Council were to shrink from considering certain provisions of the Bill they would be abnegating their functions and justifying the all but scurrilous remarks which had been made about the Council in various publications and journals at home and abroad. There were two broad principles involved in the Bill—one was connected with the reconstruction of the Medical Council, and the other concerned the educational alterations proposed by the measure. He did not for one moment propose to enter into the question of the reconstruction of the Council, for he considered that it would be beneath their dignity to discuss any such question. He held that the Council, under great difficulties, had admirably discharged most arduous duties. The most bitter of the censurers of the Council were gentlemen who, however admirable as practitioners or as journalists, were utterly unacquainted with the details of medical education in the country. One of these gentlemen admitted before the Royal Commission that he had never been engaged either as a lecturer, a clinical professor, or an examiner; and yet this was one of the persons who would be almost sure to be elected a member of the Council in the event of there being a direct representation of the medical profession. And this gentleman had—not to use a stronger word—the complacence to criticise the actions of such men as those to whom the President alluded in his admirable address at the beginning of the present session. Criticism in such a case might well be considered a robe of honour. To the names mentioned by the President he would add three others. One was that of Professor Apjohn, who, they would rejoice to know, still lived at an advanced age in the full enjoyment of physical and intellectual vigour, and who, while on the Council, worked arduously in the discharge of his duties, and took part in the production of the national Pharmacopœia. The very name of Professor Apjohn conferred distinction on the Council. The other names were that of Professor Williams, who took an active part in the formation of the Council, and that of the blunt, honest Hargrave, a man of the highest professional skill. Mr. Macnamara then went on to review in detail various provisions of the Medical Act Amendment Bill, for the purpose of showing that it was desirable that the Council should take them into consideration. He believed that medical men had reached a very serious crisis in the history of their profession, and he had felt in duty bound to refer to the proposed changes, and to ask the Council to consider them.

Mr. Collins seconded the motion.

Dr. A. Smith said that he thoroughly approved of the aim and object of the motion. It was the usual practice to discuss Medical Bills in committee, and there were clauses in the measure which it was incumbent upon the Council to express an opinion upon. If they allowed the Bill to go to the House of Commons without discussing it, it would be assumed that it was unobjectionable to them. It dealt with the question of finance, and nothing could be a greater blunder than the financial arrangements which the Bill proposed to make.

Dr. Humphry said that one question which they had to consider was whether their going into committee on the Bill would be likely to lead to any improvement in the measure. It would be certain to occupy a very considerable amount of time, and probably no great benefit would result. His own impression was that such suggestions as were likely to be made would tend rather to injure the Bill than to produce any good effect. He was content with the Bill as it stood, and he did not think that any alterations which they might propose would, on the whole, be beneficial. He held that it would be a waste of time to go into committee.

Dr. Haldane could not agree with the remarks of Professor Humphry. He considered that the Council owed it to themselves that they should discuss a Bill of such importance. They might go into committee without dealing with every clause.

Dr. Pettigrew agreed with the last speaker. All the business which they had hitherto conducted was unimportant compared with that which they might effect if they discussed the Bill.

Dr. Heron Watson held that, under the circumstances in which they were then met, it was essential that they should consider the proposed measure. The changes which the Bill sought to effect were detrimental to the authorities, and calculated to unsettle matters. It was desirable that they should discuss the clauses of a Bill which were to entail such serious consequences.

Dr. Lyons was averse to going into committee on the Bill, for that would mean that they should consider it clause by clause. He should have been more inclined to support the original proposal, which was simply that the Bill should be considered. When the measure had passed through the tranquil, though no doubt deep, sea of the House of Lords, it would come into the more troubled and stormy waters of the House of Commons, where, as they knew from the history of former attempts at legislation, Bills sometimes met with shipwreck. He thought that it would be very important that those whose duty it was to consider the Bill in the House of Commons should have some sort of guidance from the mature opinion of those members of the profession who sat around that council-table. This would be of great use with regard to the future of the measure. The Bill was one which, perhaps, affected the interests of the profession more vitally than any measure of modern times. When it was before the House of Commons they might deal with it in any manner which they thought best. He would suggest that Mr. Macnamara should withdraw his motion for going into committee, and move simply that the Bill be considered, and that they should then deal with questions of principle rather than with details.

Mr. Simon ventured to say that there were strong reasons against taking the course which was proposed in the resolution. There were many points of the Bill upon which he had sentiments which he should be ready to express at the proper moment; but it occurred to him, as a conclusive argument against going into a discussion on the present occasion, that there was no important point in the Bill upon which the Council as a corporate body had not already expressed their opinion when they had been asked for their opinion. In this instance the Bill had not been referred to them in that sense. The question of legislation had been considered by the Government, and a Royal Commission had been appointed. The Bill was the result of the judgment at which the Government had arrived. This did not appear to be a moment at which the Council could usefully intervene.

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Mr. MACNAMARA said that he had not the slightest objection to the Bill being considered otherwise than in committee, though he believed that a discussion in committee would be more convenient. It was incumbent on the Council that they should strengthen the hands of the Government in every way, so as to enable them to carry out legislation to a finality, at all events for their own lifetime. He objected to the consideration of the Bill being deferred until the measure was before the House of Commons. Such a delay would necessitate another session to the Council.

The PRESIDENT said that personally he should not support the motion to go into committee. Mr. Simon had truly pointed out that the Government had not referred the Bill to them for consideration.

The motion that the Bill be considered in committee was then put, and there appeared eight votes on each side. A second show of hands was taken, and the numbers were nine for, and eight against. The President thereupon voted in the negative, and the numbers being thus made equal, he declared that the motion was not carried.

Dr. HERON WATSON: I move now that the Council do proceed to consider the Bill.

The PRESIDENT ruled that the motion was one of which notice must be given.

An official notification from the Privy Council Office of the appointment of Dr. James Matthews Duncan as a member of the Council for the term of five years was read by the Registrar. Dr. Duncan was introduced by Dr. Pitman, and took his seat at the council-table, in succession to Sir Wm. Gull.

A communication from Mr. William Berry, of No. 7, Great George-street, Wigan, alleging an insufficient term of study in the case of Mr. George Abbott, of Standishgate, Wigan, was read, and other communications on the same subject were laid before the Council.

A letter was read from Dr. Archibald Hamilton Jacob, a member of the Council of the Royal College of Surgeons in Ireland, respecting insufficient attendance by medical students in Ireland on the medical school lectures, and the issue of false certificates of attendance on such lectures. The letter referred to the following words used by the Rev. Dr. Haughton in the course of a debate on this subject which took place in the Medical Council on July 18, 1879:—"It has come to my knowledge that certificates have been issued in cases in which there has been no attendance at all." The writer went on to say:—

As a matter of fact, I am in a position to assert that the statement of the Rev. Dr. Haughton, above referred to, was true to the fullest extent, and that it is notorious that in Dublin certificates of "diligent" attendance could be obtained, and were obtained in any number, from certain schools and hospitals by payment of the fee, and without any real attendance, for confirmation of which statement I beg to refer you to second paragraph of a letter from Carmichael College (Minutes, page 137, vol. xvii.), and to the fact that the Rev. Dr. Haughton—in his capacity of Medical Registrar of Dublin University—had, in consequence of these practices, refused, for some years, to recognise the certificates issued by a certain Dublin medical school.

These practices it is difficult for any licensing body to prevent, because it usually possesses no information respecting the circumstances under which the certificates presented by any individual candidate for its licence are granted to him. Two years ago, however, positive proofs came into my possession that several persons had passed one or other of the examinations of the Royal College of Surgeons in Ireland, to which they had been admitted on production of all the requisite certificates of "diligent" attendance at lectures, dissections, and hospital, they being, in fact, so circumstanced that attendance on any material portion of these courses was physically impossible, inasmuch as they were engaged from morning to evening, for every working day of the medical session, in offices, banks, and shops.

About this period the Ledwich School and Carmichael College (the latter of which immediately afterwards discontinued the practice) commenced to advertise that they would provide lectures from 7 p.m. to 10 p.m. in the evening, such instruction being available for clerks, shop assistants, and other students whose entire day was employed in engrossing business avocations; and the Council of the Royal College of Surgeons having protested against this system, and communicated its protest to the General Medical Council (Minutes of G. M. C., vol. xvii., page 138), eventually adopted a code of regulations for the specific certifying of attendances, and passed an ordinance refusing to receive the certificates of any school which gave lectures at night. The College appears to have held that such lectures were simply a means of evading compliance with the curriculum of study required for the letters testimonial of the College—that it is all but impossible that by such means a student could be present at the requisite number of lectures, dissections, and hospital visits—and that, if he were present, it is impossible that a young man, who has been engaged at other avocations for the entire working day, can benefit materially by studies so pursued.

I now address the General Medical Council on this subject with a view of pointing out that the action of the Royal College of Surgeons in Ireland, in reference to fictitious certificates and nocturnal courses of study, can have only a limited effect towards insuring the *bona fides* of medical study as long as such certificates are accepted by other licensing bodies in Ireland and elsewhere, and I venture to hope that the Council will adopt effectual means to prevent such certificates being received. In this connexion, I would point attention to the fact that the Royal College of Surgeons in Ireland, in thus insisting upon a definite amount of attendance, has very seriously imperilled its own pecuniary interests, inasmuch as the student who is refused admission to the letters testimonial of the College because he is not able to show that he has fulfilled the legitimate course of study, will be readily accepted by other licensing bodies in Ireland and elsewhere without any inquiry as to the authenticity of his proofs of having done so.

On the motion of Mr. MACNAMARA it was resolved that the foregoing communications be received and entered on the Minutes.

Mr. MACNAMARA said that the gentlemen of whom Dr. Jacob complained were engaged in banks and offices, where their attendance was required from ten to four, and yet they were able to produce certificates of attendance on lectures which commenced at one o'clock, and continued hour after hour until about five. The College of Surgeons had questioned some of the certificates which had been presented to them; but the only result of such action was to send the students to other licensing bodies where the certificates were received, and thus to cause a loss to the exchequer of the College of Surgeons. It was only just that he should state to the Council the remarkable fact that some of the most brilliant pupils which they had in Ireland were persons who had worked in the way which Dr. Jacobs had described. They had come out first in competitive examinations for the public service.

Dr. HUMPHRY inquired whether it was the practice in Dublin for each teacher to certify the attendance at his own course of lectures, or whether some one person certified *en masse* for all the lectures.

Mr. MACNAMARA said that the universal practice was for each lecturer to certify the attendance at his own course. It was exceedingly difficult to check the attendance by calling the roll. One student might answer "Here" for half a dozen others.

Dr. CHAMBERS said that *employés* in banks had been mentioned. There was another class of persons who had employment during the day which prevented their attendance at lectures; and that was the class of unqualified assistants. He had in his mind the case of a youth who, without having attended a single lecture, got his schedule signed, and then went to one of the licensing bodies and got examined. The proper thing would be to do away with all schedules and certificates from lecturers. They were simply a trap for the unfortunate teacher.

Dr. A. SMITH said that the certification of attendance on lectures was very troublesome, and was no guarantee of the student having acquired knowledge.

Mr. SIMON said that the question was an exceedingly difficult and large one. A certain quantity of fictitious certification was recognised by very general consent. He had on many occasions expressed very great dislike of the system of certification of bodily attendance at lectures. The question underlying the practice of fictitious certification was whether there was in great part a fictitious studentship. He thought that the instances alleged showed victorious studentship, and that persons pretended to be students while they were in fact engaged in some non-medical pursuit. When the Medical Council required four years of medical study, they meant four years in which the study of medicine was the real occupation. It was clearly an evasion of their intention if, during the four years of studentship, a person was engaged as a bank clerk. He would move—"That for the purposes of the Council's Recommendation 21, and of regulations by which the licensing authorities may desire to give effect to it, the 'four years' required to be spent in professional study must be four years during which professional study shall have been adequately followed by the candidate as his true industry and the main occupation of his time; and that the Council would not be prepared to count as part of their four years' curriculum any considerable time during which a candidate had given most of his industry to other pursuits, as, for instance, if he had been regularly engaged for the greater part of each day in the duties of some non-medical calling followed by him for his livelihood."

The motion was seconded by Dr. QUAIN, and the further discussion of the subject was adjourned to a future occasion.

A table, prepared by the Registrar, showing the rejections per cent. at final examinations in the years 1879 to 1882 inclusive, by the bodies enumerated in Schedule (A) of the

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Medical Act was laid before the Council and entered on the Minutes.

Dr. HERON WATSON moved—"That the Council do proceed to consider, on Wednesday at two o'clock, motions of which due notice shall have been given with regard to the provisions of the Medical Act Amendment Bill (as amended in committee)."

The motion was seconded by Dr. PETTIGREW, and agreed to.

The Council then adjourned.

ORIGINAL COMMUNICATIONS.

THE TREATMENT OF PARTURITION AND OF THE PUERPERAL STATE IN HOSPITAL PRACTICE.

By WILLIAM ALEXANDER, M.D., F.R.C.S.,
Visiting Surgeon, Liverpool Workhouse.

IT may be asked, if the natural provision for parturition and for the convalescence therefrom be so perfect, why is it necessary to be so careful about surroundings? In the first place, putrefactive materials have the property, as the conditions become more and more favourable to putrefaction, of producing products of greater and greater virulence. In a private patient, putrefaction is no doubt set up in all cases in the lochia that stains the vulva and for some distance up the vagina. This may set up slight feverishness and other allied symptoms; but if that patient left the bed to another puerperal woman, who would form an incubator for the further development of the germs left by the first; and if a third and a fourth woman assisted at the incubation, then, when the fifth or sixth woman occupied the bed, a woman of perhaps feeble resistance—from causes to be presently alluded to—"malignant puerperal fever" might arise in her, not as the result of infection, but because of the development of putrefaction of such a virulent kind. During a lull of the lochial flow, or even against the lochial stream, this poison ascends into the uterus, whence, like the "juice of cursed hebenon, . . . it courses through the natural gates and alleys of the body, and . . . doth posset and curd, like aigre droppings into milk, the thin and wholesome blood."

The discharges from lying-in patients should be received on clean napkins that are frequently changed, and that *are not firmly bound on the patient*. When firmly applied they press the external labia together, and retain the discharges in the vagina, thus hindering the free drainage, neutralising the antisepticity of the vaginal walls, and facilitating the creeping of putrefaction up the vagina. These napkins should merely be loosely laid below the vulva, so as to catch the lochia; and as their position is a warm one, likely to promote putrefaction, frequent removal is necessary. This frequency will depend on the amount of discharge, and is only enforced properly by insisting that that part of the patient's body is always to be kept clean at all times. As unexpectedly as possible, I make an examination of some of the cases, and any uncleanness is visited as a serious fault. Carbolised tow, absorbent cotton-wool, calico napkins, or even fine oakum, may be used for the purpose. The spray and gauze dressings of antiseptic surgery are absolutely unnecessary. To use them is like carrying coals to Newcastle.

It may thus be explained why the puerperal mortality in the practice of ignorant nurses and of workhouse hospitals is less than in that of medical men and of lying-in hospitals, and how the mortality amongst the poor under all these conditions may be approximated to a very small percentage of five or six in a thousand.

But how shall we explain why the puerperal mortality amongst the wealthy is so great, where both doctor and nurse are experienced, careful, and clean, and where the surroundings are as favourable as Hygeia herself could desire?

A respectable farmer's daughter, who lived in a locality where the shame of having an illegitimate child is still a fearful thing to face, had the misfortune to become pregnant. She fled to Liverpool when she could no longer conceal her condition, and was admitted into the workhouse. The woman was strong and healthy, the labour was an easy one, and everything promised an ordinary case. The remorse and shame of the patient were very great, and from the time of her admission she stated her firm conviction that she would never leave the hospital alive.

On the third day after labour she was a little feverish. This passed off, and returned again and again, until the woman died, as she had foretold, from the effects of her confinement. Some peritonitis was found after death, all her organs being healthy.

Why did this woman die? Not from any impurity in the ward, or from any external source of poison, but from a purulent infection the result of her mental condition, which arises in the following way.

The uterus is a contractile organ, that during puerperal convalescence is gradually getting smaller and smaller, and by its contraction is continually expelling from its interior discharges that *would* become fœtid if retained. We are often reminded of the dreadful microscopic germs that are found in the lochia, but I do not think these germs are found in the uterus. Through intermittency in the flow of the lochial stream infective germs may, and I have no doubt often do, reach the uterus; but if the uterus is in a healthy condition, the irritation produced by the consequent intra-uterine putrefaction secures the expulsion of the foul material, and an increased flow of lochia, that washes out the uterine cavity and the passages leading thereto. Except in these "sorties" the germs are, I believe, usually confined to the lower vaginal tract, as the following case will corroborate. A young woman, aged twenty-one, was admitted in November last to the gynæcological wards of the workhouse, with a uterine tumour that simulated the fourth month of pregnancy. She had, however, been delivered of a child a fortnight before, and the lochia had ceased for about a week. A sound was with a little difficulty passed through the os (*inside* a Fergusson's speculum), when about a quart of opalescent straw-coloured fluid came away, perfectly free from smell. The os was then dilated a little to secure its patency. Next day the discharge was copious and purulent, and became on subsequent days less and less until the recovery was complete. This case proves that the putrefactive germs found in lochia do not always extend up the stream as far as the uterus. The height to which they extend is probably directly proportional to their virulence, and inversely proportional to the antiseptic action of the vaginal mucous membrane, and to the continuousness of the flow of the lochial stream.

Is is a well-known fact that the uterine contractions are under the control of the ganglionic nervous system to a very great extent, and that they are involuntarily influenced by the mental condition of the patient. Every doctor knows the difficulty and tediousness with which weeping and deeply repentant Magdalenes convalesce after parturition; and many anxious mothers lose their lives through some family trouble. Grief, worry, despair, and the prospects of a hopeless future disturb or stop the normal contractions of the post-partum uterus; it lies a flabby mass in the abdomen: putrefaction rapidly creeps up the now stagnant lochial stream, and purulent infection invades the open spongy uterus, whence it spreads to the peritoneum.

Some years ago a patient in the lying-in wards had my attention called to her three days after delivery on account of her feverish and restless condition. I found a firm round tumour in the right iliac region, about the size of an adult human head. It was very tender, and was freely movable. Next day peritonitis had set in, and the tumour was much less distinct. Poultices were used, and the usual treatment of those days, but the patient died. The uterus had contracted irregularly, and had become tilted into the iliac fossa so that drainage could not be carried out. About six months ago I saw a similar case in private, accompanied by much fever and such an appearance of the patient that the ordinary medical attendant thought it was "all up" with her. Having by this time unravelled the true pathology of such cases, I grasped the uterus gently, and by gradual pressure caused it to contract and to expel a considerable quantity of discharge. A little pain was produced at first, but this soon subsided, and before I left the house the patient expressed herself as much relieved. In the first case, the old treatment—poultices to the abdomen, sudorifics, anti-pyretic vascular sedatives were used—remedies that I believe increased rather than diminished the mischief. Antiseptic syringings of the uterus and vagina are the only rational treatment hitherto employed, but these syringings were rarely complete, and seldom passed beyond the vagina.

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The second cases exemplifies the treatment I have successfully adopted for some years past, viz., to secure the contraction of the uterus when pyrexia appears in puerperal women. This is easily done by means of the hand. On first applying the hand to the abdomen the uterus will be felt to be rather tender. This tenderness will soon disappear as firm pressure is gradually made. The amount of pressure must be reasonable, for harm might be done by doing too much, and practically is rarely required in my hospital practice, because of the efficient way in which the *binder* is applied. Its application is, I believe, one of the most important subjects in midwifery, and is applied by my nurses in the following manner. The uterus is first ascertained to be well contracted, and at least in the entrance of the pelvis. A broad and substantial pad is applied over that organ, and kept in its place by a strong twilled calico binder that reaches from the great trochanters to the eighth or ninth ribs. This binder is drawn as tight as the patient can bear with comfort, and is watched, and readjusted if necessary several times in the day. I make it my business to see that the binders are properly applied, the patients and napkins clean, and the wards pure. Nothing else requires to be done except to pass my hand over the abdomen, generally outside the binder, in a small percentage of cases who show high temperature. And now to our better-class patients.

(*To be continued.*)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

CASE OF POST-ŒSOPHAGEAL ABSCESS.

(Under the care of Mr. WALSHAM.)

H. J., a bricklayer's labourer, fifty-seven years old, was admitted into Pitcairn Ward, December 8, 1882, under the care of Mr. Walsham, suffering from severe dysphagia. The patient, who was emaciated and looked much older than his age, stated that he had always been a healthy man up to November 16, 1882. On that day he made a good dinner of meat and potatoes, but in the evening found a difficulty in swallowing solid food, and felt his throat stiff. This difficulty in swallowing increased without any pain until November 29, when he was admitted to a medical ward. He discharged himself, however, the next day on account of family affairs, and became an out-patient under Dr. Duckworth, who asked Mr. Walsham to examine his œsophagus with a bougie. There was then nothing noticeable externally except, perhaps, some slight fulness on either side of the neck about the level of the cricoid cartilage. On introducing the finger into the pharynx, a leathery, slightly raised swelling of the posterior wall could be felt opposite the cricoid cartilage; but a full-sized bougie could be passed easily and without pain into the stomach. There were no signs of cervical caries, or of aneurism or other tumour pressing on the œsophagus, and the patient was positive that he had received no injury of any kind. He was advised to again come into the hospital, but refused and absented himself for a week. At the end of that time, having become quite unable to swallow even liquids, and not having taken food for three days, he once more presented himself, and was admitted under Mr. Walsham's care. A distinctly marked swelling could now be made out on each side of the neck, extending behind the cricoid cartilage, soft, circumscribed, not painful, and non-fluctuating. When examined by the finger in the mouth it was felt as a soft, semi-fluctuating swelling behind the posterior pharyngeal wall, extending upwards as high as the level of the thyroid cartilage. It was impossible to pass even the smallest sized bougie, and respiration was somewhat embarrassed. He was ordered beef-tea enema four ounces, with one egg and half-an-ounce of brandy every four hours. On December 9, chloroform having been given, the mouth widely opened by a gag, the tongue well depressed, and the upper part of the swelling by these means just brought into view, it was punctured with a long and very fine trocar and cannula. Pus being discovered, a free incision in a longitudinal direction was made with the bistoury guided by the finger as far down the throat as it could reach. The patient was immediately turned on his side, and five or six ounces of pus escaped. He was not allowed to take food by the mouth for some days; he rapidly convalesced, and was discharged December 13 with the abscess apparently healed. A fortnight, and again a month later he was seen, and declared himself to be in excellent health, and to have had no further trouble with his throat.

Remarks.—The history, when viewed in the light of subsequent events, no doubt points to abscess; but the age of the patient, the absence of all signs of constitutional disturbance or of local inflammation, of cervical caries, of injury, or other cause for suppuration, made it first appear rather as if the swelling were a new growth. At a consultation held upon the case the preponderance of opinion was in favour of its being such, and Mr. Walsham determined, if the opinion were confirmed on puncture, to remove it through the neck. Its progress was so rapid that on admission, a week later, the doubts as to its nature were considerably cleared up. The abscess, although it subsequently made its way in part behind the pharynx, was primarily post-œsophageal. In neither situation can an abscess be said to be common, and in the latter situation may be said to be decidedly rare. Of the eighteen cases of post-œsophageal abscesses collected by Mondière, eleven were in adults, and seven in children. Most of them were the result of cervical caries; three cases, however, were supposed to be due to inflammation of the throat, two to rheumatism, one to metastasis of erysipelas, one to stricture of the œsophagus, and one to attempts to swallow too large portions of food. In the present case no cause whatever for the abscess could be found. As regards the opening of these abscesses, it is advisable either not to give chloroform, or to let the patient recover slightly from its influence before making the incision, and directly it is made to turn him on the side, as in several of the above-referred-to cases of post-œsophageal abscess suffocation ensued from the escape of pus into the air-passages.

DEVON AND EXETER HOSPITAL.

CASE OF POISONING BY STRONG HYDROCHLORIC ACID.

(Reported by ARTHUR G. BLOMFIELD, M.D., House-Surgeon.)

POISONING by strong hydrochloric acid being rare, I am induced to publish the notes of the following case:—

John W., aged two years, was admitted into the Devon and Exeter Hospital on April 4, 1883, and his mother gave the following account of his proceedings:—About half an hour before his admission she had given him a basin of broth, and while her back was turned he stood upon a chair and got hold of a small two-ounce medicine bottle containing some strong fluid, the nature of which she did not know, and drank nearly the whole of its contents. She was attracted by the child's screams, and saw him with the bottle in his hand, which she at once snatched away. She saw that his mouth and lips had been burnt by the liquid, and that he was endeavouring to spit it out; and she at once brought him to the hospital. The child was crying lustily; and directly after its admission was sick, the vomited matter being of a blackish colour, and containing altered mucus, and what was probably some of the broth. The hands and feet were of a bluish colour, and the pulse at the wrist very feeble and frequent. The child kept on being constantly sick, and brought up the antidote—carbonate of magnesia mixed with water and freely given. The countenance expressed anxiety, but there was no cough, and it did not appear that any of the acid had passed into the windpipe. The lips were not shrivelled or blistered, but there were one or two small excoriations at the angles of the mouth. The tongue appeared somewhat shrivelled up on its surface, and white. The child cried so continually and was so restless that it was impossible to examine thoroughly the interior of the mouth and back of the throat, but the general appearance was that of but slight injury to these parts. He swallowed the magnesia solution, but it was evident that the act of swallowing was painful to him. Dilute alkaline solutions, oily and mucilaginous drinks, and milk were ordered to be given

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freely, and the child was put to bed. The vomiting continued pretty frequently, and the child cried out a good deal. At 8.30 p.m. the child died, death being preceded by symptoms of collapse.

Post-mortem, sixteen hours after Death.—The epithelium of the throat and gullet was destroyed in patches. The lining membrane of the œsophagus especially was dry, and of a white colour, and in parts was entirely removed. The stomach contained a large quantity of brown grumous fluid. On the posterior wall there was a black granular patch the size of a five-shilling piece, or rather larger, with some small abraded patches. This appearance was evidently due to the adherence to the surface of the stomach of matter altered or produced by the action of the acid, and was preserved with the stomach. There was no sign of perforation. The other organs were healthy.

The bottle the mother brought with the child contained only a few drops of a yellow fluid, and in the mouth of the bottle were small particles of cork stained of a red colour. The fluid fumed slightly in the air, and yielded dense white vapours with ammonia. It was evidently the acid of commerce sold under the name of spirits of salt.

Remarks.—I am unable to say how much of the acid the child swallowed, because I could not learn from the parents how much there had been originally in the bottle which was brought with it to the hospital. From the rapidly fatal result one may probably be justified in concluding that the dose was a fairly large one, and not less than half a teaspoonful. The child being so young, could not, of course, give any account of the quantity taken, but it is probable, from the absence of any marked corrosions about the lips and inside of mouth, that the fluid was rapidly swallowed, and immediately followed by retching and vomiting. The fatal dose is not given in the "Principles of Forensic Medicine," by Drs. Guy and Ferrier (fourth edition), but reference is made to a case of fatal poisoning by a teaspoonful (3j.) in a girl fifteen years of age, related by Dr. George Johnson (*British Medical Journal*, March, 1871). The shortest fatal period is stated to be five hours and a half, and the average period about twenty-four hours. In this case the child died about four hours after swallowing the acid, and the rapidity of the termination is, no doubt, accounted for by the age (two years) of the child.

DR. WILSON'S LITHOTOMY OPERATIONS. — At the Calcutta Medical Society, Dr. Wilson described his method of operating for stone in India. No preparation is required, and the operation may at once be performed, and there is no need of tying the hands and feet if two assistants are at hand to hold the thighs well back, the patient lying on his back with the buttocks well to the end of the table. It does not matter whether the bladder is empty or full. Having passed in the grooved staff, and ascertained by digital examination the position and condition of the rectum, he holds the staff in the left hand, and with the right enters the point of a common scalpel at the median line about half an inch above the anus, and turning its edge to the operator's right, lets its point rest in the groove of the staff, pushing it down an inch or more until it enters the prostate. This done, he withdraws it to the place of first contact with the staff, and completes the incision by withdrawal of the knife, cutting outwards and downwards so as to cause an incision large enough to admit the forefinger. If an adult, he dilates fascia and prostate with the finger till it enters the bladder, withdraws the staff, and extracts the stone with forceps. If a boy, it is safer to dilate with some small instrument, such as a grooved director, before attempting to insinuate the finger, or the urethra may become torn across, and the bladder pushed away beyond reach. "The present writer knows of no other operator who holds the staff himself. The advantages claimed are, that the groove of the staff is more readily reached, and the deep incision more safely made. Some of the advantages claimed for this mode of operation—that is, by entering the point of the knife direct into the groove, and completing the incision on withdrawal—are, that holding the edge of the scalpel to the right, it is scarcely possible to wound the rectum; that if the arteries are distributed regularly there can be no considerable bleeding; and that there is no unnecessary cut surface, and the wound heals in less time."—*Indian Medical Gazette*, March.

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THE MEDICAL TIMES AND GAZETTE *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, APRIL 28, 1883.

THE GENERAL MEDICAL COUNCIL.

THE General Council of Medical Education and Registration in the United Kingdom met, for the thirty-fourth session, on Thursday, the 19th inst. The profession will have read the opening Address of the President, which we were able to publish last week, and our observations on it may therefore be very brief. Dr. Acland occupied himself in the main with clearly stating the special subjects that would engage the attention of the Council, viz., cases of alleged or proved misconduct on the part of certain medical practitioners; the Report of the Committee on Unqualified Assistants; and the Report on Professional Examinations. In speaking of these matters he took occasion to notice with marked approval some of the points in the Medical Bill; as, under the first head, the giving power to the Council to remove from the Medical Register for a fixed period the name of a practitioner whom it does not consider to deserve the punishment of permanent civil disability as a medical practitioner—a power held to be doubtful under the existing Act; and the power of appeal against a decision of the Council, in these cases, to the High Court of Justice. Under the third head, he pointed to the great importance of the proviso in Clause 20 of the Bill, which will impose upon the Medical Boards the duty of ascertaining the sufficiency of the education provided by the medical schools. He referred briefly to the great improvement that has unquestionably taken place during the last twenty-five years in the higher general culture and the professional education of the medical student; "but," he observed, "until the settlement of various disputed questions, which Parliament alone can settle, the Council is unable to insure for either teachers or students the stability of any sound methods of education upon which agreement can be obtained."

The first business of any special importance before the Council was the consideration of a report by the English Branch Council on the case of Mr. R. A. Prosser. The case had been before the Council on July 6, last year, and had

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then been referred to the Branch Council for further inquiry and report. That body now stated that, having obtained and considered some additional papers, mentioned in the reference from the Council, and having heard the opinion of the solicitor to the Council, they had resolved that "there are not grounds for finding Mr. Prosser guilty of infamous conduct in a professional respect." The Branch Council also sent to the Council the solicitor's report on the case, a record of the coroner's inquest, and other proceedings in the matter. Dr. Pitman and Mr. Marshall moved the adoption of the report, but some of the members—and especially the representatives of Irish authorities (the complaint against Mr. Prosser had been preferred by the King and Queen's College of Physicians)—were not satisfied, and Dr. Lyons moved that Mr. Farrer, the solicitor to the Council, be requested to attend and give his reasons for the report he had made. Mr. Simon said that the matter had been gone into with great care, and very fully, by the Branch Council, who had considered the case on its merits. Dr. Humphry also supported the report of the Branch Council. He pointed out that the most serious charge made was resolved into the fact that Mr. Prosser had made the post-mortem examination complained of in an imperfect, or as Mr. Simon put it a thoroughly slovenly, way; but no evidence had been adduced to show that his statement as to the cause of death was incorrect, or that the abdominal viscera were healthy; and if he believed the patient had been neglected, he was bound to say so in his evidence before the coroner. The motion for the attendance of Mr. Farrer was negatived, and then motion was made to refer the report back to the Branch Council. But it was pointed out that the matter had already been twice referred, and there was no reason for thinking that the Branch Council would alter their opinion; and the motion was lost by a considerable majority. The original motion was then carried without a dissentient voice. We imagine that those who read the reports of the Branch Council and of the solicitor will think that they could not have arrived at any other conclusion, though they will also think Mr. O'Leary was very hardly used. Another case then came before the Council for judgment, and this matter also was before them last year. It was a petition from a practitioner for restoration to the Medical Register, from which his name had been removed in 1877. A question was raised whether the Council had power to restore to the Register a name which had been erased under Section 29 of the Medical Act, 1858; and the Executive Committee were directed to obtain counsel's opinion on the point. This had been done, and the opinion was to the effect that the erasure of a name is left entirely in the discretion of the Council, and that it is clearly in their power to direct that a name be restored. The case was then discussed in private; and, upon the public being readmitted, the President stated that it had been resolved, by motion put from the chair, that the Council did not feel that they would be justified in complying with the application. The Council had before them two other cases—those of Mr. Horton and Mr. Morrison. The former was incomplete. As to the latter, a communication was received from the Royal College of Surgeons of England, stating that the Council of that body had resolved that the offence of which Mr. Bentham Paynter Morrison, of Adelaide, South Australia, had been convicted "was of such a nature as to render him unfit to remain a Member of the College, and that he be accordingly removed from being a Member." It was duly moved, and agreed to—"That the Registrar be directed to remove from the Medical Register the qualification of Member of the Royal College of Surgeons, England, 1871, formerly held by Mr. Bentham Paynter Morrison." On the second day of meeting, the Council were again occupied with judicial duties. Mr. Hoar, of The College, Maidstone, was accused of infamous conduct in a professional respect, in that he had taken advantage of his position, as personal friend and medical attendant, to seduce a solicitor's wife. Proceedings had been taken in the Divorce Court, and the jury had found that the respondent and co-respondent had been guilty of adultery. Mr. Hoar appeared before the Council by his solicitor; and after a prolonged consideration of the case in private, the public were re-admitted, and informed that the Council had resolved—"That as it has been proved to the satisfaction of the General Medical Council that William Hoar, M.R.C.S. Eng. 1844, Lic. Soc. Apoth. Lond. 1845, has been guilty of infamous conduct in a professional respect, the Council does, by this order in writing, direct his name to be erased from the Medical Register." The Council next considered the case of Mr. Arthur Augustus Sadgrove, Licentiate of the Apothecaries' Hall, Dublin, who had been prosecuted and fined for assuming a medical title to which he had no right; and had also been charged with another offence, of which he had, on trial, been acquitted. After the case had been partly considered it was adjourned till the 24th inst., in order to give Mr. Sadgrove an opportunity of satisfying the Council on two important points. On that day—Tuesday last—the Council resumed the adjourned consideration of the case, and, after due inquiry, resolved that Mr. Arthur Augustus Sadgrove had been proved to have been "guilty of infamous conduct in a professional respect"; and accordingly the Council directed his name to be erased from the Medical Register. They resolved also that "it be remitted to the Executive Committee to take such steps as may seem advisable to trace the letters signed 'A. Duncan,' which have appeared in Mr. Sadgrove's case." On Tuesday the Council considered also the case of Mr. Thomas Gray, M.R.C.S. Eng. and L.S.A., against whom the Medical Alliance Association had laid complaint that he had given false certificates of the cause of death in cases where he had never seen the deceased persons during their illness. In one case Mr. Gray had been convicted at the Thames Police-court and fined. No evidence of like conduct in any other case had been obtained; and Mr. Gray declared through his solicitor that the statements that he had given false certificates in other cases also were absolutely without foundation. The whole matter against Mr. Gray, and his defence, are fully stated in our report of the proceedings; and it will be generally felt that the case was not one to justify any sudden display of judicial severity by the Council. They (the Council) also took that view, and resolved that Mr. Gray, "having been convicted of making a false certificate concerning the death of a child whom he had not seen, but who had been attended by his unqualified assistant, the Council intimate to Mr. Gray their marked disapproval of his conduct, but, in the exercise of their discretion, do not think it necessary now to remove his name from the Medical Register."

On Wednesday, the sixth day of the session, the Council considered and adjudicated upon a second case of complaint made against a medical man for signing a false certificate of death. Mr. William Henry Dry, of Walworth, who appeared by his solicitor, had been convicted in a police-court of making a false certificate concerning the death of a child whom he had not seen, but who had been attended by his unqualified assistant; and the Council passed, in regard to his case, a resolution in exactly the same terms as their resolution affecting Mr. Gray. The decided action taken at last by the Council in cases of this kind cannot fail to have an important effect in putting a stop, at any rate, to the grosser offences of this kind. Practitioners have now been fairly and clearly warned of the punishment they will in the future be liable to whenever like practices are brought

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before the Council; and the warning given by the judgments passed in the two cases last referred to has been strongly emphasised by a resolution agreed to by the Council in connexion with the report of the Committee on the employment of unqualified assistants, viz., that the Council record, for the information of all whom it may concern, "that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purposes of any law or lawful contract, are, if brought before the Council, regarded as charges of infamous conduct under the Medical Act." We must leave the consideration of the important report by Dr. King Chambers's Committee, and all the other matters of business that have been dealt with by the Council, till next week.

THE CONTAGIOUS DISEASES ACTS.

The vote at which the House of Commons arrived on Friday last week, condemning one of the essential principles of the Contagious Diseases Acts, is a heavy blow and great discouragement to sanitary legislation, and affords a most telling and disastrous illustration of the evils which may be expected to arise when the Government of the country is in the hands of a Ministry that is strong and united on political and party questions only, and cannot give any guidance or lead to the Houses of the Legislature on other practical matters of at least as grave importance. Mr. Stansfeld, in moving "That this House disapproves of the compulsory examination of women under the Contagious Diseases Acts," instead of directly asking for the repeal of those Acts, showed much ingenuity and worldly wisdom; but the real issue involved was whether the Acts have worked advantageously or injuriously to the Naval and Military Services and to the public generally. It would be superfluous and unnecessary to state afresh his statements and arguments in support of his motion. They are well known, and his speech contained nothing new against the operation of the Acts. He asserted that the report of the Committee in favour of the Acts had been taken on faith by the majority, "who were determined to support the legislation without looking too closely into the evidence that had been received," and that the report was passed hastily, and *en bloc*. He disputed the hygienic value of the Acts, and quoted statistics to prove that they had failed to work anything but evil, and declared that he would never give up the task of exposing the imposture that such legislation was to be defended on sanitary grounds. Mr. Osborne Morgan, the Judge Advocate-General, made a very effective reply to Mr. Stansfeld's speech. He spoke, he said, not on behalf of the Government of which he is a member, but as an individual member of the Committee that for the best part of four sessions of Parliament had closely investigated the Acts. The majority of that Committee was in the proportion of ten to six, and included every member of the Committee who had not enrolled himself as a vice-president or active member of one of the societies for promoting the total abolition of the Acts. The discussion of the majority's report had occupied a whole day, and fourteen divisions were taken on substantial amendments. The evidence taken was so enormously voluminous, occupying some 1500 pages, that almost anything could be proved out of it; and one of the difficulties of the Committee had been to separate what was irrelevant from what was material. He was quite ready to give Mr. Stansfeld credit for singleness of purpose; but it was to be wished that that gentleman and others could believe that men who were reluctantly compelled to differ from them might be actuated by motives as pure and honourable as their own. He went at length into the history of the Acts, which have been in operation for fifteen or sixteen years, and into the character and significance of the evidence that had been adduced before the Royal Commission and the various committees that have been appointed to inquire into the operation of them. He denied that the Acts bore unfairly on the "weaker sex," and challenged Mr. Stansfeld to produce a single case of interference with respectable women. In one case, which occurred nine years ago, it had been suspected that the police had exceeded their duty; but when the matter was inquired into, the statements made were absolutely contradictory one of another. All the cases of alleged wrongful arrest that came before the Select Committee were shown, when sifted, to be merely imaginary stories. In like manner he controverted in detail, and fully, every point advanced by Mr. Stansfeld, attacking and overthrowing his "facts" as well as his arguments. As to the statement, often made, that the Acts had increased immorality, his opinion was that they had decidedly diminished it, and "most certainly, at all events, they had almost killed juvenile immorality." He drew attention to, and proved, the "immense work of reclamation" that had been accomplished by means of the Acts. He pointed to the memorials received from Devonport and Plymouth, and from Portsmouth, in favour of the Acts, the former of the two petitions being signed by the mayor and ex-mayor, thirty-five justices of the peace, twenty-three clergymen, and eighty-five professional men. He concluded his speech by saying that he "had everything to lose and nothing to gain by the course which, from a sense of duty, he felt himself compelled to take. He represented a constituency of Nonconformists, and all knew how strongly the motion was supported by those bodies, though he must say that, as far as he could ascertain their views, they were founded upon a very imperfect acquaintance with the subject. It was not without regret, too, that he saw himself driven to separate on this one occasion from many of his friends below the gangway, with whom, as a general rule, it was his pride and pleasure to act. But he really could not help himself. He did not say that it would be impossible to frame some substitute for these Acts. All he said was that, as yet, no practical substitute had been suggested. That being so, he should be unworthy of the responsible office which he had the honour to fill if, knowing what he had learnt in the course of the late inquiry, he failed to raise his protest against any attempt to impair the efficiency of a system which, say of it what they would—and no doubt there was much that could be said against it—had done much to check the progress and alleviate the severity of one of the most terrible scourges of humanity, and had also done something to mitigate in its worst forms one of the most baleful, as well as most prevalent, vices of modern society." The speech is a most able and effective one; and unprejudiced persons must agree in the opinion of the *Times*, that "in the report of the Committee, in the evidence of the medical witnesses, above all in the facts and opinions collected from the localities in which the Acts prevail, the Judge Advocate gave telling reasons against any interference with the operation of the Acts." In the discussion which followed, Colonel Stanley, as the representative, so far as the War Office was concerned, of the late Government, frankly and loyally expressed his adherence to the policy in support of the Acts which he and those with whom he had acted felt it their duty to carry out while they held the reins of Government. Mr. O'Shaughnessy, the chairman of the Committee on the Acts, effectively defended the report. He observed that it was obvious that some efforts ought to be made to cure the evil against which the Acts were devised; but the strongest opposition prevailed against the

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support of Lock hospitals out of the rates, while it was certain that many people who contributed largely to the ordinary hospitals would not give one shilling to a Lock hospital. He maintained that the Acts had been hygienically efficient, and that they were not a violation of morality. The Marquis of Hartington, speaking as the official representative of the War Office, but not as the representative of the Government, thought that the House would be disposed to accept the conclusions at which the Committee had arrived after a careful examination of the evidence, in preference to the ingenious inferences of Mr. Stansfeld. It might be that the Acts had not effected any great results—how could they, as long as their operation was confined to a few stations?—but it ought to be sufficient for the House that they had materially increased the efficiency of the Army and Navy, and had conduced to the improvement of the health of the community at large; and he trusted that Parliament would not interfere with their beneficial operation until some complete and satisfactory measure was proposed for dealing with the whole question. The Chancellor of the Exchequer said he was confident that the Acts had appreciably benefited the Army and Navy, and had very decidedly improved the juvenile morality of the towns where they were administered. But, contrary to the opinions held by medical men, by Mr. Osborne Morgan, and others most conversant with the working of the Acts, he holds that compulsory examination is not an essential part of the system; and he therefore supported Mr. Stansfeld's motion, though he is himself opposed to the total abolition of the Acts, to which end only—and every one knows it—is Mr. Stansfeld working. Both Mr. Childers and the Marquis of Hartington admitted that there existed an entire divergence of opinion between different members of the Government on the question of the Acts. Those who are most responsible for the administration of the Acts, and therefore know most about them, as the Secretary of State for War, the First Lord of the Admiralty, and the Home Secretary, give them, we were told, a general support; but other members of the Government are totally opposed to them; and therefore the question was treated as an open one, *i.e.*, as a question upon which Parliament was to decide without help or guidance of any kind or degree from the Government. Most men will agree with Sir Stafford Northcote in thinking it most strange and most unfortunate that the Government should abdicate one of its primary functions when the question was one of the highest importance, and one that it was specially undesirable to leave open. But the Ministry in thus acting have sown the wind, and they will have, in all probability, to reap the whirlwind. One of them during the debate alluded to the pledges given by many of his colleagues at the last general election to vote for the total abolition of the Contagious Diseases Acts; and the lesson taught by Mr. Stansfeld's present success will certainly not be lost on Anti-Vaccinationists, Anti-Vivisectionists, or any other small but compact and resolute body of fanatics.

THE GOVERNMENT MEDICAL BILL IN COMMITTEE.

The Medical Bill passed through Committee in the House of Lords on the afternoon of Thursday, the 19th inst., unchanged in all its main features except in the directions in which we last week stated that amendments would most probably be made. Clauses 1 and 2 were accepted without discussion. On Clause 3, referring to the title to registry, Lord Powerscourt moved an amendment providing that no person should be placed on the Medical Register unless he or she had obtained a diploma from one or more of the medical authorities recognised by the Act for one of the parts of the United Kingdom after having passed the first examination of one of the Medical Boards, and having thus become attached to one of the medical authorities; but providing also that should a person fail, after application, to obtain a diploma from any such authority he or she should, after a certain time, be entitled to registration without any diploma. Lord Carlingford could not accept the amendment. He thought that those who had framed it could not have seen the amendments which he had himself placed on the paper. He understood and fully appreciated the object of Lord Powerscourt—namely, that the medical authorities should not suffer in *status* or means; and his own amendment would effect that object. His remarks would apply also to the Earl of Miltown's amendment, which also would make affiliation to one at least of the medical authorities compulsory; but in his opinion the plan of absolute compulsory affiliation was a very awkward one. The Earl of Camperdown observed that the Royal Commissioners had considered the question of compulsory affiliation at great length and very carefully, and had decided that it was not admissible. The amendments of Lords Powerscourt and Miltown were negatived. Clause 9, providing for the establishment of Medical Boards, excited prolonged consideration, several amendments having been placed on the paper, and many of their lordships taking part in the discussion. Lord Carlingford observed that the question of the constitution of the Medical Boards was one of the most perplexing parts of the Bill. He had found great difficulty in estimating the comparative claims to representation on these Boards of the Universities on the one hand, and of the medical Corporations on the other. He had obtained all the information he could on the subject, and had come to the conclusion that, as regarded the Boards for England and Ireland, the relative proportions as the Bill stood did not represent the comparative importance of the authorities in the system of examination and licencing; the Universities, taken as a whole, were somewhat overrated, while the great medical Corporations were somewhat underrated. He would leave the Board for Scotland as it stood. He proposed to amend the Board for England by giving only one representative to each of the five Universities, instead of two each to Oxford, Cambridge, and London, and one each to Durham and the Victoria University; the result of which would be to give a majority of two on the Board to the Corporations, who did such an enormous work in licensing practitioners. He recognised that in Ireland, as we pointed out last week, the Universities and the Corporations are more equally balanced; but he thought, on the whole, that a majority should be given to the Universities. He proposed, in accordance with amendments placed on the paper by Lord Powerscourt and Lord Miltown, to remove the Irish Apothecaries' Hall from the list of licensing authorities, and to give two representatives to the Colleges of Physicians and of Surgeons, and the Royal University, and three to Trinity College; the result of which would be to give the Universities five votes, and the Corporations four, and to reduce the whole number of representatives on the Board from eleven to nine. These proposals met with much hostile criticism, and, in the end, Lord Carlingford, on the suggestion of Lord Camperdown, held over the consideration of the Board for England, and accepted Lord Cairns's final proposal for the constitution of the Board for Ireland, viz., to give the two Universities and the College of Surgeons three representatives each, and the King and Queen's College of Physicians two, dropping out the Apothecaries' Hall; and the amendments required to carry out this arrangement were made in the clause. A series of amendments were introduced on the clause by Lord Carlingford, to the effect that the Medical Council and the Privy Council shall not have the power of striking off from,

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or adding to, the list of bodies represented on a Medical Board without "reporting to Her Majesty," and laying such report before both Houses of Parliament. Lord Balfour of Burleigh proposed, in the interest of the Scotch Universities, to insert in Clause 10 a new paragraph providing that the final examination may be held "at each University by the examiners of the Medical Board in conjunction with the examiners of the University, or in each division of the kingdom, in conjunction with the examiners of a board formed by the combination of two or more Corporations"; but the amendment, meeting with opposition from the Duke of Richmond and Gordon and Lord Carlingford, was withdrawn, and the clause was agreed to. Clause 11, empowering a Medical Board to delegate certain powers to a committee of their body, was struck out. Clause 21, which authorises the Medical Boards to visit medical schools, and to deprive them, if found inefficient, of their privileges as recognised schools, and in like manner to visit and, if necessary, deprive examining authorities of their privileges, was amended on the motion of Lord Miltown, by giving such schools and examining authorities a right of appeal to the Medical Council. On the proposal of Lord Carlingford some verbal amendments were made in Clause 22, with the object of providing that colonies and foreign countries shall not use the powers given by the Bill for the purpose of obtaining the advantages therein contained without conceding corresponding advantages to this country. Clause 26 was omitted from the Bill, and a new clause, which we placed before our readers last week, was inserted in lieu of Clause 27: the mere certificate of qualification to practise of a Medical Board will carry no registrable title, and all existing titles granted by the recognised medical authorities will be registrable. On Clause 28 (now Clause 27) Lord Carlingford moved an amendment, to the effect that, if any person "who practises for gain, or purposes to practise, or publishes his name as practising medicine, surgery, or midwifery, or receives any payment as practising medicine or surgery," takes or uses a medical title not permitted by the Act to be entered on the Register, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds; and after some discussion the amendment was agreed to. The provision for requiring payment of an annual fee was dropped out of the Bill. Clause 47, referring to powers of colonial legislation, was also omitted. Altogether the measure was decidedly improved in Committee.

THE WEEK.

TOPICS OF THE DAY.

WITHIN a period of a few days, two kindred institutions have made their annual appeal to the public; we allude to the British Home for Incurables at Clapham, and the Royal Hospital for Incurables at West Hill, Putney Heath. For the former institution the Duke of Cambridge put forward a statement which he was bound to confess was the reverse of satisfactory. So great had been the drain upon the resources of the charity within the last few years, that, with the exception of a sum of £14,000, which could not be touched, all its funded property had been sold to keep the establishment going. From the same cause only forty-nine out of the seventy-five beds had been occupied. No doubt times were bad, His Royal Highness added, but he trusted the supporters of the Hospital would come to its assistance, since no less a sum than £10,000 per annum was required for its maintenance. During the evening the Secretary announced subscriptions amounting to £720, and stated that in the course of the past few weeks £2300 had been forthcoming by means of legacies. The festival of the Royal Hospital for Incurables was held at the Albion Tavern, Aldersgate-street, and was presided over by Mr. W. Fowler, M.P., who, in the course of his remarks, strongly advocated the system of pensions. He believed they did a great amount of good in relieving the necessities of deserving people, and cost very little to distribute, the money going direct to the object for which it was subscribed. The report showed that the Hospital had 457 pensioners and 189 inmates; as regarded expenditure the charges were necessarily heavy, whilst the income was slightly precarious. During the past year, out of £30,000 received, £10,000 consisted of legacies, a sum which could not be relied on as an annual source of income. A new wing had recently been built at a cost of nearly £30,000, of which sum about £5000 was still owing. During the evening the Secretary read out to the company a list of subscriptions and donations amounting in the aggregate to £2265.

The following facts collected from the police reports of the past few days exhibit a state of affairs so disgraceful that it is to be hoped no mistaken leniency will in future be shown towards offenders of a similar class. George Hawkes, butcher, Hospital-street, was fined £5 at the Birmingham Police-court, for exposing for sale potted meat unfit for food. A warrant was issued against a man named Copson, a potted meat manufacturer, who supplied the joints. A large quantity of diseased horseflesh wa sfound on Hawkes's premises. At the same court, Henry Bryan, butcher and potted meat manufacturer, was sentenced to three months' imprisonment, without the option of a fine, for a similar offence. Under his counter were found fifty-seven pieces of horseflesh, on the side stall there was another large piece, and in the back premises sixty more. At the Leicester Police-court, Thomas Dunkley, butcher, of Great Wigston, who had been twice sentenced to three months' hard labour for sending diseased meat to London, and had been convicted altogether fifteen times, was charged with exposing for sale a calf and pieces of beef unfit for food. He was sentenced to two months' hard labour, without the option of a fine.

The Royal Commission on Metropolitan Sewage Discharge have resumed their meetings at the House of Commons, and at their offices, Richmond-terrace, Whitehall, with Lord Bramwell in the chair. Sir John Coode, Colonel C. B. Ewart, C.B., R.E.; Dr. de Chaumont, F.R.S.; Dr. Stevenson, Mr. James Abernethy, F.R.S.E., and Dr. W. Pole, F.R.S. (Secretary) have attended at the several meetings. The case was opened, and evidence was given on behalf of the Metropolitan Board of Works, and this branch of the inquiry will no doubt occupy as much time as has already been taken in the opening of the proceedings.

The annual meeting of the Metropolitan and National Nursing Association was recently held at Grosvenor House, the Duke of Westminster presiding. It will be remembered that the objects of this Association are—to train and provide a body of skilled nurses to attend on the sick poor at their own homes, to establish in the metropolis, and to assist in establishing in the country district, organisations for this purpose, to form a training-school for nurses in connexion with one of the London hospitals, and to raise the standard of nursing, and the social position of nurses. The Chairman, in moving the adoption of the seventh annual report, remarked that while the hospitals of London took the first place in all that concerned the treatment of the sick poor, this Association dealt with the large number of cases which from one cause or another could not, or at any rate did not, find admittance either into those indispensable institutions, or into the workhouse infirmaries. During the past year a branch with two nurses had been established at Greenwich, while the branches at

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Paddington and Holloway were, under local management, doing good work; and he hoped before the next annual meeting that a branch would have been established in Lambeth. Mr. Rathbone, M.P., in seconding the motion, pointed out that the nurses trained and sent out by this institution were ladies by education, and their intercourse with the poor had permanently beneficial effects—a fact to which the Rev. Canon Spence bore willing testimony. In the course of the proceedings it was announced that the debt which had hampered the earlier operations of the Association was now considerably reduced, and would, it was hoped, before long be entirely wiped out.

The arrangements for the electric lighting of the metropolis are gradually assuming a definite form, but, like every other innovation on established custom, the new system does not proceed without a certain amount of opposition. A meeting of delegates from the Vestries of Kensington, St. Martin's-in-the-Fields, and the district Boards of Holborn, St. Giles, and Westminster, was recently held in Westminster, under the presidency of Mr. T. J. White, to consider the course to be adopted with reference to a communication received from the Board of Trade, forwarding a copy of the model provisional order proposed to be granted to the various electric lighting companies. The following resolutions were put to the meeting and carried:—"That this meeting is of opinion that it is undesirable for the Board of Trade to force electric lighting upon any district under present circumstances in opposition to the desire of the local authority." Also, "That this meeting is of opinion that an extension of time should be granted by the Board of Trade, so as to allow full opportunity to the local authorities for considering the model clauses of the provisional order relative to electricity issued by the Board, and to give their replies thereto."

On Friday, the 20th inst., in the Queen's Bench Division of the High Court of Justice, judgment was given in the actions Abrath *v.* the North-Eastern Railway Company, and M'Mann *v.* the same defendants. These were both actions for malicious prosecution by the railway company in question. It will be remembered that M'Mann sustained certain injuries in a collision which happened on the defendant's line, and Dr. Abrath, a medical practitioner of Sunderland, who attended him, represented these injuries as being so serious that the Company paid £1000 to settle the case. Subsequently, however, the Company, from evidence they received, were induced to believe that they had been imposed upon, and they prosecuted M'Mann and Dr. Abrath for conspiring together to defraud them. Their result of their trial was that the defendants were acquitted, and they then brought the actions against the Company for malicious prosecution. The jury at this latter trial answered two questions placed before them by the judge in favour of the Company; but the third question, as to whether the Company had prosecuted from an honest desire that justice should be done, they left unanswered. The learned judge, however, directed a verdict for the Company, and the present application was on the part of the plaintiffs for a new trial on the ground of misdirection, namely, in telling the jury that the onus of proof that the Company had not exercised due care, and had not such an honest desire, was on the plaintiffs. Mr. Justice Grove delivered judgment at considerable length, that the verdict must be set aside, and that there must be a new trial. Mr. Justice Lopes entirely concurred. Counsel for the Company asked for time to appeal, and the Court said that on account of the importance of the case they should not be disposed to discourage an appeal; on the contrary, they thought the case one in which an appeal might very fairly be brought, and eventually a fortnight's time was allowed for lodging a notice of appeal.

The National Health Society has recently addressed a letter to the Home Secretary, in which much satisfaction is expressed that Ministers intend to bring in a measure for the local government of the metropolis, and it is urged that, amongst other matters, there should be reform with regard to cistern-water and its constant and direct supply, and also with regard to the drainage of houses.

SIR T. SPENCER WELLS, BART.

The announcement that Her Majesty has been graciously pleased to confer the honour of a baronetcy on Mr. T. Spencer Wells, "in acknowledgment of the distinguished services which he has rendered to his profession and to suffering humanity," has given great satisfaction. The wonder is that the public recognition by the fountain of honour—the Crown—of Mr. Wells's position among the surgeons of the nineteenth century has been so long delayed. Certainly the work of no other living surgeon, excepting that of Mr. Lister, so distinctly and eminently deserves to be entitled epoch-making as does Mr. Spencer Wells's work in raising ovariotomy to its present eminence as a life-giving and health-restoring operation.

PARIS REGISTRATION RETURNS FOR 1882.

During the year 1882, 21,411 *marriages* were celebrated in Paris, and of these 17,579 occurred between bachelors and spinsters, 1206 between bachelors and widows, 1710 between widowers and spinsters, 904 between widowers and widows, and 12 among divorced persons. During the year there occurred 46,059 *births* of legitimate infants, and 16,512 of illegitimate infants. There were 103·5 male births to 100 female births. The number of *deaths* in 1882 was 58,702, among which were 17,411 deaths of children of less than five years of age. There were 116·1 male deaths to 100 female deaths. There were 106·6 births to 100 deaths. Of the deaths, 10,342 arose from phthisis, and 7579 were due to epidemic diseases, viz., typhoid fever 3352, small-pox 661, measles 1018, scarlatina 158, and diphtheria 2300. There were 767 suicides—612 males and 155 females. There were 5170 infants registered as born dead, 3486 being legitimate, and 1664 natural infants.

THE DOWNING PROFESSOR OF MEDICINE.

The recent decision of the Chancellor of the University of Cambridge in respect of the meaning of certain sections of Statutes B and E, relating to the Downing Professorship of Medicine, will be received by all those interested in the welfare of the Cambridge University Medical School with regret. The question raised was whether Dr. Latham (the present Professor) was entitled to receive a certain additional stipend from the University or not, and there was the further question as to the amount to be contributed to the University by Downing College in respect of such Professorship. Statute E, which was confirmed by the Queen in Council on March 10, 1882, says in Section 4: "The Downing Professor of Medicine shall be entitled to receive from the University in each year such stipend as will raise his whole yearly stipend, not including his lodge, or any equivalent for it, to an amount greater by three hundred pounds (£300) than the share of the revenue of Downing College paid to each fellow of the College for that year." But Statute B, which was confirmed by the Queen in Council on June 29, 1882, referring to the Downing Professors (Chapter vi., Section 9), says: "The preceding clause shall come into operation .... in the case of existing Professorships, upon the next vacancy of the Professorship, or at such

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earlier time as the Professor may come under this statute, in accordance with the provisions of Chapter xix." The Chancellor has decided that Dr. Latham is not entitled by Statute E to receive a stipend from the University. It is not for us to question the legality of the decision, though several eminent lawyers had previously expressed an opposite opinion. But we cannot help feeling that at the present critical time it is unfortunate that any line of action should be adopted which is opposed to the best interests of the Medical School. The Downing Professor of Medicine lectures upon Materia Medica and Therapeutics, a subject of the utmost importance, and one, moreover, which a student may learn perhaps to best advantage before coming up to London to complete his training in the wards of one of the metropolitan hospitals. It is obvious, therefore, that the office is one of the most important posts in the University so far as the Medical School is concerned, and it would not be at all in keeping with the spirit of recent acts on the part of the Senate that the holder of it should receive an utterly inadequate remuneration. It is not too late to remedy this, and that in a dignified manner; for in Chapter xix. of Statute B, in reference to the statutes not coming into operation as regards existing Professorships, it is enacted, "Provided, however, that if a resolution be passed by the Council of the Senate that it is desirable that they shall sooner come into operation in regard to any Professorship, and such resolutions shall be assented to by the Professor affected thereby, and confirmed by grace, the provisions shall then come into operation accordingly." We hope to be able, at no distant date, to record that this proviso has been adopted by an unopposed grace of the Senate.

THE PARIS WEEKLY RETURN.

The number of deaths for the fifteenth week of 1883, terminating April 12, was 1270, and of these there were from typhoid fever 25, small-pox 9, measles 24, scarlatina 4, pertussis 9, diphtheria and croup 35, erysipelas 3, and puerperal infections 9. There were also 61 deaths from tubercular and acute meningitis, 229 from phthisis, 45 from acute bronchitis, 147 from pneumonia, 69 from infantile athrepsia (31 of the infants having been wholly or partially suckled), and 43 violent deaths. The number of deaths registered this week is less than the mean of the last four weeks, which is 1285. There is a general diminution in the number of deaths from epidemic causes. The births for the week were 1302.

INCISION INTO, AND DRAINAGE OF, THE PERICARDIUM.

The meeting of the Royal Medical and Chirurgical Society on Tuesday evening last was unusually interesting. Dr. Samuel West related a successful case of purulent pericarditis, treated by free incision and drainage. It is the first case which has been so treated in this country; the only other recent case on record is the one by Dr. Rosenstein, of Leiden, which we fully described in these pages just two years ago (March 19, 1881). Dr. West's patient has fully recovered. There is no deformity of the chest, and nothing but a small scar remains to remind the patient (who was exhibited) of the narrow escape of his life that he has had. We congratulate the author most heartily on the judgment with which the case was treated, and on the success which attended it. The interest of the case was amplified by an historical account of the cases recorded since Francisco Romero, of Barcelona, "anno primo hujus sæculi," performed the first successful operation of the kind. It had long been advocated, and both Desault and Larrey had attempted it, though they had not succeeded in carrying out their intentions. Romero's method of operating was thoroughly surgical, and modern operators might do worse than be guided by his advice. He recommended that an incision be made in the sixth interspace, at the junction of the cartilage with the rib, and that the pericardium having been seized with a pair of fenestrated forceps, be incised with curved scissors. This author records two successful cases—the first on record—and a third case, in which he was obliged to desist from the operation on account of adhesions with the pleura. The mode of operation practised by Dr. West is beyond all criticism, since it proved so successful; but in future cases he will probably modify it slightly. For it is well shown in his paper, by means of the cases he has tabulated, that it is by no means always easy to distinguish an enlargement of the heart from pericardial effusion. Such a possibility of course suggests a very deliberate and careful mode of opening the pericardium. A case was mentioned by one speaker, in which a trocar was passed, as it was thought, into the pericardium, but the gush of blood which followed too clearly proved that not only the pericardium but also the ventricle had been entered. The meeting of the Society had to be prolonged in order to give time for the discussion, to which we must regret that an entire evening could not have been afforded. The full details of the discussion will appear in due course.—The President announced, in the course of the evening, that, in order to fill up vacancies, the Council had selected the following gentlemen for Honorary Fellowship of the Society:—Dr. W. B. Carpenter, F.R.S., Professor W. K. Parker, F.R.S., Dr. Frankland, F.R.S., and Professor Allen Thomson; Professors Bigelow, Du-Bois Raymond, Charcot, and M. Pasteur. Their names were ordered to be suspended in the usual manner for ratification by the Fellows at the next ballot. It would be difficult to find any other eight men more worthy the highest honour which the Society has to confer, or names better calculated to confer honour on the Society than the foregoing.

THE LATE SURGEON-GENERAL J. L. HOLLOWAY, C.B.

The following station-order has been published by Sir C. Pearson, K.C.M.G., Commandant of the Royal Victoria Hospital, Netley:—"The Commandant is grieved to announce the death of Surgeon-General J. L. Holloway, C.B., Principal Medical Officer of this establishment, which took place at 4 p.m. this morning (April 19), after a very short but painful illness. In Dr. Holloway, Netley Hospital has lost a most capable administrator, and his department a true friend who most jealously guarded its honour, its privileges, and its rights. To the medical officers of the Army, and of this Hospital in particular, Sir Charles Pearson desires to express his sincere regret at the loss their profession has so unexpectedly incurred, and, in the name of all under his command, he begs to offer his heartfelt sympathy with Mrs. Holloway in the affliction which has overtaken her with such awful suddenness."

THE HEALTH OF KENSINGTON DURING THE MONTH OF MARCH LAST.

In his general remarks on the health of the parish of Kensington during the four weeks from February 27 last to March 24, Dr. T. Orme Dudfield, the Medical Officer of Health for the district, observes that the recent severe weather has been followed by a rise in the rate of mortality, due principally to an increase in the number of deaths of young children from pulmonary and other diseases. The death-rate, however, did not reach the level of the average rate in the previous ten years; during the previous four weeks it was returned as 14·9 per 1000, and in the four weeks under notice it rose to 17·0, which is 3·2 per 1000 below the de-

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cennial average. The most satisfactory feature in respect of the public health in Kensington at present, Dr. Dudfield says, is the remarkable lowness of the zymotic death-rate. The deaths from the principal diseases in this class were only ten in the four weeks to which this report refers, the decennial average, corrected for increase of population, being twenty-nine. His previous month's report recorded no deaths from either measles or scarlet fever, and in the four weeks now dealt with these diseases are again absent from the death-returns. The deaths from whooping-cough, diarrhœa, and enteric fever were only six, three, and one respectively. The reported cases of scarlet fever were five, as against six in the previous month, but no death was registered from this cause in either of the two months. One case of small-pox was brought to notice during March, in the person of a female domestic servant at Prince's-gate, and this case (ascertained to have been imported from Pimlico) was removed without loss of time to the South-Western District Hospital.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

At an ordinary meeting of the Royal College of Physicians, held on Thursday, the 26th inst., the following Members nominated by the Council, proposed to the College for election to the Fellowship, were duly elected:—James Sawyer, M.D. Lond., Birmingham; George Frederick Elliott, M.D. Dub., Hull; Robert Mundy Gover, M.D. St. And., Home Office, S.W.; Julius Dreschfeld, M.D. Wurzburg, Manchester; Francis Warner, M.D. Lond., 24, Harley-street, W.; Herbert Watney, M.D. Camb., 1, Wilton-crescent, S.W.; William Murrell, M.D. Brussels, 38, Weymouth-street, W.; Henry Cook, M.D. St. And., Shaldon, Teignmouth; Thomas Clifford Allbutt, M.D. Camb., Leeds.

INSANITY AND GOOD AND BAD TIMES.

In a very interesting review of the statistics of the Cumberland and Westmoreland Asylum at Carlisle, Dr. Campbell, the Medical Superintendent of that institution, expresses the opinion that in the district to which that Asylum belongs a sudden and rapid increase of value in labour has a more potent influence in the production of insanity, than poverty the result of depression in trade or agriculture. In support of this opinion, Dr., Campbell refers to a table showing that the admissions into the Asylum have been more numerous in proportion to population in the good than in the bad times included in the last decade, the highest number of admissions in any one year having been reached in 1875. But the numbers represented in the table are not sufficiently large to warrant any safe conclusion on such a point, and it is to be remembered that insanity is a disease of slow incursion and gradual development, and that it has in many instances existed for years before asylum treatment is resorted to, and also that fluctuations in the annual number of admissions into an asylum are often dependent on changes in legislative enactments, or in the policy of Government departments, or on the adequacy or inadequacy of asylum accommodation for the time being, and that it must be misleading to trace them to variations in public prosperity. There are strong grounds for believing that, whatever may be the case in Cumberland and Westmoreland, throughout the country generally it is adversity, and not prosperity, that contributes to an increase of mental disease. The idea that good times, in which high wages are earned and squandered, are conducive to the increase of insanity, is an outcome of the hasty generalisation often confidently repeated, but utterly without foundation, that the same conditions are conducive to the spread of intemperance and its deplorable consequences. Now, it admits of no doubt that the opposite of this is true. In three years of high wages and hard work in England and Wales, from 1871 to 1873, 2230 persons died of drink, while in three years of comparative idleness and reduced wages, from 1874 to 1876, 3316 persons died of drink. The consumption of spirits was thirty-six million gallons a year in the years of prosperity, but forty-two million gallons a year in the years of adversity. Suicides are more frequent in bad than in good times, and there seems little reason to doubt that the depression, weariness, and anxiety, with insufficient nourishment, that are inseparable from want of work, are more likely to lead to mental overthrow than the industry, cheerfulness, and full feeding that wait on abundant employment.

M. PASTEUR'S PENSION.

The *Gazette Médicale* states that "it is expected that the Minister of Public Instruction will shortly lay before the Chambers a Bill having for its object the increase of the annual pension voted by the Assembly to M. Pasteur from 12,000 fr. to 25,000 fr. This pension is to be reversible on the wife and children of the distinguished chemist. Without participating in all the opinions of M. Pasteur, and even while controverting some of them, no one will refuse his homage to the services which he has rendered to science, industry, and the public wealth; and everywhere, whether within Parliament or beyond its doors, approval will certainly be accorded to the expression of national gratitude which has led to this proposition."

FIBROMA OF THE ROUND LIGAMENT.

Professor Ludwig Kleinwächter describes, in a recent number of the *Zeitschrift für Gebürtshulfe und Gynäkologie*, a case of fibroma of the round ligament, which is interesting on account of the extreme rarity of that condition. The only case which Professor Kleinwächter has been able to find is described by Winckel, and in it neither of the tumours, of which there was one on each round ligament, exceeded a bean in size. Dr. Kleinwächter's case was that of a multipara aged forty-four. The tumour reached to two fingers' breadths above the umbilicus, it caused slight pain, and was said to increase in size before and during each menstruation. The tumour was situated more to the right than to the left of the middle line, and when it was pushed upwards pain was complained of in the region of the right Poupart's ligament. The uterus was pushed to the right of and behind the tumour, which filled the pelvic brim. The tumour was removed, the operation being long and difficult, owing to the number of adhesions present. The clamp was applied to the pedicle, and two drainage-tubes inserted. The patient died from peritonitis on the third day. On autopsy, both ovaries and tubes were found healthy, and the pedicle of the tumour was situate on the left round ligament, about an inch from its origin. The uterus was enlarged, but the nature of the enlargement is not stated. The tumour was solid, fibrous in structure, and weighed about three pounds and a half. Looking at the rarity of this disease of the round ligament, the numerous adhesions present, and the uterine enlargement, it might be suggested, and it is to be regretted that Professor Kleinwächter does not discuss the point, that the tumour was originally a uterine fibroid which had become united by adhesions to the round ligament, and subsequently severed from its old attachment.

On the 20th inst., Her Majesty was pleased, by and with the advice of her Privy Council, to appoint James Matthews Duncan, Esq., M.D., to be, for five years, a member of the General Council of Medical Education and Registration, in the place of Sir William Gull, Baronet, resigned. Dr. Duncan's appointment as one of the Crown nominees on the Council will give great satisfaction, both on account of his high character for ability, thoughtfulness, and thorough-

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ness, and because it meets the claim of the obstetricians that their department of practice ought to be distinctly represented on the General Council of Medical Education.

We are very glad to record that Sir James Paget has been elected Vice-Chancellor of the University of London in place of the late Sir George Jessel.

The President of the Parkes Museum, H.R.H. the Duke of Albany, has fixed Saturday, May 26, for the opening of the Museum in its new premises in Margaret-street.

The distribution of prizes in the Faculty of Medicine of University College, London, will take place on Monday, May 21, at 3 p.m. The Right Hon. the Earl of Kimberley, President of the College, will preside on the occasion.

The Senatus Academicus of the Glasgow University have decided to confer upon Dr. W. Turner, Professor of Anatomy, Edinburgh University, and Dr. D. Hack Tuke, of London, the honorary degree of LL.D., on Friday, the 27th inst.

At the annual meeting of the Anti-Opium Society, Glasgow, held on the 23rd inst., a resolution was adopted to the effect that the Chinese Government should be allowed to deal with opium by taxation or otherwise as they thought proper, and that the Chefoo Convention, giving the Chinese Government power to tax Indian opium as high as they liked, should be ratified.

The Goldsmiths' Company have given £5000 to the Sustentation Fund of the London Hospital, in answer to the appeal made at the Mansion House meeting on the 13th inst.

MEDICAL MATTERS IN PARLIAMENT.

House of Lords—Thursday, April 19.

The Medical Act Amendment Bill.—The House went into committee (Lord Redesdale in the chair) on this Bill, and after three hours' discussion the measure was reported with amendments.

House of Commons—Thursday, April 19.

Vaccination in India.—Mr. P. Taylor inquired whether it is a fact that the High Court of Madras had lately decided a case on appeal to the effect that "compulsory" vaccination is illegal, the judges declaring that it is quite within the option of a parent whether his children shall be vaccinated, and that it is not unlawful to dissuade others from allowing their children to be vaccinated.—The Under Secretary for India replied that, if the hon. gentleman would give him the authority on which the statement was made, he would make inquiry into the matter.

Medical Appointments, Ireland.—Mr. Sexton asked the Chief Secretary to the Lord Lieutenant of Ireland why a delay had occurred in filling up the vacancy in the medical officership of the Cashel and Grange Dispensary districts, co. Tipperary, notwithstanding the regulation that each such vacancy must be filled up within eighteen days.—Mr. Trevelyan replied: I learn from the Local Government Board that there is not any order in force prescribing that such vacancies shall be filled within eighteen days; further, that in the case of the appointment made at Cashel on February 14, the usual particulars as to age and qualification were not transmitted to them till the 3rd of the present month; and when they were received it was found that the gentleman selected had not attained the prescribed age. The Board accordingly refused to sanction his appointment, and instructed the committee to proceed to a new election. The Board have no power in the circumstances described to take the appointment into their own hands.

Friday, April 20.

Contagious Diseases Acts.—Mr. Stansfeld moved—"That this House disapproves of the compulsory examination of women under the Contagious Diseases Acts." He contended, at some length, that the Acts had neither checked disease nor promoted morality. He impugned the report of the Committee on the Acts; and quoted statistics to prove they had been in every way a failure; and, in short, made all the usual statements that pass for arguments with the opponents of the Acts.—Mr. Osborne Morgan, who spoke as an individual member of the Committee, showed from the evidence before the Committee that the Acts had clearly effected immense good, physical and moral; and that no effectual substitute had been suggested for them.—Colonel Stanley spoke strongly in support of the Acts; Mr. G. Russell and Mr. Rogers spoke against them; and Mr. O'Shaughnessy, as Chairman of the Select Committee which had for four years sat upon the subject, effectively defended its report.—Lord Hartington gave a general but decided support to the Acts, and expressed the hope that Parliament would not consent to abolish the present system until at least some efficient substitute had been suggested in its place.—Mr. Gorst and Sir Stafford Northcote urged that the Government ought to state its views on the subject. Mr. Childers, speaking for himself only, said that he believed the Acts had done much good, but he thought the good was due to the police administration and other provisions of the Acts. He did not believe that compulsory examination was essential, and therefore he supported Mr. Stansfeld's motion.—Some other members took part in the discussion; and in the end the resolution condemning compulsory examination was carried by 182 votes to 110.—Lord R. Churchill asked the Secretary of State for War whether the Government would at once introduce a Bill giving effect to the vote.—Lord Hartington replied that that was a question to be considered.

Monday, April 23.

Open Spaces in London.—In reply to Mr. Firth, Sir J. McGarel Hogg said the Metropolitan Board of Works have not issued, nor are they about to issue, regulations which will have the effect of prohibiting cricket, football, and all athletic sports upon Blackheath, Peckham Rye Common, and other open spaces in London. Such regulations as have been made by the Board with regard to games on open spaces are merely such as are necessary in the interests of the general public.

The Contagious Diseases Acts.—Lord Randolph Churchill asked the Secretary of State for War whether it was the intention of Government, without delay, to introduce a Bill to give effect to the resolution arrived at on Friday relative to the Contagious Diseases Acts, or what other steps they meant to take.—The Marquis of Hartington replied that he could only say that he was in communication with the First Lord of the Admiralty and the Home Secretary as to the measures to be adopted to give effect to the resolution referred to, and he hoped shortly to be able to make a statement on the subject.

Tuesday, April 24.

Typhus Fever in Dublin.—In reply to a question from Mr. Corbet, referring to the outbreak of typhus fever in Jones's-court, Dublin, Mr. Trevelyan said that even before the letter referred to he had been made aware of the allegation that the ladies who were proprietors of the tenements where the fever broke out caught the disease by going there, and had died of it. But it was reported to him, upon the authority of the medical men who attended them in their illness, that they died of pulmonary complaints. The matter was, however, being further inquired into, and the result should be made known.

The Criminal Lunatic Asylum, Dundrum.—In reply to a question by Mr. Corbet, as regards post-mortem examinations, Mr. Trevelyan said: The total number of such examinations held during the period stated was eighteen. Of these the first fifteen were conducted by the resident physician of the asylum, the fees—one guinea in each case—being received by him. Two were held by that officer in conjunction with the district dispensary doctor, the fees—three guineas in each case—being shared between them. In the most recent case which has occurred the examination was conducted by the dispensary doctor alone, who received a fee of two guineas. In all cases the fees were paid by the County Treasurer on the order of the coroner. The opinion given by the resident physician as to the cause of M'Daid's death has been correctly quoted. The visiting physician, who afterwards saw the body, expressed doubt that a nail was the actual weapon used. The coroner was not dissatisfied with the verdict itself, but he at first declined to receive with it a rider, which he thought illegal, but finally accepted it, yielding to the wishes of the jury.

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FROM ABROAD.

Intra-uterine Injections in Puerperal Septicæmia.

At a meeting of the New York Medical and Surgical Society (*New York Medical Journal*, March 31), Prof. Gaillard Thomas read a case as illustrative of what should be the treatment of puerperal fever or puerperal septicæmia at the present day. A primipara in the higher walks of life had a rapid delivery; no tear of the genitals occurred, and next day the vagina was syringed out with carbolised water. The first forty-eight hours passed by without any bad symptoms; but on visiting her on Tuesday morning, as she was confined on the Sunday afternoon, the temperature was found to be 101° Fahr., and by evening had increased to 103·5°. By the morning of the fourth day it had risen to 103°, and in the afternoon was 106·5° in the mouth. Her appearance was wild, like that of one about to have puerperal mania; the skin was hot, and she was crying out with pain, although she had taken a good deal of morphia. The pulse was 145. On examination it was found that there was a bilateral laceration of the cervix uteri, extending nearly up to the vaginal juncture, this probably accounting in part for the quickness and ease of the labour in a primipara. The uterus was washed out every four hours during the night with carbolised water by means of the Chamberlain tube and Davidson syringe. Next morning the pulse had fallen to 120, and the patient (who had taken opium freely) declared that she was much relieved. Indeed, the relief was so extraordinary, that it began to be believed that some exceptional circumstance had occurred, and that there really had been no septicæmia. The uterus was only washed out at longer intervals, but the temperature then went up, and the maniacal look returned. The uterus was now washed out every three hours, opium was freely administered, ten grains of quinine were given every eight hours, and iced water was passed through a coil of rubber tubing placed over the abdomen. As long as this treatment was kept up the temperature did not rise above 101° to 102°, but as soon as the washing out of the uterus ceased it rose to 104°, and sometimes to 105°. This was proved by repeated trials. After this treatment had been continued for ten days—a physician remaining with the patient day and night, giving the injection every three hours, and thirty grains of quinine during the course of the day—it was deemed time to stop it, and in less than twenty-four hours the temperature again rose to 105°. On the sixteenth day after delivery, and the tenth after the commencement of the high temperature, the intervals of the injections were extended from three hours to four, then to five, six, and seven hours, and finally they were discontinued altogether, the quinine given up, and the coiled tubing taken off. Opium in small doses was continued for a while longer. The patient entirely recovered.

"I wish to contrast this case with another which I saw just before—that of a woman who had been recently delivered of her third child. When I was called to see the patient the temperature was 106°; she had been taken with violent pains in one of the iliac fossæ, and had been put, five days before, pretty profoundly under the influence of opium; and a blister had been applied over the whole of the abdomen, large doses of quinine having also been administered. When I saw the patient the use of intra-uterine injections was begun at once, but she lived only twenty-four hours, and died in a state of coma.

"It seems to me that the time has arrived when puerperal septicæmia should be treated upon just as simple a plan as septicæmia of any other kind is—namely, by washing with some antiseptic fluid the surface where the disease originates—some fluid which will remove the poisonous material that being absorbed, and also, so far as possible, neutralise its poisonous qualities. In brief, I would say that puerperal septicæmia, with our present light on the subject, should be treated in the following manner:—1. Wash out the uterine cavity completely with some antiseptic fluid; 2. Quiet all pain with opium; 3. Get the peculiar influence of quinine upon the nervous system; and 4. Keep the temperature, at all hazards, at or below 100° by the methods which we now possess. Three years ago, at the American Gynæcological Society, I took the ground which I take to-day regarding this subject, and only one gentleman in the entire Society supported my view. Every other member who spoke referred to the danger of introducing air into the uterine sinuses during the injections, etc. But I believe that the danger attending the use of the injections is counterbalanced by the benefits to be derived. I do not think that there is the least probability that air will be introduced if a tube of large size—as large as the finger—is used. But when a catheter is employed, there is some danger of inserting it into a sinus, and introducing air and fluid together directly into the vessels."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 10.

John Marshall, F.R.S., President, in the Chair.

Nævus of the Rectum proving Fatal in the Adult from Hæmorrhage.

Mr. Arthur E. J. Barker offered this case for special consideration on the following grounds:—1. On account of its rarity; no similar case being known to the author after careful search. 2. On account of the gravity of the condition in this special instance, in which, in a particularly strong and healthy adult, slow death from bleeding was the result. All the symptoms usually met with in those dying of loss of blood appeared to be present here. Beyond these, there were few special symptoms noticed as dependent on the condition. The patient, whose earliest symptom was an attack of diarrhœa accompanied by great loss of blood, usually suffered from constipation, and was obliged to strain much during defæcation. Sometimes, however, he had intervals of diarrhœa, always with great loss of blood, and felt no pain and lost no flesh, and there was no particular discharge from the rectum except during the attacks of bleeding. 3. Because a diagnosis of the condition was made by inspection of the rectum with a strong light. This was thrown up the bowel by a forehead mirror from a powerful lamp, and through a large vaginal speculum, which could always be introduced under chloroform. The treatment suitable to such cases was a point that might be usefully discussed. By this inspection, the mucous membrane of the bowel was seen to be marked by smooth longitudinal folds, mottled with a peculiar purplish tint. On these purplish folds were three shallow ulcers, whence blood flowed freely. The patient gradually sank, in spite of various remedies, and died from loss of blood. After death, the wall of the rectum was found to be much thickened in the lower four inches and a half of its length by nævoid growth in its walls, on the rugæ of which were the three shallow ulcers before described. The body in other respects was healthy and well developed, but almost free of blood.

Mr. Howard Marsh related the history of an essentially similar condition in a girl aged ten, under his care at the Children's Hospital in Great Ormond-street. She had been subject to attacks of hæmorrhage from the bowel from the time she was two years old. They had occurred at first at intervals of about a year, but after a time had grown more frequent, coming on about every month. The amount of blood passed varied from a teaspoonful to a teacupful. Whilst under his care, he had himself witnessed two or three hæmorrhages of the larger amount. The symptoms of the case undoubtedly pointed to a nævus; and on examination of the rectum with a speculum, he found a nævus encircling nearly the whole of the bowel close to the border of the anus, and reaching about an inch and a half up the rectum. The aspect of the growth left no doubt as to its nature. Treatment with Paquelin's cautery was found effectually to arrest the hæmorrhage for a time, but it was impossible to use such treatment over any large surface, for fear of producing a stricture of the anus. The position of the growth afforded no chance for ligature. The child was three times in the hospital, and was discharged finally with its hæmorrhage greatly relieved, but not entirely cured.

Mr. Stanley Boyd admitted that, when he first examined Mr. Barker's case, in his capacity of Surgical Registrar to University College Hospital, he had been inclined to attribute the hæmorrhage to a malignant growth at the junction

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of the sigmoid flexure and the rectum. He had been able to feel with his finger masses which suggested to him malignant lipomata such as Mr. Curling had described. When he had introduced a speculum, he attempted to pass a rectal bougie through it, but had found it arrested in the sigmoid flexure; and its withdrawal had been followed by a rush of blood, which he imagined to have come from the sigmoid flexure, but which, on further consideration, he was inclined to regard as blood which had been forced back from the rectum into the sigmoid flexure.

The PRESIDENT asked whether Mr. Boyd had traced completely the endings of the small arteries in the growth.

Mr. BOYD replied that his examination had not been sufficiently minute to enable him to do so.

Mr. SAVORY asked if the growth involved the mucous membrane only.

Mr. BOYD replied that it involved the submucous tissue also.

The PRESIDENT remarked that one remarkable point in Mr. Barker's case, in which it differed from the case described by Mr. Howard Marsh, was that it occurred in an adult, and that the treatment by cautery which Mr. Marsh had adopted would probably have been much less suited to an adult than to the child. The treatment in Mr. Barker's case, which had been chiefly injection of perchloride of iron, and the use of sulphate of copper and opium by the mouth, had been mainly tentative, and the death of the patient had been rapid.

Mr. BARKER, in reply, said he had hoped to have received more suggestions as to treatment, which had not been easy. His patient had been the source of a remarkably offensive fœtor immediately after death, before there had been time for the decomposition of the blood. He was sorry not to have heard any explanation of this; he suggested its essential similarity to that which was observed in those who died in the extreme anæmia of scurvy.

ON SOME POINTS CONNECTED WITH LOCAL RECURRENCE OF MALIGNANT DISEASE.

Mr. HARRISON CRIPPS read this paper. He commenced by criticising the view commonly expressed, that local recurrence took place in the cicatrix of the wound, and pointed out that it was rather in the skin and subcutaneous tissue adjacent to the cicatrix that the recurrence was often observed. A paper published by the author in the *Pathological Society's Transactions* of 1881 was referred to, in which microscopic evidence was produced illustrating the view that, as regards malignant disease of the rectum, whether found in the mucous or in the submucous coat of the bowel, it was originally formed of cells derived from Lieberkühn's follicles. A theory founded upon these specimens was also suggested, viz., that the formation of leucocytes was one of the normal functions of the intestinal epithelium. Two cases were narrated in which recurrence of malignant disease undoubtedly first showed itself by cancerous nodules originating in the deeper layer of the cutaneous epithelium by the side of the cicatrix, that is to say, in a part of the skin that had not been removed at the time of operating. After referring to the views of Brodie and other surgeons as to the desirability of removing the entire mammary gland, notwithstanding the cancer may involve only a small portion, Mr. Cripps advised that the same principle should be applied to the superjacent skin. The theory upon which the surgeon advocated the removal of the whole gland-tissue was that, notwithstanding a great portion of it appeared sound, the epithelial lining of the ducts and acini was in reality already affected, and only required time for cancerous growth to become manifest; the epithelium within the gland being in direct continuity with that covering, and the superjacent skin being originally derived from it by involution. Thus the cutaneous epithelial cells lying over the gland were as liable to be implicated as those within it. Mr. Cripps recognised that it was the universal practice of surgeons, when operating for mammary cancer, freely to remove any skin that appeared to be implicated; but he suggested that, even in cases where the skin was soft and supple, longer immunity from recurrence might be possibly obtained by its wide and free removal, than by being satisfied with removing a mere elliptical portion involving the nipple.

Mr. ALBAN DORAN thought that, with regard to the method of formation of the leucocytes which Mr. Cripps had introduced into his paper, some attention should be paid to the homologous theories of Rindfleisch and Hayem, that the red corpuscles were not produced from the white, but from the nuclei of red marrow-cells. Bold as were these statements, they were supported by some long-continued and very careful experiments.

Dr. CREIGHTON suggested that it was best to consider in a separate class those cases of malignant disease where the recurrent tumours appeared not in the scar, but in fresh skin, for then they were often found widely separated from each other, and from the original growth. The cancerous nodule in such cases he regarded as purely an affair of the subcutaneous connective tissue, and not of the rete mucosum itself. Cicatricial tissue was essentially embryonic; and for that reason, as Virchow had pointed out, was more liable to the invasion of cancer. It was not uncommon to see a cancerous growth on the base of a healed ulcer.

Mr. BUTLIN observed that Mr. Cripps had raised, in the first place, a great clinical question, as to how much skin should be removed in operations for cancer. Mr. Cripps had urged that the more skin was removed, the less was the danger of recurrence *in situ*; and he did not imagine that that could be disputed. Its recurrence in glands was a different matter, and not immediately under discussion. Mr. Moore, at the Middlesex Hospital, he believed, was the first to point out that too little of the skin was generally removed; and he had had remarkable success in some of his cases of cancer of the breast, where, in addition to a large area of skin, he had removed the fascia and subjacent muscles to a large extent. Dr. Gross also, the son of the celebrated surgeon of Philadelphia, had used similar methods with similar success; and the large and successful operations of Mr. Banks, of Liverpool, led to the same conclusions. Out of eleven cases of recurrence in Mr. Banks's practice, only four had been *in situ* (the others were in neighbouring glands), and these had been, not in the skin, but in the deep muscles or fasciæ; showing that the process of direct infection did not take place through the skin alone.

The PRESIDENT remarked that the question was essentially one for demonstration rather than for theory; and regretted that Mr. Cripps had not brought forward some microscopical specimens. He was himself inclined to agree with the text-books in saying that the cicatrix was the matrix, which was more easily invaded by cancer, rather than the seat of a new development. The lines or nodules of cancerous growth which were often found along the tracks of sutures in operations, were instances of the facility which cicatricial tissue afforded for the invasion of a new growth. The benefit that might be expected, in a case where an extensive removal of skin was possible, he thought was undeniable. The late Mr. Clover, who had wide opportunities of being present at operations as a looker-on, was of opinion that the present custom tended to remove less skin than was desirable. The surgical writings of Dr. John Brown, many generations ago, showed an old system of extensive operation, which would probably have pleased Mr. Cripps. In the case of operation on a cancerous breast, two threads were passed under the gland, the one vertical, the other horizontal; the whole mass was lifted up by these, and swept off by a circular stroke, the bleeding stopped by the actual cautery, and a mass of resins and balsams, which were crude antiseptics, was then plastered over the wound, and left for a long period. The huge wound granulated slowly, but there was more final success than might, perhaps, have been anticipated.

Mr. HARRISON CRIPPS, in reply, desired to explain, at the outset, that he had never ventured to claim anything novel in the treatment he had recommended; he had merely called attention to it as a matter of sufficient importance to justify some repetition. He quite agreed with what the President had said, that this was a matter not for theory, but for demonstration; and explained that he had refrained from showing a long series of specimens on which most of his remarks had been founded, because they had been previously shown to the Pathological Society, and some of them figured in the *Transactions* for 1881. He thought that they showed, as clearly as could be shown in dead specimens, the process of transformation of the nuclei of the columnar intestinal epithelium into the cells in the submucous retiform tissue. The cases of cancer of the rectum, where secondary deposits, arranged after the pattern of Lieberkühn's follicles, were found in the liver, he considered strong proof that these nuclei had made their way to the liver, and developed after

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the manner of their parents. It was hardly probable that entire cells could be transferred, though their nuclei might be.

The PRESIDENT remarked, in conclusion, that the development of secondary growths, after the type of primary, was undoubted, but that the formation of leucocytes from the intestinal epithelium was the point which needed further demonstration.

GENERAL CORRESPONDENCE.

A VERY DESERVING CASE.

LETTER FROM MR. KENNETH W. MILLICAN.

[To the Editor of the Medical Times and Gazette.]

SIR,—I venture to appeal on behalf of the widow and three children of Benjamin T. Moore, M.D., who died at Kineton yesterday, leaving his family in the most complete and utter destitution. They are totally unprovided for in any way, and are *literally* penniless.

Any subscriptions, however trifling, to tide Mrs. Moore over the present until some steps can be taken on her behalf, will be thankfully received by the Rev. F. Miller, M.A., Kineton, Warwick. I am, &c.,

April 21. KENNETH W. MILLICAN, M.R.C.S.

MEDICAL NEWS.

UNIVERSITY OF ST. ANDREWS.—MEDICAL GRADUATION, SESSION 1882-83.—The following registered medical practitioners, having passed the required examinations, had the degree of Doctor of Medicine conferred upon them on April 18:—

James Lawton Andrew, L.R.C.P. Edin., M.R.C.S. Eng., L.M. Eng., L.S.A. Lond., Mossley, near Manchester; Harvey Eustace Astles, F.R.C.P. Edin., Adelaide; Andrew Brown, M.R.C.P. Edin., L.R.C.S. Edin., London; Henry Francis Fisher, L.R.C.P. Edin., L.F.P.S.G., Liverpool; Thomas Gambier, M.R.C.S. Eng., L.S.A. Lond., St. Leonards-on-Sea; William Kitto Giddings, M.R.C.P. Edin., M. and L.M. R.C.S. Eng., L.S.A. Lond., Calverly, Leeds; James Jamieson, F.R.C.S. Edin., Edinburgh; Frederick Fitzherbert Jay, L.R.C.P. Lond., M.R.C.S. Eng., Slough; William Henry Kempster, L.R.C.P. Edin., M.R.C.S. Eng., London; Thomas Smith, F.R.C.P. Lond., F.R.C.S. Edin., Woodley, Stockport.

John Edward Hanson, M.B. and C.M. St. And., Huddersfield, also proceeded to the degree of M.D.

At the same time the following gentleman passed the First Professional Examination for the degree of Bachelor of Medicine and Master in Surgery:—

John Martin, L.R.C.S. Edin., L.A.H. Dub., A.M.D., Cork.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 19th inst., viz.:—

Anderson, L. McEwan, New Cross, student of Guy's Hospital.
Bartlett, Benjamin P., L.S.A., Hastings, of Guy's Hospital.
Blamfield, J. William, L.S.A., Jersey, of St. Bartholomew's Hospital
Carr, H. Eustace, L.S.A., St. John's-park, N., of the Middlesex Hospital.
Cater, J. Rundle, Westbourne-square, of St. Mary's Hospital.
Dabbs, C. John, L.S.A., Newport, I. of Wight, of the London Hospital.
Malcolm, J. David, M.B. Edin., Edinburgh, of Guy's Hospital.
Manley, J. H. Hawkins, M.A. Cantab., L.S.A., West Bromwich, of Guy's Hospital.
Marcus, James, Calcutta, of St. Thomas's Hospital.
Rabbeth, Samuel, L.S.A., Putney, of King's College Hospital.
Robson, W. W. Constable, L.R.C.P. Lond., Brompton-square, of St. Thomas's Hospital.
Ryle, Reginald J., St. John's Wood, of Guy's Hospital.
Slater, D. John, L.S.A., Putney, of St. Bartholomew's Hospital.
Watson, William, L.S.A., Rochester, of Guy's Hospital.
Webster, W. Frederick, Kilburn, of St. Mary's Hospital.
Wilson, Thomas, L.S.A., Hollingbourne, Kent, of the Westminster Hospital.
Wright, H. Hodgson, Forest Hill, of Guy's Hospital.

Two candidates who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were admitted Members of the College, viz.:—

Hind, A. Ernest, L.R.C.P. Lond., Stockton-on-Tees, student of St. Bartholomew's Hospital.
Squire, E. Herbert, L.S.A., Wivenhoe, Essex, of the London Hospital.

Four candidates passed the examination in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the College. Two candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months, and one for twelve months. Ninety-six candidates presented themselves for the examination just completed, as compared with seventy at the corresponding period last year. Of this number four were referred to their professional studies for three months, twenty for six months, three for nine months, and one for twelve months, making a total of twenty-eight out of the ninety-six examined.

Primary Examinations.—The following were the questions on Anatomy submitted to the candidates at the anatomical and physiological examination for the diploma of Membership of the Royal College of Surgeons on the 20th inst., when they were required to answer four and not more than that number out of the six questions, from one till three o'clock, viz.:—1. Describe the structures displayed upon removing the dura mater from the middle fossa of the base of the skull. 2. Describe the posterior surface of the sternum, and mention the various structures in immediate relation with it. 3. Give the dissection required to expose the parts concerned in femoral hernia. 4. Enumerate in their relative positions the structures displayed upon removal of the sterno-mastoid muscle. 5. Describe the structure and relations of the vesiculæ seminales. 6. Give the dissection required to expose the extensor carpi radialis brevior muscle. The following were the questions on Physiology, to be answered the same day between four and six o'clock, viz.—1. Give an account of the coagulation of the blood. 2. Describe the process of secretion as it occurs in the submaxillary gland. 3. Describe the structure and functions of the grey matter of the spinal cord. 4. Give an account of the structure, development, and uses of adipose tissue. 5. Describe the structure of the valves of the heart, and the manner in which they act. 6. Describe the structure of the mucous membrane of the uterus, and the changes which occur in it during menstruation.

The following gentlemen passed this examination on the 23rd inst., viz.:—

Aikins, H. Wilberforce, student of the Ontario School.
Barratt, J. O. Wakelin, of the Birmingham School.
Barrett, William, of the Manchester School.
Beard, Frederick, of Guy's Hospital.
Burke, H. Morton, of St. Thomas's Hospital.
De Chazal, C. Lucien, of University College.
Dobson, L. C. Talbot, of St. Bartholomew's Hospital.
Helme, W. Croft, of the Edinburgh School.
Henderson, J. Threapland, of the Leeds School.
Hubbersty, R. Stephen, of the Edinburgh School.
Jackson, W. E. Gillson, of the Westminster Hospital.
Lloyd, P. Allen, of St. Mary's Hospital.
Lockyer, C. William, of the Bristol School.
Monks, G. Howard, of the Harvard University.
Oldacres, C. Everard, of the Birmingham School.
Oliver, G. Henry, of the Leeds School.
Ord, W. Theophilus, of the Bristol School.
Rendall, P. John, of St. Bartholomew's Hospital.
Robinson, A. Hepworth, of the Edinburgh School.
Taylor, L. Albert, of the Birmingham School.

Six candidates were referred for three months, and one for six months. The following gentlemen passed on the 24th inst., viz.:—

Berrill, Alfred, student of the Birmingham School.
Booth, A. Milner, of the Leeds School.
Brockat, A. Alexander, of St. Thomas's Hospital.
Brown, Thomas A., of the Edinburgh School.
Dew, C. Edward, of the Bristol School.
Fraser, C. Lachlan, of the Glasgow School.
Hawkins, F. Sidney, of the Bristol School.
Holt, Joshua, of the Leeds School.
Hughes, Samuel, of the Liverpool School.
Morrison, A. Edward, of the Edinburgh School.
Munro, W. John, of the Edinburgh School.
Roberts, Alfred E., of the Aberdeen School.
Smith, Frank Wyatt, of the Cambridge School.
Thirkill, Henry, of the Leeds School.
Tyndall, Francis, of the Liverpool School.

Eight candidates were referred for three months, and one for six months. The following gentlemen passed on the 25th inst., viz.:—

Brown, Alfred, student of the Leeds School.
Chapman, R. Hugh, of St. Bartholomew's Hospital.
Elliot, W. H. Wilson, of Guy's Hospital.
Finley, F. Gault, of the Manchester School.
Guthrie, L. George, B.A. Oxon., of St. Bartholomew's Hospital.
Ireland, C. John, of the Leeds School.
Jones, J. L. Thomas, of St. Bartholomew's Hospital.
Maclaren, Murray, of the University of Edinburgh.
Marquis, Duncan, of the Glasgow School.
Oliver, John, of St. Bartholomew's Hospital.
Ramsay, H. Murray, of St. Bartholomew's Hospital.
Shaw, C. J. Stokes, of the Bristol School.
Southern, F. Gerald, of St. Thomas's Hospital.
Stephens, Harold F. D., of the University of Edinburgh.
Thomas, W. Thelwall, of the Glasgow School.

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Thompson, Charles J., student of the London Hospital.
Thyne, T. Jackson, of the University of Edinburgh.
Trask, J. Ernest, of the Bristol School.
Walsh, R. William, of St. Bartholomew's Hospital.
Warde, A. W. Brougham, of St. Bartholomew's Hospital.
Whitelocke, R. H. Anglür, of the University of Edinburgh.

Three candidates were referred for three months.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 19:—

Langston, John James, Grantham, Lincolnshire.
Squire, Edward Herbert, Wivenhoe, Essex.
Thorburn, William, Moss House, Rusholme, Manchester.
Tomalin, Wm. John Clarkson, 24, York-road, Northampton.
Tyler, Alfred Joseph Reeve, 1, New North-road, N.

The following gentleman also on the same day passed the Primary Professional Examination:—

Harris, John Henry, St. Bartholomew's Hospital.

APPOINTMENTS.

VINCENT, OSMAN, F.R.C.S. Edin.—Consulting Surgeon to the City of London and East London Dispensary.

BIRTHS.

BARKER.—On April 19, at 87, Harley-street, Cavendish-square, W., the wife of Arthur E. Barker, F.R.C.S., of a daughter.

BARNES.—On April 17, at Boreham-street, near Hastings, the wife of A. R. Barnes, M.B., of a son.

HACKETT-WILKINS.—On April 17, at 157, Ledbury-road, W., the wife of T. J. Hackett-Wilkins, Surgeon Madras Army, of a daughter.

HERON.—On April 23, at 40, Margaret-street, Cavendish-square, W., the wife of G. A. Heron, M.D., M.R.C.P., of a son.

HUTCHESON.—On April 18, at Brighton, the wife of Surgeon-Major George Hutcheson, M.D., of a son.

TWINING.—On April 17, at The Knoll, Salcombe, South Devon, the wife of A. H. Twining, M.R.C.S., of a daughter.

MARRIAGES.

ANDREW—FERGUSSON.—On April 24, at Surbiton, Dr. George Andrew, F.R.C.S., of Englefield Green, to Susanna Margaret, second daughter of the late Captain E. F. T. Fergusson, H.M.I.A., and Royal Observatory, Bombay.

BRAND—FERGUSON.—On April 24, at Fetteresso, Alexander Theodore Brand, M.B. and C.M., of Driffield, Yorks, to Amelia, third daughter of the late W. B. Ferguson, C.E., of Aberdeen.

COOMBS—MILLAR.—On April 19, at Bristol, the Rev. Herbert L. G. Coombs, M.A., Curate of St. Augustine's, to Isabella Maud, daughter of the late Charles Millar, M.D., J.P., of Penrhos, Carnarvon.

HUSBAND—BRADSHAW.—On April 19, at Charlcombe, Bath, Walter Edward Husband, L.R.C.P., of Manchester, to Lucy Evelina Augusta Berkeley, only daughter of the late Capt. Lawrence Augustus Bradshaw, R.A.

SKRIMSHIRE—BRADLEY.—On April 18, at Reading, Frederic W. Skrimshire, M.R.C.S., of Morpeth, to Eleanor Kate, elder daughter of Robert Bradley, of Western Elms, Reading.

DEATHS.

BULLEY, FRANCIS ARTHUR, F.R.C.S., of Portland-place, Reading, Berks, at the Royal Berkshire Hospital, on April 21, aged 74.

CRONIN, FRANCIS MARCH, son of E. F. Cronin, M.D., at Old Manor House, Clapham, on April 18, aged 8.

DAVIDSON, GERTRUDE MARIAN, wife of Charles Davidson, F.R.C.S., at 29, Cassland-road, Hackney, on April 23, aged 25.

ELLIS, FRANCES AUDREY, wife of Heber Dowling Ellis, M.D., at 7, Howard-square, Eastbourne, on April 20.

HOLLOWAY, JAMES LEWIS, Surgeon-General A.M.D., C.B., at Netley, on April 19, aged 57.

HUMPHRY, PERCY WILLIAM, eldest surviving son of John Humphry, M.R.C.S., Medical Superintendent of the County Asylum at Stone, Aylesbury, on April 21, aged 19.

JAMES, THOMAS, M.R.C.S., at Uxbridge, on April 22, in his 69th year.

LOWE, THOMAS, M.R.C.S., at Solihull, Warwickshire, on April 21, aged 72.

SMITH, CHARLES MANNERS, F.R.C.S., Surgeon-General, late of H.M. Bengal Army, on April 22, aged 61.

THANE, GEORGE DANCER, M.D., 15, Montague-street, Russell-square, W.C., at Parramatta, New South Wales, on March 13, in his 27th year.

TUKE, WILLIAM SAMUEL, M.R.C.S., eldest son of Dr. D. Hack Tuke, of London, at Springfield, Bournemouth, on April 20, aged 26.

WITT, CHARLES, M.R.C.P., F.R.C.S., late of Spring gardens, S.W., at Lavender-hill, on April 23, in his 86th year.

VACANCIES.

NORWICH FRIENDLY SOCIETIES' MEDICAL INSTITUTE, NORWICH.—Surgeon. (*For particulars see Advertisement.*)

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, DYKE-ROAD, BRIGHTON.—House-Surgeon. (*For particulars see Advertisement.*)

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, KING WILLIAM-STREET, CHARING CROSS, W.C.—Assistant-Surgeon. Candidates must be Fellows of the Royal College of Surgeons, London, and have served the office of Surgeon or Assistant-Surgeon at a recognised general hospital during two years, or served as a clinical assistant at an ophthalmic hospital for three years. Applications, with testimonials and certificate of age, to be sent, addressed to the Committee of Management, on or before May 2.

ST. MARYLEBONE GENERAL DISPENSARY, 77, WELBECK-STREET, CAVENDISH-SQUARE, W.—Resident Medical Officer. Salary £195 per annum, with furnished apartments, attendance, coals, and gas. Candidates must be registered, and hold a medical and surgical qualification. Written applications and testimonials to be sent to the Secretary not later than 10 a.m. on April 30, and candidates must attend at the Dispensary on May 2, at 5 p.m.

COMPARATIVE ANATOMY.—Dr. Garson will commence his course of thirteen demonstrations "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata," in the Museum of the College of Surgeons, on Tuesday, the 1st prox., at four o'clock. All students and visitors to the Museum are invited to attend. The following will be the programme:—Integumentary System of Fishes; of Amphibians and Reptiles; of Birds; of Mammalia—from the 1st to the 22nd. The Respiratory System, from the 29th to June 12. The Circulatory System, from June 19 to July 24. The demonstrations will be given every Tuesday, at four o'clock.

COLLEGIATE PRIZES.—No award having been made for the last Collegial-Triennial Prize of the Royal College of Surgeons, the subject has been withdrawn, and the following substituted for the next:—"The Nature of Inhibitory Action in the Animal Body; to be elucidated by original research." The following is the subject for the Jacksonian Prize to be awarded in 1884, viz.:—"The Surgical Treatment of Uterine Tumours, both Innocent and Malignant."

APPOINTMENTS FOR THE WEEK.

April 28. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Mr. A. Geikie, "On Geographical Evolution."

30. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m. Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

MEDICAL SOCIETY OF LONDON, 8½ p.m. Sir Joseph Fayrer, "On a Case of Dysentery and Hepatic Abscess; Recovery after Spontaneous Opening of the Abscess through the Lung." Dr. Cros (of Paris), "On Plessimetry as a Means of Diagnosis."

May 1. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Annual Meeting.

PATHOLOGICAL SOCIETY, 8½ p.m. Adjourned discussion on Diabetes. Speakers—Dr. Seymour Taylor, Mr. Victor Horsley, Dr. Frederick Taylor Dr. Dawson Williams, Dr. Dickinson, Dr. Pavy, Dr. Douglas Powell, and Dr. Edmunds. Mr. Stanley Boyd—Tubercular Ulcers of the Tongue (living specimen).

2. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Nomination of Office-Bearers for the ensuing session. Deputy Surgeon-General Joseph Ewart, M.D., "On the Causes of the Excessive Mortality among the Women and Children of the European Army of India."

OBSTETRICAL SOCIETY OF LONDON (54, Berners-street, W.), 8 p.m. Specimens will be shown by Dr. Mansell-Moullin and others. Dr. Rasch, "On a Case of Extra-uterine Pregnancy resembling so-called Missed Labour." Dr. Braxton Hicks, "On the Behaviour of the Uterus in Puerperal Eclampsia as observed in Two Cases." Dr. Herman, "On a Case of Acute Gangrene of the Vulva in an Adult; with Remarks."

3. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "Count Rumford."

4. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

ROYAL INSTITUTION (Council Meeting, 3 p.m.), 9 p.m. Mr. R. H. Scott, "On Weather Knowledge in 1883."

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VITAL STATISTICS OF LONDON.

Week ending Saturday, April 21, 1883.

BIRTHS.

Births of Boys, 1329; Girls, 1278; Total, 2607.
Corrected weekly average in the 10 years 1873-82, 2703·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	907	848	1755
Weekly average of the ten years 1873-82, corrected to increased population ...	893·1	828·8	1721·9
Deaths of people aged 80 and upwards ...	...	...	76

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	3	1	3	7	...	2	...	1
North ...	905947	1	16	5	2	6	...	3	...	2
Central ...	262288	...	8	1	4	2	...	...	...	2
East	697389	...	9	5	3	7	...	1	1	2
South	1265927	1	10	9	7	18	...	4	2	6
Total	3801184	2	46	21	19	40	...	10	3	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·745 in.
Mean temperature	48·0°
Highest point of thermometer	66·0°
Lowest point of thermometer	35·0°
Mean dew-point temperature	38·8°
General direction of wind	Variable.
Whole amount of rain in the week	0·58 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 21, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending April 21.	Deaths Registered during the week ending April 21.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2607	1755	23·2	66·0	35·0	48·0	8·89	0·58	1·47
Brighton	111262	76	41	19·2	61·0	34·8	47·0	8·33	0·44	1·12
Portsmouth ...	131478	103	64	25·4	...	...	...	...	...	...
Norwich	89612	55	52	30·3	...	...	...	...	...	...
Plymouth	74977	40	29	20·2	58·1	34·5	45·2	7·33	0·22	0·56
Bristol	212779	139	79	19·4	57·8	36·8	45·4	7·44	0·21	0·53
Wolverhampton .	77557	63	44	29·6	58·9	31·9	44·2	6·78	0·20	0·51
Birmingham ...	414846	312	166	20·9	...	...	...	...	...	...
Leicester	129483	98	51	20·5	62·0	37·0	45·7	7·61	0·51	1·30
Nottingham ...	199349	145	89	23·3	64·8	34·0	46·7	8·17	0·38	0·97
Derby	85574	63	29	17·7	...	...	...	...	...	...
Birkenhead ...	88700	53	29	17·1	...	...	...	...	...	...
Liverpool	566753	389	277	25·5	56·1	37·4	45·8	7·67	0·24	0·61
Bolton	107862	60	49	23·7	57·7	35·9	44·4	6·89	0·50	1·27
Manchester ...	339252	224	188	28·9	...	...	...	...	...	...
Salford	190465	112	75	20·5	...	...	...	...	...	...
Oldham	119071	81	62	27·2	...	...	...	...	...	...
Blackburn	108460	95	64	30·8	...	...	...	...	...	...
Preston	98564	58	38	20·1	...	...	...	...	...	...
Huddersfield ...	84701	42	39	24·0	...	...	...	...	...	...
Halifax	75591	34	37	25·5	...	...	...	...	...	...
Bradford	204807	129	64	16·3	60·2	39·4	46·5	8·06	0·35	0·89
Leeds	321611	196	129	20·9	63·0	39·0	47·1	8·39	0·48	1·22
Sheffield	295497	199	105	18·5	63·0	38·0	45·8	7·67	0·48	1·22
Hull	176296	145	90	26·6	65·0	35·0	45·4	7·44	0·62	1·57
Sunderland ...	121117	88	51	22·0	...	...	...	...	...	...
Newcastle	149464	102	72	25·1	...	...	...	...	...	...
Cardiff	90033	73	39	22·6	...	...	...	...	...	...
For 28 towns ...	8620975	5781	3807	23·0	66·0	31·9	45·9	7·72	0·40	1·02
Edinburgh	235946	143	91	20·1	54·9	37·2	45·4	7·44	0·32	0·81
Glasgow	515589	394	335	33·9	53·0	37·0	44·9	7·17	0·51	1·30
Dublin	349385	288	249	37·2	57·4	31·5	45·0	7·22	0·06	0·15

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·75 in. The lowest reading was 29·32 in. on Wednesday evening, and the highest 30·07 in. by the end of the week.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

AN APPEAL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A member of our profession, well known to us, who has been obliged, through deafness, to relinquish his practice at Potter's Bar, is now without resources and very anxious for employment. His wife, the daughter of a medical man, one of the founders of the Medical Benevolent College, is a lady of most exceptional qualifications, who could take charge of any public institution, with superintendence of children, nurses, and the household; whilst the husband could supervise and attend to correspondence and keep an eye on the sanitary state of the building. All who know them feel how specially they are qualified for the work proposed. It is in the hope that your readers may be able to suggest or discover some suitable post that we venture to ask you to give publicity to this letter.

April. We are, &c.,
E. SYMES THOMPSON.
JOHN GAY.

F.R.C.S., Wolverhampton.—It is stated that there will be three vacancies in the Council caused by the retirement in the prescribed order of Mr. Cooper Forster, Vice-President, and Messrs. J. Birkett and Prescott Hewett, late Presidents of the College.

Royal Benevolence.—The German Crown Prince and Princess have lately received a deputation, who presented a fund collected in Germany on the occasion of their silver wedding, when a consultation was held upon the best mode of employing the money. The Crown Prince proposed that the proceeds of the subscriptions should be applied, as soon as possible, to promote the welfare of the people, and especially in the direction of sanitary improvements, *inter alia*. It was decided that the Victoria Institute for Nurses of the Sick should receive a grant of 170,000 marks. Fixed annual contributions will be made to children's seaside hospitals and holiday homes. The administration of the fund will be undertaken by a committee.

The Decrease of Sophistication.—The analyst's quarterly report to the Strand District Board of Works shows that out of sixty-seven samples analysed, all were genuine except two—one of milk and one of mustard.

The French Central Meteorological Bureau.—In the annual report, just issued, it is shown that the general warnings were last year verified in 83 cases, and the local warnings in 81 cases out of every 100, while of the sea-coast warnings 100 were quite correct, 65 tolerably correct, and 42 incorrect. This gives a percentage of 80 good warnings as compared with 67 in 1881; but the Bureau acknowledges that the storm of November 10, one of the worst of the season, was not signalled. The number of meteorological stations has increased from 102 to 147, viz., 10 observatories, 82 normal schools (51 with six observations a day, and 31 with three), 21 lighthouses, 13 semaphores, etc. The daily foreign reports have increased from 31 to 39.

The Thames Embankment Ventilators.—We understand that the Commissioners of Sewers have not abandoned all hope of being able successfully to combat the action of the Metropolitan District Railway Company in this matter. A conference has been held on the question between Sir James McGarel Hogg and the Remembrancer.

Our Bakehouses.—Under the present system of official inspection it is impossible to deal adequately with the abominations which exist in the bakehouses now utilised for the manufacture of bread, many of which are totally unfit for the preparation of human food. Altogether there are some 4000 in the metropolis. It is stated that an attempt will be made to have incorporated in the Bill which the Government intend to introduce to provide, for the further regulation of white-lead factories, certain provisions with regard to the inspection of bakehouses, and to prohibit the construction of underground bakehouses.

Satisfactory Water Analysis.—Dr. Corfield, Medical Officer of Health, St. George's, Hanover-square, in his report for the four weeks ending the 31st ult., states that the samples of water submitted for analysis were the best he had ever analysed.

Sanitary Improvements, Ireland.—Our contemporary, the *Builder*, says the Irish Public Health Act (1878) has effected marked improvement in the sanitary condition of Ireland. The sums expended in sanitary works had largely increased. The loans issued to the public sanitary authorities in Ireland for sewerage and water-supply since 1876 amounted to nearly £960,000 in seven years. On the census night of 1871 the number of persons in Ireland suffering from fever was 2070; that is, typhus, enteric, and simple fever, but not measles, scarlatina, and so on. On the census night of 1881 the number suffering from fever was 1501, showing a decrease of 7 per cent., whereas the decrease in the population in the same period was only 4·3 per cent.

Gratitude for Parochial Medical Relief.—The Clerk to the Stoke-on-Trent Board of Guardians recently informed them that he had received an anonymous letter containing 15s. in postage-stamps. The letter stated that some time previously the sender was the recipient of medical treatment at the expense of the ratepayers. Since then he had got better, and, feeling grateful for the assistance, he was anxious to refund to them the cost of his medical treatment. He was still very weak, but as soon as he could he would send another remittance.

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A Provincial Teacher.—At the recent pass examination for the diploma of Membership of the Royal College of Surgeons there were 96 candidates, as against 70 at the corresponding period last year; and at the primary (now going on) there are 195, as against 210 last year.

The University of St. Andrews.—A memorial has been presented to the Lord Advocate of Scotland, on behalf of the Senatus Academicus of the University of St. Andrews, stating reasons why that University should not be dissolved, as, by a provision in the Universities (Scotland) Bill, may, under certain contingencies, be the case.

A Noisy Trade decreed a Nuisance.—In an action, Wannel *v.* West, in the Chancery Division, for an injunction to restrain a nuisance, the plaintiff was a fisherman, residing at Topsham, in Devonshire. The defendant had recently commenced carrying on, in the adjoining house, and on the first floor, the business of a boat-builder. The plaintiff's case was that the noise occasioned by this trade constituted an actionable nuisance. The nuisance to the plaintiff was the greater in that his calling rendered it necessary for him to sleep during the day-time. There was the usual conflict of evidence. The judge said that in a case where there was such a conflict of evidence a judge must use his common sense, and his own common sense told him that the carrying on of a boat-building business (which was a peculiarly noisy trade) on the first floor of an adjoining house would constitute an intolerable nuisance to any man, particularly to the plaintiff. An injunction was granted to restrain the defendant from carrying on his business so as to occasion a nuisance to the plaintiff.

The Southern Hospital, Glasgow.—The Committee has awarded the premium for the plans sent in under the motto "Hygiene" (No. 1), the authors of which are architects of Glasgow. There were forty-six competitors, including architects in Paris.

Prevention of Cruelty to Children.—It is reported that it is proposed to establish in Liverpool a Society for the Prevention of Cruelty to Children, and the proposal has met with an unexpected degree of sympathy. This benevolent work has long been in actual and useful operation in the United States of America. Evidence is not wanting that there is a vast amount of cruelty practised upon children, and it is somewhat anomalous that, while animals are safeguarded by special protectors, children have been left neglected. The object intended to be accomplished—that of protecting and helping afflicted children—is laudable alike in protecting children and in keeping negligent parents up to their duty. A large and influentially attended public meeting has been held on the subject, when it was resolved to form such a society, and a committee was appointed to take the necessary steps to this end.

The Rochester and Chatham Joint-Hospital for Infectious Diseases.—The Bishop of Rochester, in the presence of the Mayor and Town Council and a numerous company, has just opened this institution. The Hospital is capable of providing forty beds, and cost £7000.

Proposed Sanitary Inspectors' Association.—Several inspectors having thought it desirable, it is suggested that an association should be formed of inspectors and other officers who are engaged in the performance of sanitary works for, say, London and neighbourhood, whereby they could meet, read papers, etc., and help one another, generally, on matters pertaining to their office of inspector of nuisances.

Smoke Nuisance: Important.—The owner of Phœnix Mill, Oldham, has been summoned before the borough magistrates for allowing his mill chimney to emit dense black smoke beyond the prescribed limits. The defence was that £100 had been spent in patents, and the Bench was asked to request the sanitary authorities to step in and advise some better means than those already employed; it was also urged that the manufacturers and spinners were "most abominably used" in this matter of smoke prosecution. The Bench said the case was of the utmost importance to the town; but they were of opinion that, inasmuch as it had been shown the defendant had expended a considerable sum of money in endeavouring to comply with a previous order made to abate the nuisance, he had used due diligence, and the summons was dismissed.

Neame.—Since the inauguration, in 1873, of the Hospital Saturday Fund in Birmingham nearly £40,000 has been collected through that medium. The amount received last year was the largest since the first year. Several meetings of workpeople have just recently been held at the works of employers, and resolutions passed adopting the weekly system of contributing.

A Difference of Opinion.—Referring again to the sale of diseased meat in Charterhouse-street, Dr. S. Saunders, in answer to an inquiry at the last meeting of the City Commissioners of Sewers, said there was a difference of opinion between himself and the Medical Officer of the Holborn District on the subject of this meat, his own belief being that it was unfit for human food, whilst the other medical authority considered it should not be withdrawn from the consumption of the poor. It was well known that large quantities of meat were consigned under two labels, one of them representing offal. If, however, by any mischance such meat was not seized, it was sold to the poor as sound and wholesome. The Court ordered the practice of selling diseased meat in Charterhouse-street, outside the Meat Market, and without the jurisdiction of the officers of the Commission, to be reported to the Local Government Board.

Tobacco and Snuff supplied to Paupers contrary to Act of Parliament.—The Clerk of the Liverpool Select Vestry has drawn attention to the surcharge by the auditor of £77 for tobacco and snuff supplied to paupers, the ground being that they were supplied on an order of the Vestry, instead, as required by the Act of Parliament, as medical comforts ordered by the medical officer. The practice, it appears, had been in existence for thirty-six years, and the Committee had determined to continue it. The matter was referred to the Financial Committee with a view to appeal.

Pauper Children.—The West Derby Board of Guardians have resolved that a number of children, selected without regard to religious distinction, shall be allowed to emigrate to Canada under proper protection, and that £10 and a complete outfit be granted in each case, subject to the consent of the Local Government Board.

The Port Sanitary Authority, Liverpool.—Dr. J. S. Taylor, in his report for the year 1882, referring to the number of emigrants from the port, observes:—"The passage of so large a number of persons, brought from all parts of the Continent and the British Isles, is attended with considerable risk to the inhabitants of the city, more especially as the emigrants undergo no medical examination previously to their arrival. It is no unusual circumstance to find some of them in an advanced stage of infectious disease on arriving, when they are immediately sent to the hospital. During the year 197 emigrants were sent to the hospital, and of these 174 suffered from measles, 15 from scarlatina, and 8 from fever. They were nearly all foreign emigrants, and, being under the control of the shipping companies, were easily dealt with; but British emigrants being under no supervision, except such as is exercised over lodging-houses, may spread disease over the city unchecked, and thus constitute a public danger."

The Leamington Provident Dispensary.—It was stated at the fourteenth annual meeting, at which Lord Leigh presided, that the members numbered 3550, who contributed £701 12s. 6d.; 4150 patients had received treatment; the deaths had been 51, or 14·3 per thousand. The medical staff received £345 17s., and the public subscriptions in aid amounted to £132 1s. 6d. The Chairman spoke of the great value of the institution to the working-classes, and also to Leamington by checking and reducing disease.

London Bakehouses.—It is seen from Mr. Redgrave's last annual report that, by an improved supervision of the metropolitan bakehouses, some of the horrors brought to light last year have been removed. But bakehouses are still very inadequately ventilated, and this must continue to be the case so long as they are generally cellars. This is a very serious evil, and Mr. Redgrave suggests no excessive legislative intervention with the trade when he urges that new underground bakehouses should be forbidden. The report still exhibits a very unsatisfactory condition of a large number of the bakehouses.

COMMUNICATIONS have been received from—

The President of the Pharmaceutical Society, London; Mr. Shirley F. Murphy, London; Mr. K. W. Millican, Warwick; Dr. Armstrong, Liverpool; Messrs. Woollams, London; The Registrar of the Apothecaries' Hall, London; The Registrar of St. Andrews University; Professor P. W. Latham, Cambridge; The Honorary Secretary of the Medical Society of London; Mr. J. Chatto, London; The Honorary Secretary of the Obstetrical Society of London; The Sanitary Commissioner for the Punjaub, Lahore; The Secretary of the Royal Institution, London; Mr. H. Trueman Wood, London; The Registrar-General for Scotland, Edinburgh; Professor Langmore, Netley; The Chairman of the Council of the Parkes Museum, London; The Secretary of University College, London; The Honorary Secretary of the Pathological Society of London; Mr. John Gay, London; The Secretary of the Medical Faculty of the University of Aberdeen.

BOOKS, ETC., RECEIVED—

Annual Report of the Newcastle-upon-Tyne City Lunatic Asylum for 1882—Des Névroses du Larynx, par le Dr. A. Gouguenheim—Report of the Committee of Management of the Homerton Hospitals for the Year 1882—A System of Surgery, by various Authors, edited by Holmes, 3 vols.—Index of National Board of Health Bulletin—Manual of Pathology, by J. Coats, M.D.—Taylor's Principles and Practice of Medical Jurisprudence, 2 vols.—History of Rome, by Victor Duruy, part 4—Abdominal Hernia, by Rushton Parker, B.S., F.R.C.S.—Vegetable Alkaloids and the Methods of their Separation, by Matthew Hay, M.D.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—American Journal of Obstetrics—Le Progrès Medical—Revue d'Hygiène—Westminster Review—British Workman—Band of Hope Review—Friendly Greetings—Sunday at Home—Leisure Hour—Girl's Own Paper—Boy's Own Paper—American Journal of the Medical Sciences—Italian Times, April 21.

The library of the Obstetrical Society has been removed from 291, Regent-street, to 54, Berners-street, W., where all communications should be addressed. The library will be re-opened on May 2.

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ORIGINAL LECTURES.

GULSTONIAN LECTURES ON STERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London.

By J. MATTHEWS DUNCAN, M.D., F.R.C.P.L.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, etc.

LECTURE III., PART II.—ITS PREVENTION AND CURE.

THE regulation of desire and pleasure cannot be passed over without some remarks. Of the moral condition of those in whom these feelings are absent, or in whom they are in excess, I shall say nothing; and this silence is not because the moral condition is either unimportant or without influence on bodily health and on sterility, but because there is little that requires to be said. The healthy performance of the function of childbearing is surely connected with a well-regulated condition of desire and pleasure; and a well-regulated condition is not a reduction to a minimum or total absence, neither is it excess. I have already said that both desire and pleasure may be, and not rarely are, entirely absent; and it is my opinion, founded partly on the distinct testimony or concurrence of married women who are examples of the evil, that an education injudiciously ascetic, as it may be called, sometimes produces this deficiency, which is a source of much disappointment and disaster in married life; and this view is corroborated by what is quite certain—namely, that by indulgence the feelings may be, and not rarely are, produced or increased. Writing on sterility, Ambrose Paré gives directions how to increase desire with a view to conception. Equally important is excess of desire and pleasure, and its reduction within moderate limits is equally advantageous. Religion, morals, bodily health, and childbearing all combine to exalt the value and importance of moderation, and to show the evils of absence or of excess. The influence of separation of married people, or of living without cohabitation for a long time—a period, say, of several months—is very widely recognised; and it is probably dependent on the increase of desire and pleasure in those who have little of either, and on the restoration of them in those who have been rendered nearly impotent by excess. This power of separation has appeared to me to be far more frequently operative in women who have had a family than in those who are absolutely sterile; and remarkable examples are not rare.

I have heard and read of, but have not personally witnessed, the disappearance of sterility after recovery from a fever; and this result is ascribed to the prolonged separation caused by the illness. The explanation may be correct, but it does not appear to be the natural one, for fevers are powerfully injurious to general health, and are known to disorder the ovarian and uterine functions.

I have already spoken of sterility as caused by marriage, especially in the young, and we know the sterility of prostitutes and the sterility of confined animals who couple freely or excessively; and it is probable that all these infertilities may have a bond of union in their being due to excessive desire and pleasure, or to excessive sexual indulgence, or to both combined.

In animals, especially in cows and mares, the semen is described as being not rarely expelled from the vagina soon after coitus; and this failure to retain is said to be, in some cases, owing to the animal not being duly in heat. Attempts are made to cause retention by dashing cold water over the buttocks and external parts. A like failure to retain the semen is frequently complained of by women, who describe it as coming away either immediately after coitus, and without leaving the horizontal position, or only on getting up. In either case women often attribute sterility to this failure of retention, and seek a cure of it with a view to fertility. Further, I have repeatedly been distinctly informed by careful women who habitually have this disagreeable imperfection, that conception has followed the rare occasions on which they have, as they noticed at the time, retained the semen. That this non-retention is often only partial is made probable by the occurrence of pregnancies in women who describe themselves as invariably suffering from it. It is rarely complained of except by the sterile, and I believe it is rare among the fertile. I have also a very strong impression, which I have no data to corroborate statistically, that it is especially common among those sterile women who have not sexual pleasure. I know nothing that modifies this condition, but believe that the production of sexual pleasure may have favourable influence. It probably depends on the failure of the timely dilatation of the cervix uteri, and perhaps of the uterine openings of the tubes so as to admit the semen, and on the failure of the simultaneous production of a condition of increased temporary negative abdominal pressure, or of that adspiratory action of the abdomen which numerous old and recent authors invoke to explain the mechanism of fecundation; or it may depend on the failure of both of these conditions of ordinary successful coitus. Before leaving the subject I must add that the facts as to this profluvium seminis are not of the highest degree of security; for, so far at least as I am concerned, they are not more than the statements of intelligent wives. They are probably quite accurate, as they are certainly given in good faith; but it is possible that mucous discharges or glandular secretion through the ducts of Cowper or Duverney may be, in some cases, mistaken for semen.

The immoderately great consumption of alcoholic drinks by women, without their necessarily ever reaching the stage of drunkenness, is so common and so potent a cause of disorder and disease that it requires special mention. It is possible that much of the influence of this drinking might be justly ranked as part of mere overfeeding, whose injurious effects we have already spoken of, but this is far from certain. Indeed, while I am unable to give any strong evidence of the specially injurious action of alcohol, considered as an article of diet, I am much disposed to this view, being led to it by the good results in practice which I believe justly attributable to desisting from the use of it. The instances on which I rely are cases in which I have, by physical examination and other modes of inquiry, been unable to discover any evidence of disease of the internal genital organs. It would not make the conclusion more assured to enumerate cases which are not in number or other circumstances sufficient for a demonstration. But I may mention the leading features of one which could not but strike the most careless observer. This patient was brought to me to be cured of sterility, and, as some prolonged treatment was expected, she proposed to reside near me for a time. She was between twenty and thirty years of age, and had been several years living in fruitless marriage, absolute sterility. On two occasions, with at least two years of interval, I declared my inability to do anything against the sterility by local means because I could discover no disorder or disease of the womb or its appendages. Having some suspicion of too liberal use of alcoholic drinks, I recommended teetotalism. After the lapse of a few years the patient, now a happy mother, was again brought to me on account of some trifling complaint, and I was told as follows:—Her drinking habits having increased, she was induced to go into seclusion with rigid surveillance, and in this she lived for about a year without any kind of alcoholic drink. When she came home again she had lost much flesh, but was in good health, and she maintained what were now teetotal habits. She immediately became pregnant, and pregnancy recurred. Such cases are not singular, and induce a belief in a special hostility of alcoholic drinking to fertility.

But alcoholic drinking has, in addition to the general or constitutional disorder which it produces, well ascertained power, in certain cases, to induce disease of the internal genital organs. That which is most easily and distinctly made out is chronic ovaritis. It often comes and goes in the presence or absence of the cause. When it is present sterility is not always a result, but frequently so, and its cure is often followed by the disappearance of the sterility.

We have, lastly, to consider the power of various local and chiefly uterine diseases and disorders, which have too much engrossed the attention of the profession hitherto. As I have already remarked, there can be no rational doubt that these local affections have a very limited scope of action; are,

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indeed, quite subordinate to the great causes of sterility affecting populations or classes. That they should have been the chief study of practitioners, as distinguished from statesmen or medical officers of health, is not only natural but in a sense just; for the practitioner cares not for the population or the class, but for the individual. If he is to do any good to the individual it is by discovering something amiss and providing a remedy that he must work. And where is a practitioner first to look for a special cause of sterility if not in the essential organs of generation? Here he finds several diseases, only in recent years the subject of scientific investigation, so-called ulcerations, displacements, strictures, subinvolution, and others, upon which he easily founds a theory, generally a mechanical one, of the sterility, which he at once proceeds to attempt to cure. If he fails to cure that does not discourage him; for, in the present state of therapeutics, the reputation of remedies is founded more upon faith than upon evidence.

The wisest practitioner is he who, giving due weight to all items of knowledge acquired in regard to a disease or an unnatural condition, sets limits to his faith or his expectations, and scrutinises the evidence on which a treatment is based, and this all the more severely if a certain result of the treatment is gain to himself.

Spasmodic dysmenorrhœa is the most striking morbid condition connected with sterility. It has its seat in the womb or its neighbourhood, and it is by most gynæcologists regarded as a purely local affection, having as its cause obstruction to the passage of the menstrual blood from the womb into the vagina by local or general congenital contraction of the canal of the cervix uteri. The nature of the affection and the place it occupies in the theory of sterility make me believe it to be a local affection in only a very limited sense —only in the same sense as irregular action of the heart or of the bronchi is a local affection. Its frequency, apart from numerous other considerations, is enough to make the pathologist hesitate to accept an alleged deformity of the cervix uteri as its cause. Besides, when the very rare alleged cause has really presented itself in rare cases of real pin-point os uteri, dysmenorrhœa has not been always present; in my practice it has been always absent.

When evidence is led in favour of the obstruction theory of dysmenorrhœa the argument from the success of treatment by enlargement of the passage is generally held to be irresistible, and its force to be, if that is possible, increased by the cure of sterility which often accompanies the cure of the dysmenorrhœa, or, at least, follows the enlargement of the passage. The frequent success in curing or relieving dysmenorrhœa by this treatment, and the occasional success in curing sterility, are not matters of doubt. I have, indeed, no hesitation in saying that while many other pieces of advice are of great value in the treatment of the associated conditions of dysmenorrhœa and sterility, and in the treatment of them when not associated, this is the only medical interference that approaches in dignity to a cure. By this means, and chiefly by this alone, have cures such as concern us here been effected. In attestation of this utility we may cite the very great number of much vaunted means by which the object is effected, by very many kinds of knives, many dilators, many expanders, many scissors, by tents of various kinds, by bougies of various shapes, all of them, when put into use, producing enlargement of a part or of the whole of the passage through the cervix uteri.

For those who deny the existence of contraction it is not necessary to say a word further against the explanation of cure by mere enlargement. For them that is certainly not the explanation. And it is easy to frame theories of the cure of dysmenorrhœa by enlargement of the passages, which may have the great superiority over that founded on obstruction, that they may also explain the cure of the associated sterility. Now, though the very simple cervical obstruction theory has been held sufficient to account for the sterility as well as for the dysmenorrhœa, it is plainly in this respect impotent.

While it is doubtful whether any menstrual blood is regularly passed through the internal extremities of the tubes into the uterus, it may justly be held sufficient by the dysmenorrhœal obstruction theorists to consider the passage of menses through the cervix alone. But they, of course, extend their theory of causation and cure to sterility, and here it is semen whose passage has to be studied, not menstrual fluid, and the cervix is not the only narrowed part of the semen's route, for it must pass not only through the cervix, but also through the Fallopian tubes. And if the seminal obstruction theorists find impediments in the cervix with its comparatively considerable dimensions, such as to allow their knives or scissors to work, what will they say of the closed capillary channel of the internal extremity of a tube? Their cure of sterility merely enlarges a passage where there was no apparent mechanical obstruction, and leaves untouched a passage where there is apparent entire impermeability.

That the obstruction theory (in all except its absolutely certain applications, as in imperforate hymen—cases to which we here make no reference) is excessively exaggerated must be plain to everyone who regards the almost innumerable cases of fecundation in extraordinary circumstances—cases without penetration; cases of impregnation in peculiar conditions through the rectum or through the urethra; cases in advanced uterine cancer; cases in procidentia with great cervical hypertrophy; cases in extreme distortion by fibroids; and others. In this matter the appeal to comparative anatomy is most instructive, and the argument from it very evident. The apparent mechanical difficulties in the way of the semen passing the cervix are, in some mammals, increased in an extreme and often a curious manner, without any consequent obstruction. To this matter Kehrer and Lott have paid particular attention, and have shown that the apparent mechanical difficulties affect the construction of the male organ in its relation to the female passage as well as the female passage itself.

To me it appears theoretically reasonable to connect the dysmenorrhœa and sterility with rigidity of the cervix, and the opinion that it is so is confirmed by its being actually discovered in most cases. Anyone familiar with the use of increasingly sized bougies in dilating the cervix must recognise the greater force required in dysmenorrhœal than in healthy women, and the increase of painfulness of the process as the force used, slight though it is, increases. The overcoming of this rigidity by temporary dilatation, not the overcoming of a mechanical obstruction, seems to me in some mysterious way to exert a generally beneficial influence on that part of the process of fecundation in which the uterus is implicated during insemination. For it may be held as almost certain that, during the natural sexual orgasm in coitus, the internal ends of the tubes, which we almost never see but as absolutely closed passages, are temporarily opened inside, and that the same happens to the cervix; and while it is probable that such wide opening of the cervix is not essential for fecundation, it must be held as facilitating it or rendering it more probable. Besides, this opening is an indication that the whole nervous arrangements as well as the physical organs are co-operating to produce the object in view. The opening here pointed out has, in its natural or healthy performance, and in the obstacle from rigidity, close analogy with similar processes going on during the premonitory and first stages of labour; and the dysmenorrhœal pains have analogy in the irregular, painful, and useless contractions and pains of these stages of labour, and of the hours immediately following delivery.

No other disease, local or presumably local, has such importance in the theory of sterility as spasmodic dysmenorrhœa. This great place is established by the frequent association of the two conditions, and by the probable connexion of the dysmenorrhœal neurosis with profluvium seminis, with disorder of sexual desire and pleasure, and with other derangements of the sexual orgasm of coitus. But dysmenorrhœa has its place confirmed in a unique way, for its cure is universally admitted to be a distinct and direct step towards the cure of sterility, and this can be said of no other local condition.

During recent times no disease has more engaged the attention of gynæcologists than the catarrh and peculiar changes of the cervix uteri connected with it, known generally by the name of ulceration of the neck of the womb. To it, even when in a very slight form, has been ascribed a very great pathological importance, and the Croonian Lectures of West seem to have had less effect in bringing the profession to a just judgment of its comparative insignificance than the overshadowing influence of some other temporary novelty. Among other evils which this very prevalent disease has been alleged to produce is sterility; but there is not a tittle of evidence that it has any special influence in preventing conception; and we have, for guidance as to

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this matter, our best help in the fact that conception and natural pregnancy are extremely common during its continuance. Among twenty-six cases observed by Grünewaldt, with a view to the study of the changes of the cervix uteri in the first month of pregnancy, he found only eleven with a quite healthy state of the cervical mucous membrane. Six had papillary and nine catarrhal ulceration, which no doubt existed before conception.

Almost identical statements may be truly made regarding versions and flexions, and I do not repeat them. But in this department of gynæcology increase of knowledge not only tends to diminish importance, but to show that the great mass of versions and flexions are conditions of simple health.

The importance of those diseases which prevent the commencement of uterine pregnancy, or render such commencement improbable or difficult, needs only to be mentioned. To Grünewaldt we owe a careful statement of the extent and potency of this class of diseases, and for them he, as already said, vindicates a morbid superiority over those conditions which prevent conception.

The diseases and disorders of the genital organs, whether they act in preventing conception, in preventing uterine pregnancy, or in interfering with its natural healthy progress, are operative in individual cases, and demand the most careful study of the practical physician, for it is chiefly through his power over them that he can hope to cure sterility. That in the early stages of the study of these diseases their influence should be exaggerated is natural. At all times there can be no doubt their study and treatment will be most important, not only on their own account, but with a view to the improvement of the general health. In the case of those local diseases which may be proved to have no special influence in diminishing fertility, their removal, by increasing the general health, will help towards a removal of sterility.

Treatment of Ranula.—In a lecture, delivered at the Hôtel Dieu (*Gaz. des Hop.*, April 19), Prof. Richet said that about fourteen or fifteen years ago he had shown that we may get rid of sebaceous cysts without extirpating them, by the injection of chloride of zinc. One of his pupils tried the same procedure in sublingual cysts; but it has been found that in these success is not always to be obtained, inasmuch as the inflammation induced by the chloride, in place of causing the disappearance of the tumour, solidifies it, and renders it indestructible. In order to obviate this inconvenience, Prof. Richet has modified the procedure. He passes successively two curved needles, armed with a double thread, one on each side of the cyst, which he then divides between them; discharges the contents, and cleans out the sac most carefully. He then fills this with a pledget of charpie soaked in chloride of zinc, and leaves it *in situ* for forty-eight hours. The threads and charpie are then removed, and a cure rapidly follows.

Remarkable Case of Defective Development.—A case was recently exhibited before the Philadelphia Medical Society by Dr. Atkinson (*Phil. Med. Times*, February 24), which presented the following peculiarities. It is that of a man, aged forty, who had never had any teeth, nor any distinct growth of hair on the scalp, except the downy hairs which are seen in early infancy. He is also destitute of the sense of smell, and almost of that of taste. His skin appears to be unprovided with sweat-glands, as he never perspires; and when working actively he is obliged to wet his clothes, in order to moderate the heat of the body. He can sleep in these wet clothes in a damp cellar without catching cold. His jaws present the appearance of a person who has lost all his teeth. Hair is present at the axillæ and pubis, but the downy hair which is usually seen over the skin at large is wanting, except on the scalp. His maternal grandmother and uncle were similarly defective, and this man is among the younger of twenty-one children. He is a man of very good health, never having been seriously sick, and, although not able to chew his food in the ordinary manner, he has never suffered from dyspepsia. The secretion of urine is unusually abundant. He is married, and has eight children, among whom are two girls, both of whom lack a number of teeth.—*Boston Medical Journal*, March 29.

THIRTY-FOURTH SESSION OF THE
GENERAL MEDICAL COUNCIL.

Held at their House, Oxford-street, W.

Fifth Day—Tuesday, April 24.

The first business of the Council to-day was to deal with the case of Mr. Thomas Gray, M.R.C.S., L.S.A., of 12, Montague-place, Poplar, for the purpose of considering whether he had been guilty of such conduct as would justify the Council in removing his name from the Medical Register.

A report on the case which had been made to the Branch Council by the solicitor (Mr. Farrer), contained the following paragraphs:—

This is a complaint by the Medical Alliance Association that Gray is guilty of systematically giving false certificates of the cause of death in cases where he had never seen the deceased persons in their illness; and a copy of a conviction at the Thames Police-court of having made a false certificate in the case of Minnie Lucy Wadsworth, when Gray was fined £5 and £2 2s. costs, accompanied the complaint. (See Minutes of Branch Council's meeting of June 27, 1882.) No further evidence has been produced or can be obtained than the above, so that the case stands on that conviction.

The effect of the evidence is that Thomas Gray was convicted of having issued a false certificate of the cause of death in one case, that of Minnie Wadsworth.

He is alleged to have done the like in other cases, but of this there is no proof.

The Council will have to determine whether his conviction in this one case brings him within the scope of Section 29 of the Medical Act as having been guilty of infamous conduct in a professional respect.

Mr. Farrer said that he had communicated with Mr. Carpenter, the Hon. Sec. of the Medical Alliance Association, but Mr. Carpenter was unable to give any further evidence than that of the one case in which a conviction had been obtained; but he referred him to a Dr. Macgill, of Bromley. He had accordingly written to Dr. Macgill, and received a reply alleging that Mr. Gray had given false certificates in other instances, but he had not furnished any proof of the allegations, and his letter was not evidence. He (Mr. Farrer) had written to the mother of the child, Minnie Wadsworth, asking for information as to other cases in which it was alleged that Mr. Gray had given false certificates in her family; but such information had been refused. The only case upon which the Council would have a right to rely was that of Minnie Wadsworth.

In the correspondence containing the allegations against Mr. Gray, it was stated that the child was attended by a person named Bell, who held no legal qualification whatever, and that Mr. Gray had certified that he had attended the child in its illness, though in fact he had never seen her.

Mr. Gray had been summoned to appear before the Council at two o'clock, and he attended accordingly, accompanied by his solicitor, Mr. George Lewis.

Mr. Lewis addressed the Council on behalf of his client. He said that Mr. Gray had no desire to introduce any controversial element into the matter, but he wished him to express his deep regret that anything which he had done in the course of his practice should have laid him open to a conviction even of an offence which was punishable by a fine. But he was very anxious that his personal and professional character should not be looked upon in too severe a light in consequence of that conviction. Mr. Gray had been practising as a medical man for forty years, and his character had been without reproach. He thought that if the matter upon which Mr. Gray was convicted had been fairly laid before the Council they would have hardly thought it necessary to bring him before them upon a charge of infamous conduct in a professional respect. The statements that he had given false certificates in other cases, as well as that of Minnie Wadsworth, were absolutely without foundation, and there was no evidence of any sort in support of them. The case, shorn of the untrue statements which had been made against Mr. Gray, was simply that in the year 1882 he had given a certificate of having attended upon a child nine weeks old who had died of the whooping-cough, but that he had not personally attended it. In consequence of his business having increased he took into his service ten years ago an assistant named Mr. Bell at a salary of £110 a year, and Mr. Bell boarded and lodged in Mr. Gray's house. He had walked the hospitals, but had

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not qualified. Up to two or three years ago Mr. Bell was in the habit of signing death certificates with his own name, "for Mr. Thomas Gray," and those certificates were accepted by the registrar of deaths without any complaint of any sort or kind; and burials took place upon them. About two years ago an objection was made to certificates in that form, and from that time Mr. Gray had signed his own certificates. In the instance now under review, though Mr. Gray had not seen the child, he considered that the attendance of his assistant was such an attendance as entitled him to give the certificate. In certifying that he had seen the child, he meant that the child had been seen by his assistant for him. This was the only case in which he had certified upon the report of his assistant, and for having done so he was summoned to the police-court and fined £5. Probably, if all the circumstances had been stated to the magistrate, nothing more than a nominal penalty would have been imposed. He had believed himself entitled to sign the certificate in this instance, and it was for the Council to determine whether for this error of judgment they would adjudge him guilty of infamous conduct in a professional respect, and remove him from the practice of his profession after an irreproachable career of forty years. This was not the case of a doctor who had given a certificate of death when nobody had seen the deceased person. He ventured to think that it would be straining every fair principle to deal with him as having been guilty of infamous conduct because in one isolated case he had acted under a mistaken notion of what he was entitled to do.

Mr. GRAY added that his assistant, Mr. Bell, was the son of a medical man, and that he had attended two sessions of professional instruction, and had been ten years in the profession. He was a man of large experience, and a patient under his treatment was well cared for.

The room was cleared of strangers, and the Council deliberated in private. Upon the public being readmitted,

The PRESIDENT announced that the following decision had been arrived at:—"That Mr. Thomas Gray, having been convicted of misdemeanour in signing a certificate of death in the case of a child whom he had not seen, but who had been attended by his unqualified assistant, the Council determine to intimate to Mr. Gray their marked disapproval of his conduct, but in the exercise of their discretion they do not think it necessary now to remove his name from the Register."

Mr. LEWIS: May I with great respect say that the crime is neither a felony nor a misdemeanour. That may guide you probably in the future. That is why I take the liberty of making the observation.

Mr. FARRER: I certainly was under the impression that it was a misdemeanour.

Mr. LEWIS: It certainly is not. It is an offence, not a crime. An assault would be a misdemeanour, no doubt.

The room was again cleared of strangers. Upon the return of the reporters,

The PRESIDENT said that the Council had no desire to press any particular legal phraseology, for the view they took of the subject was a higher one. They had removed the word "misdemeanour," and substituted the following:—"That Mr. Thomas Gray having been convicted at the Thames Police-court of making a false certificate concerning the death of a child," etc.

The Council then resumed the consideration of the case of Mr. Arthur Augustus Sadgrove, which had been adjourned from Friday, the 20th inst., to give Mr. Sadgrove an opportunity of satisfying the Council as to a letter dated September 10, 1881, purporting to have been written by Mr. A. Duncan, Secretary to the Faculty of Physicians and Surgeons of Glasgow, and as to the allegation that he had falsely claimed to be a Licentiate of the Faculty of Physicians and Surgeons of Glasgow.

Mr. SADGROVE was again in attendance, and handed in various documents bearing upon his case. Among these was a petition praying the Council not to remove his name from the Register, and alleging that he was unable to give any information concerning the letter of September 10, 1881, purporting to have been written by Mr. A. Duncan, and stating that Mr. Sadgrove was a Licentiate of the Faculty of Physicians and Surgeons of Glasgow. He also produced a letter dated September 6, 1881, purporting to have been written by the young man named Duncan whom he met at the Waverley Hotel, Glasgow, after he had failed to pass, and who told him that he knew members of the Faculty, and that he would be able to obtain a special examination for him. This letter contained the following passage:—"I will go to the office before my namesake [Mr. Duncan, the Secretary of the Faculty] opens his letters, and see him respecting your communication."

Mr. TURNER asked Mr. Sadgrove whether he could explain why the writer of that letter should wish to go to the office of the Secretary of the Faculty before he opened his letters.

Mr. SADGROVE said that he really could not explain why young Mr. Duncan should write in that style, and why he should say that he would go before the Secretary opened his letters. He never heard whether he tried to get the special examination for him.

Dr. SCOTT ORR asked whether this Mr. Duncan was a qualified practitioner or a candidate.

Mr. SADGROVE: He said that he had not been up to the Faculty, but he intended going up.

Dr. SCOTT ORR: You told me on Friday that he was a fellow-candidate.

Mr. SADGROVE: I ought not to have said that he was a fellow-candidate. I do not see how I could have said so, because he was not present.

Dr. SCOTT ORR: You mean to say that he had not presented himself for examination?

Mr. SADGROVE: No, he had not.

Dr. HERON WATSON asked how Mr. Sadgrove came to introduce into the Medical Directory for 1881 the statement that he was a licentiate of the Faculty of Surgeons of Edinburgh.

Mr. SADGROVE replied that he was going up for examination in January, 1881, and he caused himself to be so described in the Directory for that year in anticipation of his passing the examination. He thought that by the time the Directory was issued he should have obtained his diploma.

The Council then deliberated in private, and after a short interval the doors were again opened to the public.

The PRESIDENT said that, after due inquiry, the Council had judged Mr. Sadgrove guilty of infamous conduct in a professional respect, and that they had directed the Registrar to erase his name from the Register.

The Council then rose.

SIXTH DAY—WEDNESDAY, APRIL

Dr. STORRAR moved the following resolution, notice of which stood upon the agenda:—"That, in the opinion of this Council, the examinations in dentistry *sine curriculo* should cease and determine after December 31, 1883." He urged that he used no exaggerated language when he said that there was a very aggravated feeling among the dentists of England in consequence of the persistence of examinations in dentistry *sine curriculo*. He had received two private letters on this subject, which he should not then read, as they were not intended for the public, but he should be happy to show them to any member of the Council who came to him privately. The writer of one of them said that he believed that it was the general opinion of competent judges that the value of the dental licentiateship had been greatly lowered by the manner in which it had been granted in Ireland. Very few men went to Scotland, where it could be obtained *sine curriculo*, while numbers went to Ireland. The letter argued that if the two licences could be obtained with equal knowledge in the two places, dentists would go to the nearest place to get it, namely, Scotland.

Mr. MACNAMARA said that they ought to have the name of the writer of that letter.

Dr. STORRAR said that he would in this instance go out of his usual routine, though, perhaps, he ought not to have been called upon for the name. The writer was Mr. Tomes.

Mr. MACNAMARA said that Mr. Tomes had never been present at one of the examinations in Ireland.

Dr. STORRAR said that perhaps he ought not to have read a private communication, but, as he had been challenged by Mr. Macnamara, perhaps Mr. Tomes would excuse him for having done so. Some statistics which were put before them the other day as to the examinations for dental qualifications showed that the College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow examined only sixteen candidates between them *sine curriculo* in 1882, and that of these they rejected one-half; while the College of Surgeons in Ireland examined no less

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than sixty during the same year, and rejected only fifteen. He would ask whether, *primâ facie*, that was an aspect of affairs which was creditable to the Royal College of Surgeons in Ireland, or beneficial to the profession of dentistry? He wished to speak temperately on the subject, but he thought that this was a condition of things which they ought not to allow to be continued. The Dentists Act was passed in 1879, and came into operation on August 1 of that year. Surely sufficient consideration would be shown to dentists now upon the Register if examinations *sine curriculo* were abolished at the end of the present year.

Dr. FERGUS seconded the motion.

Mr. MACNAMARA impugned Mr. Tomes's competency to express any opinion upon an examination at which he had never been present, though in doing so he yielded to no man in his respect for Mr. Tomes. It had been said that the Royal College of Surgeons of Ireland had rejected only fifteen candidates, but there was another way of stating that fact, and that was that they had rejected 25 per cent. of those who presented themselves for examination. He referred to a unanimous resolution recorded in the Minutes of the Council for 1879, to show that at that time it was held by them that the enforcement of a curriculum would be a hardship upon persons then in practice. There was no way of accounting for a unanimous resolution of that kind being passed by the Council, except by conceiving that it was felt that it would be a hardship to call upon gentlemen in practice to produce that which it would be almost impossible for them to produce, namely, a curriculum. The College of Surgeons in Ireland resolved to admit to examination *sine curriculo* up to August, 1881, all dentists in practice for the previous five years, and they had loyally adhered to that course. But they further determined that any gentleman whose name was on the Dental Register, and who was entitled to all the privileges of a dentist, and was anxious to still further prove his competency, should be admitted to examination upon fulfilling certain conditions. The Examining Board consisted of three members of the Court of Examiners, one of whom was the best examiner in anatomy that he had ever known, and of three dental surgeons who were Fellows of the College. Each application for the dental examination had to be submitted to a committee, of which he (Mr. Macnamara) was a member. Each candidate was subjected to a most searching examination. Out of 586 candidates who were examined by the College, 109 were positively stopped. When that was the case the examinations could not be of the character to which Mr. Tomes alluded. Licentiates had to undertake that they would not attract business by advertising, and if they broke that undertaking the diploma was cancelled. The College took every care that no undesirable person should be examined, and a great number of persons were refused admission to the examinations. On one occasion there came before the Examining Board a candidate who appeared to be a perfect monomaniac with regard to qualifications. He had the qualifications of so many bodies and societies that the authorities of the College said, "Gracious! why does he want our qualification?" And this gentleman was examined and found wanting. Let that fact be told to Mr. Tomes.

Dr. STORRAR: Well, he was a monomaniac! (Laughter.)

Mr. MACNAMARA said that the gentleman was burdened with qualifications, and yet the College of Surgeons in Ireland could not conscientiously pass him. However, he should be sorry to undervalue distinctions of the other bodies on that account. The College of Surgeons of Ireland held that if a man was on the Register and possessed no qualification, he must be one of a class to which he personally had taken exception; and yet, the representative of the College of Surgeons of England—a gentleman whose name was a name to conjure by, Sir James Paget—had told them that hairdressers, tobacco merchants, and others, who had added the occupation of dentist to their other pursuits, were worthy of being on the Register, and that the licensing bodies should not object to them. The Council of his College felt that on this point they stood upon a rock. They were prepared to challenge the Medical Council to go before the Privy Council on the subject. He felt that the verdict of such men as composed the Privy Council would be in favour of the College of Surgeons of Ireland. He had no amendment to move, but he should vote against the resolution.

Dr. FERGUS said that he certainly felt, with Mr. Macnamara, that a certain time should be given to a man to get out of the rut, and distinguish himself from the hairdresser and others who had been referred to; but he thought that the time which had been given for that purpose was quite long enough. He believed that the intention of the members of the Council in allowing the examinations *sine curriculo* was that they should exist until a man had had time to pass through a curriculum. In 1878 the College of Surgeons in Ireland passed a resolution that "after the first day of August, 1881, no candidate should be admitted to examination who has not pursued the following curriculum, and lodged with the registrar of the College at least a fortnight previous to examination," etc. That resolution was afterwards rescinded, but he thought that it was a great misfortune that the College should have departed from that wise regulation. When he gave notice that he should ask a question on the subject of examinations *sine curriculo*, he did not intend to particularise any one licensing body. He thought that it was high time that all such examinations should cease and determine. He had opposed them from the very first. It was no hardship to refuse to examine *sine curriculo* a man who was already on the Register. Let him pass through a curriculum if he wanted to obtain a qualification.

Professor HUMPHRY said that he thought that some slight confusion had arisen with regard to the word "curriculum." The Council determined at a given date on a certain curriculum. It was a long and arduous one, and it was almost impossible for any man engaged in the practice of dentistry to go through it; but it was to be gone through by students in dentistry. The College of Surgeons of England, if he remembered rightly, declined to hold examinations in dentistry without a curriculum. Their candidates had up to that time gone through one, and they thought that it would somewhat lower their qualification if the curriculum was not insisted upon. That was for students in dentistry. The point of the College of Surgeons in Ireland was a somewhat different one. They did not admit students in dentistry without a curriculum, but they held, and he thought with some reason, that members of the dental profession who were on the Register should be allowed an opportunity to pass a good examination, and they contended that on the whole they benefited the profession of dentistry by encouraging those who were on the Register to qualify in a regular manner. There was no reason to suppose that the examination *sine curriculo* of the College of Surgeons of Ireland was not a good one. He should not support the motion.

Mr. MACNAMARA wished it to be distinctly understood that his College did not now examine any person *sine curriculo* unless his name was on the Register.

Dr. STORRAR said that his answer to Mr. Macnamara would be a very brief one. It was that the College of Surgeons in Ireland, after having resolved that no examination should take place *sine curriculo* after August, 1881, had changed their mind. He regretted that Professor Humphry should have taken the line he had taken. It was admitted that men who were really very ignorant had been admitted on the Register in consideration of their having been in practice before the present Act. They had reason to believe that the educated dentists wished to improve the status of their profession. A great many of the more ignorant ones were pressing forward in order to get a qualification attached to their names.

Dr. HUMPHRY suggested that a proviso should be passed which would prevent the enforcement of a curriculum applying to persons who were already on the Dental Register. He moved, as an amendment—"That, in the opinion of this Council, the examination in dentistry *sine curriculo* should be limited to persons who are already on the Dental Register."

Mr. MACNAMARA said that they would all vote for such a motion as that.

Mr. MARSHALL seconded the amendment.

Dr. FERGUS said that there was already an exception made in favour of such persons. The additional words would make no difference. They would leave the bodies as they were.

Mr. SIMON said that he thought that Mr. Macnamara had made out a very good case, but in matters of this sort the institutions ought to be, like Cæsar's wife, above suspicion. He should like to know whether the sixty men who had been examined by the Royal College of Surgeons in Ireland were

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on the Irish Register. He thought that it would not be right that there should be competition between the different divisions of the kingdom with regard to *sine curriculo* examinations. He thought it quite fair that the examination *sine curriculo* held by the College of Surgeons in Ireland should be open to registered dentists in Ireland, but it should be limited to them.

Dr. QUAIN said that the subject was a very simple one. There were persons on the Dental Register who were accused of being ignorant, and they offered to pass an examination as to their competency. Surely they ought to be permitted to do so without a curriculum.

Dr. A. SMITH said that the results of the examinations *sine curriculo* showed that a considerable proportion of the candidates had been rejected. These examinations were limited to men already on the Register, and those men would pass away in the course of a few years. He thought that every encouragement ought to be given to them to show their competency if they were desirous of obtaining a higher standard in the profession.

Dr. HERON WATSON said that the amendment merely expressed a fact which admittedly existed in connexion with all examinations *sine curriculo*. As to the motion that all such examinations should cease in December, 1883, the only effect of it would be that all the portals by which men could be admitted to such examinations would be choked with candidates, and the examiners would be inconvenienced. It would make no real difference in the number of men who were examined in that way; but it would cause them to come up *en bloc* or *en masse*.

Mr. COLLINS expressed himself in favour of allowing dentists on the Register to obtain a qualification *sine curriculo*.

Mr. MARSHALL said that Mr. Simon's proposal to limit the examinations held *sine curriculo* by the College of Surgeons in Ireland, to dentists who were in practice in Ireland, would take away with one hand the boon which was conferred with the other. There could be no competition in this matter between the different divisions of the kingdom.

The amendment was carried by a large majority, only one hand being shown against it. It was then put as a substantive motion, and agreed to.

The debate on the following motion, moved by Mr. Simon at a previous sitting, was then resumed:—"That, for the purposes of the Council's Recommendation 21, and of regulations by which the licensing authorities may desire to give effect to it, the 'four years' required to be spent in professional study must be four years during which professional study shall have been adequately followed by the candidate as his true industry and the main occupation of his time; and that the Council would not be prepared to count as part of their four years' curriculum any considerable time during which a candidate had given most of his industry to other pursuits—as, for instance, if he had been regularly engaged for the greater part of each day in the duties of some non-medical calling followed by him for his livelihood."

Mr. TURNER said that he did not think that the motion altogether met the point raised by Dr. Jacob in his letter. That point was specified in the last paragraph of the letter, in which Dr. Jacob asked the Council to declare that the issue of fictitious certificates was not tolerated by the Council, and they should not accept attendance at night upon a course of medical study as a sufficient compliance with the recommendation of the Council. The resolution seemed to apply to the last point, or that which related to *bonâ fide* attendance at the lectures. It did not sufficiently emphasise the opinion of the Council with regard to the giving of false certificates of attendance at lectures. They ought to make a distinct declaration upon that point. It appeared to him that it was as grave an offence for a teacher to certify that A. B. had attended his instruction if he had not so attended, as for a medical practitioner to certify in a death certificate that he had attended a certain person when in fact he had not seen him. The Council had recently expressed their view as to the impropriety of giving false certificates of death; and he could see no distinction between the two offences. The point which Mr. Simon wished to emphasise in his motion was the necessity of making study *bonâ fide*. He (Mr. Turner) agreed with the resolution as to that necessity; but at the same time he felt that they ought not to throw any difficulty in the way of young men whose circumstances were such that they needed to take means to earn a livelihood while they were pursuing their medical studies. He knew a great number of young men in Edinburgh who were so placed, and he could mention men who were now occupying leading positions in the medical profession and in the scientific world, and who during their period of study earned their bread in some entirely non-medical capacity. One of these men obtained his living by doing the hack work of a newspaper office, and while so engaged obtained the first medal in the class of anatomy.

Mr. SIMON said that, as regarded false certificates, he scarcely needed to state that he agreed with every word which Professor Turner had uttered, and if Professor Turner would make a separate motion on the subject he should be most glad to support it if possible. He said "if possible," because he felt that there was very great difficulty attaching to the question of what was a *bonâ fide* attendance.

Dr. MATTHEWS DUNCAN said that he entirely agreed with the tenor of the remarks which had been made by Mr. Simon in bringing forward his resolution, but he objected to the passing of his resolution as it stood. One objection was that it proposed an entirely new departure in medical education, and he thought that it would be extremely unfortunate to make such a departure at the present period. Not only was the student to be told how long he was to study, but the motion proposed to tell him how much he was to study, and to institute the office of an inquisitor to inquire into his daily occupation. There were hundreds of young men who, though they attended the teaching, did not pay a tenth part as much attention to their studies as was paid by the hardworking young men whom Professor Turner had described; and these would not be touched by the resolution, while the hardworking students who were earning their living while they were pursuing their studies would come under its operation. He also objected to the words "adequately" and "any considerable time" as used in the resolution, for he considered them to be utterly without meaning in the connexion in which they were used. He hoped that the Council would not make it its business to inquire what a student did with his time beyond testing him when he came up for examination. The examinations were nowadays made "practical," so that the student could not pass them by means of grinding up or cramming, as was done in former years. The giving of false certificates of attendance was a thing which the Council should not recognise in any form whatever; but, as far as he was acquainted with examinations in London and Scotland, he had never met with such a thing. He concluded with the following amendment:—"The Council, having had its attention drawn by the letter of Dr. Jacobs to the use of fictitious certificates, object in the strongest manner to their issue by teachers and their use by candidates for a licence. They recommend that no certificate be granted to a student who has been absent from more than one-fourth of the lectures required in any course."

Mr. TURNER seconded the amendment.

Mr. COLLINS stated that about two years ago a committee appointed by five of the medical bodies in Dublin investigated the subject of certificates of attendance upon lectures, and they came to two good resolutions on the subject; but there was great difficulty found in the matter, and there had been no positive recognition of those resolutions by the various bodies which appointed the committee. In his opinion a strict supervision of medical schools and hospitals would be one means of preventing the abuse which had been complained of.

Mr. MACNAMARA feared that it might be thought that it was the custom in the medical schools of Dublin to issue fictitious certificates. He fancied that Dr. Jacob had somewhat of a *bête noir* on his brain in connexion with this subject. He was convinced that those schools never issued a "fictitious certificate" in the sense in which the Council would understand the term. Dr. Jacob's objection was against night lectures. It was an assumption which had been made by Dr. Jacob, but never proved, that the gentlemen who conducted night lectures gave fictitious certificates. He (Mr. Macnamara) had been told that Sir Astley Cooper lectured at eight o'clock at night.

Dr. STORRAR agreed with the views which had been expressed by Professor Turner, but he objected to the recommendation made by Dr. Matthews Duncan. He did not think that the Council could go behind the certificates signed

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by the medical teachers. He objected to the proposal that attendance at three-fourths of the lectures should be insisted upon. That requirement would be interpreted by the student as a permission to absent himself from one-fourth. As to the system of certifying attendance, he had seen cases of absolute iniquity occurring under it; but he knew of no remedy for the evil, except the making of the examination of such a nature as to exclude the possibility of cramming.

Dr. HUMPHRY agreed with Dr. Storrar. He did not think that the Council would be wise to pass a stringent resolution. He confessed that, as a pupil, he received certificates of attendance on courses of lectures from which he was absent. This was due to the kindness of teachers who felt that it would have been mischievous for him to attend them all. Dr. Humphry said that he did not think that any examiners were guided by the schedules. As an examiner he never knew whether the schedules were signed or not.

Dr. LYONS said he went a very considerable way with his friend Dr. Jacob, but he was disposed to agree with Mr. Macnamara that Dr. Jacob had taken an extreme view with regard to night lectures. No doubt evening lectures afforded facilities for young men of the class which had been described by Mr. Turner, and he hoped that the Council would not put any obstacle in the way of students who had a desire to choose the medical profession, but who, on account of the *res angusta domi*, were obliged to utilise their brains in some other way in order to gain a livelihood during the period of their studies. The question of fictitious certificates would be a good one for the Council to deal with after its reconstruction if the Medical Act Amendment Bill became law. He questioned whether it would be wise to deal with the subject now.

Both the original resolution and the amendment were ultimately withdrawn by leave of the Council.

Shortly after four o'clock the Council took into consideration the case of Mr. William Henry Dry, M.R.C.S. Eng. 1835, L.S.A. Lond. 1836, of 97, Rodney-road, Walworth, who had been summoned to attend at that hour to answer a complaint made against him on account of his having given a false certificate of death. The report made by the solicitor upon this case to the Branch Council is as follows:—

In this case complaint is made by the Medical Alliance Association that Mr. Dry, who resides at 97, Rodney-road, Walworth, keeps a dispensary in the Kingsland-road, E., which has for some years been conducted by a wholly unqualified assistant named Upfield. That, in 1879, Upfield was fined £10 for pretending to be a surgeon; and on September 9 he was again fined £10 for giving a false certificate, and his employer, Mr. Dry, was also fined £10 for making the said false certificate.

Appended is the letter from the Medical Alliance Association, together with extracts from the newspapers containing reports of the proceedings at the Worship-street Police-court, and certificates of the convictions in the latter case.

Having carefully considered this case, and the evidence obtained in support of the charge, I am of opinion that the conviction of Mr. Dry of having made a false certificate concerning the death of Henry James Ault brings him within the scope of Section 29 of the Medical Act, as having been guilty of infamous conduct in a professional respect.

W. J. FARRER.

The letter and extracts referred to in the above report were set out at length in the programme of the day's business.

Mr. TERRY, solicitor, of King-street, Cheapside, attended on behalf of Mr. Dry, and handed in a medical certificate showing that Mr. Dry was unable to attend before the Council, as he was suffering from bronchitis, weakness of the heart, and general nervous debility. He said that he had to express Mr. Dry's extreme regret at being unable to attend personally.

Mr. FARRER said that this case was very similar to that of Mr. Gray, who was before them yesterday. The only particular in which it differed from that case was that in the present instance there was a certain amount of evidence that Mr. Dry had made it a practice to give certificates of the sort of which complaint was made. The difference was an important one.

Dr. A. SMITH asked Mr. Farrer whether there was any evidence that Mr. Dry had three establishments at the present time.

Mr. FARRER replied that there was no evidence to that effect.

Mr. TERRY, on behalf of Mr. Dry, said that that gentleman would be seventy-four years of age next July, and that he had been in practice nearly fifty years, and, according to his instructions, the complaint now under consideration was the first one which had been made against him. From what he could learn from medical men in Mr. Dry's own neighbourhood, Mr. Dry had always borne an excellent character, and especially for his benevolence to the poor. Mr. Upfield, his assistant, was apprenticed to Mr. Dry twenty years ago, and he had been up for examination, but failed to pass. He proposed going up again. When Mr. Dry first took the dispensary in the Kingsland-road, he for a time lived upon the premises, and since then he had been in the habit of driving over to see patients there almost every day. The child whose death Mr. Dry had improperly certified, died of malignant scarlet fever. It had been seen by Mr. Dry's assistant. At the suggestion of a medical man who was called in to see the child before it died, Mr. Dry was asked to give a certificate, and he did so inadvertently upon the report of Mr. Upfield, without considering that he had not himself seen the child. At the police-court proceedings the solicitor for the Medical Alliance Association pressed for the highest penalty, and for costs. A fine was inflicted, but no costs were allowed. He (Mr. Terry) submitted that Mr. Dry had condoned his offence by the payment of the penalty, and he urged that the Council should not inflict upon him a punishment which, considering his present state of health, would no doubt bring about his death.

Strangers were then excluded from the room. After a short interval they were readmitted, and the President read, as the decision of the Council, a resolution in similar terms to that passed yesterday in the case of Mr. Gray. The resolution expressed the marked disapproval by the Council of Mr. Dry's conduct, but stated that, in the exercise of their discretion, they did not now think it necessary to remove his name from the Register.

A motion referring Dr. Jacob's letter to the Irish Branch Council for such inquiry as they might find needful was proposed by Mr. TURNER, seconded by Mr. SIMON, and carried after a short discussion.

The following resolution of the Executive Committee on the subject of personation at preliminary examinations was laid before the Council:—"That with reference to the subject of personation at the preliminary examinations of the several bodies, referred to the Executive Committee at the last meeting of the General Council (vol. xix., page 38), they are not at present prepared to report."

Dr. HUMPHRY moved that the foregoing resolution be received and entered on the Minutes.

Mr. MACNAMARA said that he regarded the resolution as a very bald report on a most important subject.

A short discussion took place, and the motion was ultimately carried.

The following resolutions were also passed:—"(*a*) That the resolutions based on the Report of the Committee on the Employment of Unqualified Assistants by Registered Practitioners, which were passed by the Medical Council on April 21, 1883, be transmitted to the Lord President of the Privy Council." "(*b*) That the resolution of the Council, marked (*b*) in the Minutes of April 21, 1883, page 91, be referred to the Executive Committee to communicate with the Registrar-General."

The Council then adjourned.

SEVENTH DAY—THURSDAY, APRIL 27.

The Council resumed at two o'clock, and proceeded to the consideration of the Medical Act Amendment Bill.

Dr. HALDANE moved—"That the constitution of the Medical Boards for Scotland, as laid down in Clause 9 of the Medical Act Amendment Bill (as amended in committee), is unsatisfactory, and should be amended." He said that the powers of the Medical Boards would be very great. It seemed from Clause 20 of the Bill that the Boards would have power to inspect the medical schools and the examinations of the licensing bodies, and if they saw fit they would be able to take steps to deprive any medical school of its official recognition, or to deprive any licensing body of its power to grant licences to practise. The powers of the Boards being so great, it was important that the Boards should be so elected that they would be likely to be impartial. The constitution of the English and Irish Boards was essentially the same. In England the members were in the proportion of eight selected by the universities to seven selected by the corporations. In Ireland there were six to be appointed by the universities, and five by the corporations. But in the case of the Medical Board for Scotland, though the total number of members was to be the

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same as in the Irish Board, the distribution was very different: eight were to be selected by the universities, and only three by the corporations. This would give the universities a complete preponderance. The English universities were very differently situated from the Scotch. They were essentially non-teaching bodies. There was practically no medical school at Oxford; and at Cambridge, though there was an excellent medical school, it did not come into competition with the other bodies. The University of London was a purely licensing body. The University of Dublin was practically neither a teaching body nor a licensing body. The Scotch universities, however, were essentially great teaching bodies, and a large proportion of the students obtained their education wholly in the universities themselves. It was therefore to their material interest that students should flock to them. What was the reason that such a great preponderance of representation was given to the universities? The reason could not be that they were older teaching bodies than the licensing corporations, for the opposite was the fact. He did not think that the cause of the great disproportion in the representation was due to the examinations of the corporations being inferior to those of the universities. There was no doubt that the qualification granted by a university involved, and ought to involve, a higher scientific education than a mere licence to practise; but it was with the final examination that the public had chiefly to deal, and he did not think that the final examinations of the corporations were inferior to those carried out by the universities. Taking the statistics of the examinations at the College of Physicians and Surgeons of Edinburgh, it appeared that a very considerable percentage of those who came up were rejected; and, although this mode of looking at the matter might involve a certain amount of fallacy, still the rejections showed that the examinations were conducted by the corporations with a very great amount of care. From his experience he believed that the final examinations of the corporations were as good as the final examinations of the universities, and he had been for seven years an examiner of the University of Edinburgh. He had no hesitation in saying that he believed that the real object in giving the Scotch universities such a great preponderance of representation, compared with the corporations, was to secure the support of those universities in favour of the Bill. The University of Edinburgh was a very important body, and made itself very political. He believed that the Government felt that there was no probability of the Bill passing if the Scotch universities were to oppose it entirely. If the Bill was to pass in its present form its tendency would be to aggrandise the universities, and at the same time repress the corporations. The examinations would come into the hands of the universities, and students would be afraid to go up for examination unless they had attended the classes of the university professors. Another very important effect of the constitution of the Boards as now proposed would be that the Extramural School would be extinguished in a very short time. The Extramural School of Edinburgh was of very great importance. Lectures were delivered on all the subjects connected with medicine, and students had an opportunity of supplementing their education. Altogether the School had proved of the very greatest benefit. It had also proved highly beneficial to the University itself, for there is no doubt that if there had not been good Extramural teachers the University would have fallen off to a very great degree. Another important point was that the Extramural School was a nursery for the professors. It gave a man an opportunity of showing what he was fit for, and, as a rule, the Extramural teachers had been appointed professors in the University. Even under present circumstances the Extramural School had a great difficulty in maintaining its existence. There was no doubt a great prestige about the University, and the Extramural School was not fairly handled. There was a fear amongst the students that if they attended any other class than that of the university professors it would go hard with them at the examination. It was notorious in some cases that the professors got their own students through more easily than students who had attended the classes of other teachers. He should be perfectly satisfied if the Scotch Board was constituted like the Irish one, with six professors elected by the universities and five elected by the corporations; but he believed that, as the Bill at present stood, the constitution of the Scotch Board would be most unjust to the medical corporations.

Dr. HERON WATSON seconded the motion.

Dr. PITMAN moved as an amendment—"That the Council do not express any opinion on the question." He said that he had given notice of the amendment because he was anxious to have the opinion of the Council as to how far they would discuss questions which in his judgment were not strictly within their province. He would not say that there might not be in any Medical Bill some very important question concerning the rights of the profession at large or of the public, on which it might be the duty of the Council to make a representation to the Government; but he affirmed that the Bill before them was not one of that kind. Dr. Haldane had not taken any exception to the establishment of Medical Boards. He had only taken exception to the constitution of the Medical Board in one division of the kingdom, and, representing only a part of the medical authorities in Scotland, he had asked the Council, upon an *ex parte* statement, to pronounce the opinion that the constitution of the Medical Board of Scotland was unsatisfactory. He (Dr. Pitman) could scarcely believe that the constitution of the Scotch Board was so unsatisfactory to a large number of those who were represented on the Council as it was to the body which Dr. Haldane represented. If the Scotch medical authorities were not at one on this question the Council would be asked to judge between the two, and so place themselves in a very unpleasant position. If the motion was entertained, and the decision of the Council was adverse to Dr. Haldane, the effect would be that the Council would be found pronouncing that the constitution of the Scotch Medical Board was satisfactory. It had been said that that Council had a right to discuss any medical question. He did not dispute that right, but he thought that a discussion on the present Bill would be improper, because, as Mr. Simon had very properly said the other day, the Government had not thought proper to ask for their opinion. If it had not been asked he presumed that it was not required. He thought that, unless the Council could find some reason for making a representation to the Government upon the principle of the Bill, if they offered their opinion unasked upon some point which they themselves had undertaken to decide, they would be committing something of an impertinence. The Council had definite duties under the Medical Act of 1858, but the discussion of medical politics was not one of them. The speech of Dr. Haldane had been directed to make out that the Scotch corporations had somewhat of a grievance because they were not sufficiently represented. The English corporations believed that they had a somewhat similar grievance; but what course did they take? They did not come to the Council and ask that the strength of the Council might be exercised for the purpose of representing special interests, but they went to the Lord President and represented their grievances. The Lord President listened very carefully to their representations, and probably some modification would be made in the Bill to meet their requirements. Why had not the Scotch corporations done the same? The Council was not the proper body to represent their interests. He should be sorry to see it take up the advocacy of an *ex parte* interest. As one of the Business Committee, it was his concern to see how the time of the Council was passed; and as one of the treasurers he was careful as to how the money of the Council was expended. He thought that neither the time nor the money would be profitably made use of in discussing this question. He hoped that the Council would show by a decided vote that they were determined not to entertain it.

Mr. MACNAMARA said that inasmuch as Dr. Pitman had claimed for himself a jealous custody of the time and money of the Council, he must say that he had shown a singular want of judgment in moving the amendment. This question was discussed and voted upon a very few days ago, and there was a positive majority of the Council in favour of discussing the Bill in committee; but the President exercised the privilege of voting which he very rarely employed, and thus made the numbers equal, so that the motion was not carried. Then Dr. Heron Watson gave notice of a motion that the Bill should be discussed by the Council, and that motion was agreed to. They were now asked to fight the battle over again. If that was not a wanton waste of the time and money of that body he did not know what was.

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He was most anxious that the session of the Council should come to an end that day, and he trusted that Dr. Pitman would withdraw his motion.

Mr. SIMON thought that there was not such an inconsistency as Mr. Macnamara supposed between the vote of the other day and the amendment now proposed. He hoped that the Council would not pass a vote on the point which had been raised by Dr. Haldane, for he thought that such a vote would be without significance; but he cordially assented to particular members having an opportunity to express their views on certain points of the Bill. Dr. Haldane had, with characteristic ability and with great temperateness, expressed his view on the subject of the apportionment of representatives on the Scotch Board, and he was very glad that the Council had heard it; but it did not follow that they should vote on the subject, and he hoped that they would not do so. Let the Council be satisfied that that exposition should have been given, and let them refrain from voting upon a matter in which they could not exercise a useful influence. What influence could there be in anything short of a unanimous vote on any of the points connected with the Bill? If they saw that some gross mistake was being made in reference to the collective interests of the profession, and could pass a unanimous resolution on the subject, such action would be very well; but, failing that, they could not intervene with effect. In his view, the only unanimous vote which they could pass would be one wishing well to the Bill in the broad sense, and expressing their cordial gladness that the Government had taken in hand the solution of a difficulty which had perplexed so many governments, and was endeavouring to terminate that which had been a professional scandal for the last twenty years. Putting aside individual crotchets, let them express a hope that the Government would be successful in promoting the advantage of the general public, and in satisfying the legitimate interests of the largest number of the bodies concerned, securing thereby "the greatest happiness of the greatest number."

Dr. A. SMITH was understood to express agreement with the conjectural reason which had been given by Dr. Haldane for there being so large a preponderance of representatives assigned to the Scotch universities as compared with the Scotch corporations. He regarded the discussion of the Bill as quite within the province of the Council, and even if the vote of the Council was not unanimous, the objectionable points would have been raised just as well as if it was.

Dr. SCOTT ORR, as the representative of the College of Physicians and Surgeons of Glasgow, said that that body approved of the main principle of the Bill, and he joined with Mr. Simon in wishing it success; but his College objected, like Dr. Haldane, to the large preponderance of university representation. As the Medical Council was at present constituted, the representation of the universities of Scotland had been exceedingly small, and it was difficult to say why the representation should have continued so small for so long a period. But, on the other hand, looking at the present Medical Bill, it was equally difficult to understand why the university representation should be quadrupled. It was not very easy to see why Scotland should be so exceptionally treated. The only reason which occurred to him was that which had been so well stated by Dr. Haldane, namely, that this large amount of representation was held out to the Scotch universities in order to prevent their immense political influence from being used in opposition to the Bill. The result of such a large preponderance of representation would be simply to extinguish the influence of the corporations in everything connected with medical education and the examination of candidates for licences to practise. The returns of last year showed that the number of candidates examined by the united corporations of Scotland, as compared with the number examined by the universities, was in the proportion of seven to four. The corporations all along had been doing much good and conscientious work in the licensing and examination of candidates. It seemed inconsistent with the liberal spirit of a measure which recognised the claims of the general medical profession to a share of representation, that three-fourths of the medical boards of the kingdom should be nominated by bodies which were so numerically small as the senates of the universities, the larger part of the members of which were not members of the medical profession at all. Even the medical members of those senates were not in any way representative of the general body of the profession. In contrast with the senates of the universities, the constituency of a medical corporation was numerically a large body, and was composed entirely of medical practitioners who were well acquainted with the wants of the profession. With regard to the extramural medical schools, a discouraging and probably disastrous effect would be produced upon them by the constitution of a Medical Board in Scotland with so large a proportion of university nominees; and thus one of the objects of the Bill—namely, the improvement of medical education—would be in some measure defeated. In Glasgow they had three distinct extramural schools with a total teaching staff of about forty members. He held that the Medical Board of Scotland should be constituted in pretty much the same proportions as the Medical Boards of England and Ireland.

Dr. MATTHEWS DUNCAN regarded the speeches of Dr. Haldane and Dr. Scott Orr as of the very greatest importance and value, but he intended to support the amendment of Dr. Pitman, whose view with regard to the business of the Council he considered to be a right one. Before resuming his seat he would express his cordial assent to the substance of Dr. Haldane's speech. He had heard a great deal said, and had read a great deal which had been written in newspapers, against the Scotch universities and corporations; but though he had acted as an examiner in various parts of Scotland he had never had reason to be dissatisfied in the slightest degree with any of those bodies. With regard to the preponderance of representatives from the universities on the Scotch Medical Board, he believed that the bodies that would most suffer from it would be the universities themselves.

Dr. STORRAR said that he had no hesitation in declaring his intention to vote for Dr. Pitman's amendment, and he did so with the most perfect respect for Dr. Haldane and for all that he had uttered. Dr. Haldane had stated that so great a preponderance in favour of the universities as that proposed in the Bill was unjust; but they had not heard the other side of the question, and he took for granted that there were certain views before the Government which justified the course which they had taken. But even supposing that the Government were wrong, and that they had acted hastily, he did not think that that was a matter which would be set right by any vote of the Medical Council. In the discussion in the House of Lords, a few nights ago, there were some indications that the English universities would be likely to suffer by the introduction of a change in the balance of the representation; but those universities, instead of bringing their grievance before the Council, had taken their own course. The Senate of his own University (the University of London) had made a very decided representation to the Government; and a motion on the subject would be presented to the Convocation of that University when it met on May 8, which would be long before there would be any chance of the Bill passing through the House of Commons. The University of London had not asked the Council to be an arbiter between them and the corporations. He believed that the medical corporations of Scotland could act more effectively by using the machinery which they had in their own hand than by obtaining a narrow vote in a divided Council.

Mr. TURNER said that he should support the amendment. The motion of Dr. Haldane related to a question of difference which concerned Scotland only, and he did not think that any vote which the Council could come to would solve the matter one way or the other.

Dr. HEBON WATSON wished, if possible, to accentuate the remarks which had been made by Dr. Haldane. As to the point of order which had been raised by Dr. Pitman, and the suggestion that a discussion of the motion would be a waste of time and money, he begged to remind the Council that they were a Council of Medical Registration and Education. He regarded the constitution of the Boards which were to regulate admission to the profession and to perform the multifarious duties to be confided to them as a matter of very vital importance to the present Council. According to the Bill the university element was certainly to preponderate upon the Medical Board for Scotland, and it was to preponderate in different proportions. The University of Edinburgh was to have three representatives, while the University of Glasgow and the University of Aberdeen were

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to have two each. Was there anything so different in the constitution of the University of Edinburgh, as compared with those other universities, as to entitle it to a larger number of representatives? Only one representative was to be sent by the University of St. Andrews. That University was not a teaching body. She now graduated only ten men each year, but from the year 1411 to the year 1858 she held the right to grant degrees to all comers exactly in the same way as the University of Bologna and the University of Paris. She had long been a thorn in the side of the other Scotch universities, and she was reduced to her present impoverished condition by their influence. That being the case, he held that there was good reason why the amount of representation among the universities should be reversed, and that the three representatives should be given to St. Andrews, so far as the representation of principles was concerned. One representative would be amply sufficient for each of the other universities to secure that anything which was special or peculiar in their constitution should be properly regarded. As to the corporate colleges, he would ask, Why should they be reduced to such a comparatively small number of representatives? The past history of those colleges was one in which they had done their best to fulfil their duty. He was well aware that attacks had been made upon them; but he believed that in the whole voluminous evidence of every possible kind, degree, and description which had been taken by the Royal Commissioners on the subject of the Medical Acts, there could not be found any reason why the three Scotch corporations should not maintain the position which they had hitherto held in so dignified a manner. The first time that they were led to make the smallest answer to the unworthy attacks which had been made upon them in the public prints was when Sir Trevor Lawrence rose in the House of Commons and asked Mr. Mundella a question with regard to the fellowships of the College of Surgeons in Edinburgh. Then it was that the College thought that it was a suitable time to reply; and the answer then given clearly proved that, whatever might be right in England and Ireland in connexion with the admission of men to the fellowships of the Colleges of Surgeons and of Physicians, the object which it was hoped to attain in Edinburgh by opening up the fellowships to general practitioners was that those practitioners would be led to think that they had an interest in one of the bodies of the profession, and that they were interested in the education of students, and in the maintenance of a high standard of medical education throughout the country. With regard to the assertion that there had been a want of due vigilance on the part of the Scotch corporations in admitting men to their examinations, the number of rejections certainly testified that they exercised a certain degree of reasonable discretion with regard to that matter.

Dr. HUMPHRY said that the injustice which the Bill was supposed to contain towards the Scotch corporations had been set forth by the very lucid and careful speeches which had been just delivered by the representatives of those bodies. But the question before the Council was whether they could express an opinion upon the subject. He could not think that the colleges would be benefited if such an opinion was expressed. In the first place, a resolution on the subject would be regarded as an assumption on the part of the Council of a duty which did not belong to it; and, in the next place, the Council, in order to come to an opinion on the subject, would have to decide between the conflicting interests of the universities and the corporations. So far as he was aware, they had never ventured to decide between body and body in any department of the kingdom. The duty of the Council was to see that each body did its duty in its own capacity and in its own sphere with regard to the education and examination of medical students; but the consideration of the merits or the interests of one body in comparison with those of another was a work which they had never undertaken. But, even supposing that they had the right to decide upon such questions, he contended that, in the present instance, they did not possess the knowledge which would be requisite to enable them to give a conscientious vote.

Dr. PETTIGREW said that Dr. Watson had referred to the University of St. Andrews in a very kindly spirit. There could be no doubt whatever that, so far as its medical degrees were concerned, injury had been done to that University in the past. That injury continued to follow it to the present day. He heard only yesterday that there was to be an amendment in the House of Lords with a view to exclude St. Andrews altogether from the Medical Board; but he could not see upon what principle of justice such an exclusion could take place. There was nothing which could be said of the University of London in the present day which could not have been said, at one time, of St. Andrews; and the question was whether she ought not to be reinstated to her former position. He hoped that in any discussion which took place the claims of St. Andrews would be kept in view. He had been unable to find any point in which she had failed. In many respects her examinations were all that could be desired. She was not an educating body, but still her power to grant degrees should not be crippled.

Dr. HALDANE asked leave to withdraw the motion. He thought that the corporations had been badly used by the Medical Bill, and he regarded the matter as one of special importance to bring before the Council. But he had no wish whatever that they should express an opinion as between claims of the universities and the claims of the corporations.

The PRESIDENT thought that it was greatly to be regretted that at the end of so many days in which they had been engaged in dealing with such serious subjects as they had had before them, they should at that eleventh hour enter upon a detailed discussion of a Bill which, in a very few hours, or he might almost say in a few minutes, would in all probability have passed the House of Lords.

Dr. LYONS, M.P., protested against the suggestion that the time of the Council had been wasted in the discussion because the motion had been withdrawn. It was never regarded in the House of Commons as a waste of time to move a resolution for the sake of raising a discussion upon an important subject, and then withdraw it.

Leave was unanimously accorded, and the motion was withdrawn.

Dr. A. SMITH then moved, in accordance with notice previously given—"That the mode of electing members to be returned by the registered medical practitioners in each part of the United Kingdom shall be conducted in such manner as may be provided by regulations to be made by the Privy Council, as provided for in the Medical Act Amendment Bill (as amended in committee), is very objectionable."

The motion was seconded by Dr. HALDANE, and then withdrawn by leave.

The following motion was moved by Dr. PETTIGREW, seconded by Dr. SCOTT ORR, and then withdrawn by leave:—"That of the six members nominated by Her Majesty the Queen, one should be appointed for Scotland and one for Ireland."

Notice of the following motion had been placed on the agenda by Dr. PYLE:—"That the Council would desire to impress upon the Government the necessity of making it clear, in Sections 22 and 25 in the Medical Act Amendment Bill, now before the House of Lords, that registered British practitioners will not be required to submit to any special restriction in the colonies or foreign countries from which persons are admitted to registration in this country." Dr. Pyle, in intimating his intention not to proceed with the motion, said: I have been told by Professor Humphry that there is another amendment being put to the Bill before the House of Lords, which will entirely cover this motion which I have brought forward, and therefore I will not take up the time of the Council to discuss it. I have just returned from the Riviera, and I have found that the tendency there is not to allow any British practitioners to practise there without taking degrees from the University of Paris. It places persons who go to the Riviera for their health in a very considerable difficulty, because the majority of them are English, and they are forced to be under the attention of French doctors, many of whom are unable to speak the English language. I think that it is an extremely serious matter. I do hope that at a future time this matter will be looked to by the Council and rectified.

The next business before the Council consisted of a series of eleven amendments, affecting various clauses of the Medical Bill, which Mr. Macnamara had placed upon the programme.

Mr. MACNAMARA said that he should probably gladden the hearts of the members by stating that he intended to move only the first of his propositions. The very strong opinion which had been expressed against discussing the

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details of the Bill was his reason for not proceeding with the others. He still thought that where a great principle was involved it was incumbent upon them to express an opinion, although in entertaining that view he differed from many very high authorities upon the Council. The only motion which he should make as to the Medical Bill was that the following amendment be made:—"Clause 3, page 1, line 19, after 'mentioned,' insert 'and has been affiliated to, and obtained a medical diploma from, any medical authority under this Act." He knew that it was held by some of his distinguished friends in England that the way the Register was being constructed would indirectly secure affiliation. If that was the case, he could not for the life of him see why provision should not be made that such affiliation should be a *sine qud non* for getting upon the Medical Register. The Council had been recently engaged in adjudicating upon cases of professional immorality, and he believed that they would have had more of such cases were it not for the moral influence which was exercised by the medical authorities over their alumni. He held that it was their duty on this account to point out to the Government the great importance of affiliation in a social point of view. Again, affiliation would be a source of revenue to the medical bodies, and would provide them with means for discharging important public duties. He was thoroughly convinced that in Ireland there were many practitioners who, if they once obtained a bread-winning qualification which would enable them to hold a dispensary or poor-law appointment, would not trouble themselves about affiliation unless it was made compulsory.

The motion was seconded by Dr. PYLE, and put to the vote without further discussion. It was negatived by a large majority, only two hands being exhibited in favour of it.

The next business was a notice of motion by Dr. QUAIN in the following form:—"That in Clause 4 of the Medical Act Amendment Bill (as amended in committee), the words 'subject to any local law' be struck out, seeing that if colonial practitioners are admitted to practise in this country on simple registration, which is provided for (Clause 21), it seems scarcely fair to impose local laws on registered British practitioners." Dr. Quain said that he understood now that the subject referred to would be abundantly provided for.

The following is Clause 4, referred to in the foregoing notice:—"On and after the appointed day the registered medical practitioner may, save as hereinafter mentioned, practise the callings of medicine, surgery, and midwifery, or any of the said callings, in the United Kingdom, and (subject to any local law) in any other part of Her Majesty's dominions, and may recover in due course of law in respect of such practice any expenses, charges in respect of medicaments or other appliances, or any fees to which he may be entitled, unless he is a member of a college of physicians, the members of which are prohibited by by-law from recovering at law their expenses, charges, or fees, in which case such prohibitory by-law, so long as it is in force, may be pleaded in bar of any legal proceeding instituted by such member for the recovery of expenses, charges, or fees."

Dr. QUAIN remarked that local laws might be very objectionable. There was once a local law in Canada that there should be a fee of one hundred guineas for registration. He should be very glad, if it was made clear that the colonial legislature would not impose restrictions upon a British practitioner, if colonial practitioners were not subject to like restrictions in this country.

Dr. HUMPHRY said that the matter appeared to be made perfectly clear in Clause 25.

Dr. QUAIN said that this was a matter which affected the interests of the profession at large, and was not restricted to those interests with which the Council dealt.

Mr. SIMON said that every security was given for insuring reciprocity.

Dr. QUAIN said that if that was the case he had not a word to say.

The PRESIDENT stated that the question had been carefully considered.

Dr. QUAIN was sure that it would be the wish of the Council that perfect reciprocity should be established.

The next notice of motion was also by Dr. QUAIN, namely:—"That in Clause 70 of the Bill it would be most objectionable to repeal the portion of Section 4 of the Dentists Act which prohibits prosecution by private persons, seeing that there is no reason why a distinction should be made between dentists and regular medical practitioners as regards prosecution (see Section 27, Clause 5, of the Bill), and that if prosecution were instituted by private individuals against the persons on the Dentists Register who have been objected to, the Council would be bound to maintain the accuracy of the Register, and would be engaged in litigation all over the country." Dr. Quain said that his attention had been pointed by Dr. Storrar to the fact that Clause 70 of the Bill did not refer to registered practitioners.

Dr. STORRAR stated that Clause 5 of Section 27 applied to the prosecution of registered practitioners for the assumption of a title to which they had no claim. Section 4 of the Dentists Act applied to persons who were not on the Register at all. By the new Bill, such persons could be prosecuted without leave of the Council.

Dr. QUAIN was of opinion that no person could object to that provision; but he felt that prosecution should not be directed against registered persons without the consent of the Council.

No action was taken on the notice of motion.

Dr. A. SMITH then proposed the following motion:—"That the provision of the Medical Act Amendment Bill (as amended in committee), for the constitution of the Medical Board for Ireland (Clause 9, Section 5), in which only two members are to be chosen by the King and Queen's College of Physicians in Ireland, be amended by reinserting the word 'three,' instead of 'two,' as it stood in the original Bill."

Dr. HALDANE seconded the motion.

The motion was then, by leave, withdrawn.

Mr. TURNER, in the absence of the Chairman of the Business Committee, Dr. Pitman, said that it was very important that they should come to some understanding as to whether there would have to be any meeting of the Council in order to transfer the property and other matters connected with the Council from the old body to the new one, if the Medical Bill was passed. Clause 52 of the Bill provided that the first Council under the Act should come into office on March 31, 1884. He did not know what the legal technicalities of the matter might be. They might be guided by an expression of opinion on the part of the President.

The PRESIDENT replied that the Council had undertaken certain duties, and probably all the members of the Council were of opinion that as long as they existed as a Council they should endeavour to perform what they had undertaken. When the Council ceased to exist, the mode of its dissolution would declare itself. He saw no more reason at the present time for changing the course of procedure than he did five years ago. Unless the Council gave him special instructions he should be guided by circumstances in the matter of summoning them. The Bill would probably become an Act this session; but still, the probability was one of remote uncertainty. The pressure of work before the Government was so great that no plain-speaking statesman could say what Bill was likely to pass. But the Government were earnestly desirous to bring to an end the uncertainties and perplexities of medical education in Great Britain and Ireland; and if they could pass the Bill they would pass it. The duties of the present Council under the Act of 1858 would remain the same until the day that the new Council came into power.

Mr. TURNER asked whether a meeting of the present Council would be necessary in order to transfer the property.

The PRESIDENT could hardly answer the question. He should perhaps have the opinion of one of the law officers of the Government on that subject.

Dr. LYONS, M.P., instanced the transfer of the temporalities of the Irish Church to the Church Commissioners as affording a precedent as to the way in which one body might take over the functions of another.

The Council then went on to pass the ordinary motions with which sessions are concluded.

On the motion of Dr. AQUILLA SMITH, it was resolved that the duties of the General Medical Council be delegated to the Executive Committee until the next meeting of the Council.

Dr. A. SMITH also moved—"That the thanks of the Council are hereby cordially tendered to Dr. Acland, the President, for his efficient services during the present session of the Medical Council."

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Mr. Simon, in seconding the motion, said that he could not express how much indebted he felt them to be to Dr. Acland for the singular zeal and ability with which he had devoted himself to the service of the Council and the interests of the public. It was now twenty-five years since Dr. Acland began to give his valuable assistance to that branch of the public service. Before he undertook the office of President, it was impossible for anyone to overlook the disinterestedness and public spirit which he brought to the council-table. In these last years, during which he had presided at their deliberations, Dr. Acland had devoted himself to the business of the Council as if it had been the dearest private interest of his life. (Applause.)

The resolution was carried by acclamation, and acknowledged by the President.

Other votes of thanks were passed, and the session terminated.

ORIGINAL COMMUNICATIONS.

THE TREATMENT OF POST-PARTUM HÆMORRHAGE.(a)

By PERCY BOULTON, M.D., M.R.C.P. Lond.,
Physician to the Samaritan Free Hospital, &c.

Mr. President and Gentlemen,—The treatment of post-partum hæmorrhage is a subject fraught with interest to all of us, but more especially to those who are occupied in the practice of midwifery.

In order to bring so large a theme within the limits of one evening's discussion, it will be necessary to confine this paper strictly to the Treatment of Post-partum Hæmorrhage.

Hæmorrhage may occur *before* delivery, and is called then either

Accidental or Unavoidable.

The first is due to premature separation of some portion of the placenta; the second, to placenta prævia.

Accidental hæmorrhage may be a cause of apparent post-partum hæmorrhage by concealment till the birth of the child, when, of course it becomes evident. Delivery, however, is the most effectual means of checking it, and in a severe form of this accident formidable symptoms usually occur before delivery is effected.

The returns of the Registrar-General show a death-rate of about 700 a year from post-partum hæmorrhage. These usually fall under the following heads:—

1. Accidental Hæmorrhage.
2. Placenta Prævia (Unavoidable Hæmorrhage).
3. Hæmorrhage from Adherent or Retained Placenta.
4. Post-partum Hæmorrhage proper.

It is this last which I intend to consider to-night. Both in frequency and degree I find the greatest possible differences in the records of various practitioners. This, no doubt, is partly due to the entry by this one of all cases of puerperal hæmorrhage or free discharge as post-partum hæmorrhage; while that one only records true post-partum hæmorrhage, or such as have given more or less trouble and required special treatment.

I think there is no doubt that a difference in the management of the second and third stages of labour exists, which accounts for the frequency of these cases in the practice of some practitioners.

I find that in my own cases true post-partum hæmorrhage occurs once in 183; and I am glad to say I have never lost a patient from this cause.

If it were wholly preventable there would be no reason why I should show even this low average, but there are undoubtedly certain *predisposing* causes, such as hæmorrhagic diathesis, over-distension of the uterus from multiple pregnancy, excess of liquor amnii, uterine tumours, and exhaustion from various causes, which no man can avoid.

Firm uterine contraction depends on the nervous supply to the womb. If this has been exhausted by a long and tedious labour, that should have been terminated artificially hours if not days before, what wonder that post-partum hæmorrhage to an alarming extent follows from uterine inertia!

It must therefore be evident that *prevention* of post-partum hæmorrhage opens up all the methods of treatment adopted for terminating labour in a reasonable time, before the patient's strength is exhausted.

I fancy I hear some one say that they have met with a relaxed uterus and no hæmorrhage, so that it might appear that contraction is not the *sine quâ non*. I have seen many, but in all such the uterine sinuses must have become first closed by thrombus.

In some anæmic patients this does not occur readily, and therefore it happens that such women often bleed freely after delivery.

With these preliminary remarks I will proceed to the question of treatment, reviewing the measures to be adopted in the order that would be followed according to the severity of the case.

The child being born, the patient should be rolled on to her back, the uterus being grasped and held firmly, and the placenta expressed in due time. When it has passed beyond the vulva (and not till then should it be touched), it should be removed slowly, turning it over and over with the right hand, so as to twist the membranes which follow into a cord, while the left hand grasps the uterus.

If the membranes do not follow easily, the cause should be sought, any adhesion removed with the finger, or assistance given to any portion which may be caught at last by the contracting uterus.

If the placenta and membranes are found to be entire, a dose of ergot should be administered by the mouth, and the uterus supported for about half an hour, after which the patient should be firmly bound. If the placenta is adherent, or retained from hourglass contraction, or does not come away entire, the uterus must be emptied by the hand.

If in the meantime hæmorrhage has supervened, pressure on the fundus will expel any clots, and friction and kneading of the uterus should be kept up to excite uterine contraction. It will be well to inject hypodermically into the thigh or buttock twenty drops of liquid extract of ergot.(b) I believe that ergot acts more quickly and with greater certainty by this method than by the mouth.

The patient's head should be lowered, the room kept cool, and stimulants administered according to the pulse and state of exhaustion.

In cases of the minor degree these remedies will usually suffice; and it is only when these have failed, or the case is from the first of the major degree, that other treatment will be necessary.

It is well to remember that troublesome hæmorrhage may result from laceration of the cervix uteri, or the rupture of a vulval varix, or from inversion of the uterus. The first two are rarely formidable, while the latter is readily diagnosed and controlled by replacement.

So far we have only considered the treatment adopted most usually by the veriest tyro in midwifery; but it is only a short step, unfortunately, from a simple case of post-partum hæmorrhage to one of the gravest that any man can possibly have to deal with. These are not cases that allow time to send for assistance and division of responsibility, but have to be met and dealt with alone without a moment's hesitation. Beyond what has already been mentioned, what are our resources under such an emergency?

The uterus is empty, ergot by the mouth and hypodermically has been given, and in spite of pressure and kneading of the fundus, the organ relaxes and serious hæmorrhage continues.

Galvanism need scarcely be considered, as a battery is rarely at hand, otherwise it is a most valuable remedy.

Cold, heat, the application of iodine or iron to the uterine lining, and transfusion, are the remedies which we have to select from.

The hypodermic injection of sulphuric ether, compression of the abdominal aorta, with bandaging of the extremities, are supplementary measures.

The object in view is to rouse the nervous supply to the uterus, through which alone we can get that muscular contraction which will close the bleeding sinuses sufficiently to allow of formation of thrombus.

Cold has been employed in such cases for generations. The methods of application I need scarcely enumerate. When

(a) Opening a discussion at the Harveian Society, March 1, 1883.

(b) Or Curtis's Liquor, = one grain in each minim. Much of the ergot in the market is unreliable. Ustilago maidis is the smut of maize, an oxytocic of value likely to supersede common ergot.

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ice is at hand it is usual to pass a piece into the vagina, and also to apply it to the hypogastric region, or inject ice-cold water into the uterus, applying cloths wrung out in cold water, or vinegar-and-water, to the vulva. In cases where there is an amount of latent energy—and these are the most numerous—cold will have the desired effect; but where the state of exhaustion is extreme I prefer

Heat as less likely to depress the flagging energy. Water at 110° to 120° must be injected into the uterus up to the very fundus by means of a syphon syringe, which every accoucheur carries with him as a matter of course.

Should these have failed, and the uterus still refuses to contract, I believe that the proper treatment is to add to the hot water already at hand one-quarter the bulk of liq. ferri perchlor. P.B. (not fortior). I do not recommend this as mere routine practice, but as the legitimate treatment of a case where life is undoubtedly at stake, and where moments are of the utmost consequence.

I would lay particular stress on the strength of the solution used, namely, one in four, and I think it is of little consequence whether it is applied by means of the syringe already in use, with the tube inserted up to the fundus, or on a sponge by inserting the hand into the uterus.

Less time is lost by the former plan, and it is not an easy matter to pass the hand, grasping a sponge full of fluid, through the vagina without losing a great part of the solution. Some use a sponge fastened to any introducer, and so avoid introduction of the hand, but the pelvic curve and the flabby uterine orifice make this anything but easy to do thoroughly; and should it reach the cavity of the uterus, and contraction follow, it is difficult to withdraw. At a time when a man must be calm and have his wits thoroughly about him it is important not to risk failure, and I commend the syringe as the preferable method. I own to using iron with a certain amount of dread, but I have certainly saved one life, if not more, by its use, and I should blame myself if I allowed a woman to die without resorting to it.

It occasionally will happen that, in spite of all our efforts, so much blood will be lost that fatal syncope is imminent. It is not *only* that the bulk of circulating fluid is insufficient to excite the heart to contract, but the blood-pressure within the cranium and oxygen-carrying fluid is so reduced that the central sources of nerve-energy cease to act.

Thanks to vivisection (Newell Martin's experiments), we are aware that the heart continues to contract even when removed from the body, so long as the nerve ganglia in its substance are stimulated; and therefore we may hope to resuscitate a patient even *in extremis* by efforts directed to keeping sufficient fluid circulating to so stimulate these centres.

Supposing enough blood to have been lost(c) for the patient to show symptoms of impending death, auto-transfusion should be put in practice. By this I mean that the head should be lowered by raising the foot of the bed to an angle of forty-five degrees, and the extremities bandaged tightly so as to increase the blood-pressure by the amount of blood that otherwise would be circulating through the limbs. A sinapism should be applied over the heart, and a full dose of opium and brandy given, if the patient can still swallow; if not, twenty minims of sulphuric ether should be injected hypodermically, and then preparation should be made to

Transfuse. The question of transfusion is one which, in itself, would occupy a whole evening; but I shall only make a short statement of those views which I hold on the subject. The returns of the Registrar-General show that cases of post-partum hæmorrhage too frequently occur, which, in spite of all that has been so far stated in this paper, go from bad to worse, and ultimately die. There is no doubt that many of these (probably 50 per cent.) might be saved by the operation of transfusion, and I should not hesitate to operate on such a patient so long as the heart was still beating and the lungs acting.

The three things to be considered are—

1. The best instrument to use.
2. The method of operating.
3. The fluid to be injected.

The simpler the apparatus used the better, and I am strongly of opinion that nothing is so practical and safe as an instrument which anyone can make for himself, composed of two glass cannulas, six inches of india-rubber tubing about a quarter of an inch diameter, and a pair of spring clips.

The injecting [syringes of Aveling, Playfair, Roussel, and others are more or less complicated apparatus, and have valves, on which fibrin is apt to become deposited, and either clog the machine or get into the circulation and cause embolism, and this may happen even after defibrination of the blood, which cannot easily be thoroughly effected. Moreover, I do not think it safe to use any instrument more than once. Cases requiring transfusion are happily rare, and in the meantime the instrument lies by, the valves or india-rubber become faulty, and there is no guarantee of absolute cleanliness after once using, so that the interior may be charged with those terrible bacteria which seem to be at the bottom of so many evils. The glass nozzles and clips which I should use are always available, and the bit of tubing renewed every time, the cost of the whole being only a few pence, and they take up next to no room in the obstetrical bag. Professor Schäfer, of University College, first used it when experimenting on animals.

Method of Operating.—For practical purposes transfusion from *artery to artery* may be ignored. It is far too difficult for anything but laboratory experimentation, the donor being anæsthetised, and the operation performed with plenty of light and no flurry—conditions the reverse of those met with in practice. In an ordinary way, if a surgeon has a difficult and dangerous operation to perform, he selects his time and surrounding circumstances, has all instruments ready at hand, and such assistance as he requires, the friends of the patient being prepared beforehand for what is to be. The reverse is usually the case in operative midwifery, where the accoucheur must go not only prepared to do at a moment's notice anything probable or possible, but to do it single-handed and under most unfavourable circumstances.

From *vein to vein* is by no means an easy operation, as the recipient's veins are empty and difficult to find; but this is the best method.

The apparatus I have described should be put into a cup of *salt and hot water* 100° (approximate, one ounce of salt to one gallon of hot water, or a teaspoonful to a pint), to drive out all the air. The vein of the donor should be opened after exposure by dissection, a tape having been put round the arm to stop the flow till wanted, and one cannula passed into the vein and tied-in in the opposite direction to the venous current. A clip should be on the tube close to the other cannula, to retain the saline solution therein. The recipient's arm must next be prepared, the vein exposed, if necessary, by a transverse incision, and an oblique opening made into it to insert the other cannula, first relaxing the tape on the giver's arm and the clip on the tube, so as to fill the apparatus entirely and exclude all air. The transfusion then may be allowed to go on, the quantity of blood transfused being determined by the result.

This is to my mind the best method of *direct* or *immediate* transfusion of human blood.

In what is called *mediate* transfusion the blood is drawn from the recipient into a vessel, whipped so as to defibrinate it, and then injected—a bad method, I think, for these reasons:

1. Loss of time.
2. Cooling of blood during whipping, and so necessitating artificial heating and further loss of time.
3. Impossibility of perfect defibrination, and consequent danger of embolism.
4. Necessity of a pumping apparatus to inject this into the vein—the objections to which I have already given.
5. Contamination of blood with bacteria during defibrination and injection, etc.

It only remains for me to say that in the absence of a human blood given, the injection of other fluids should be had recourse to.

Lamb's blood has been used, but in London, at any rate, a plethoric policeman would be easier to get hold of on an emergency, and more amenable under operation.

Milk has been successfully injected, but it would appear from subsequent experiments that the patient must have recovered *in spite of*, instead of *in consequence of*, milk having been injected.

In the absence of human blood a saline solution at 100° is certainly the safest substitute, as it is the easiest to obtain.

The soda salts are the best, and common salt generally at

(c) Total blood equal to one-thirteenth of body w

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hand. It should be used a teaspoonful to a pint of water at 100°.

Even hot water alone may be injected, and once, at any rate (at the London Hospital), has been successful in saving life, the dynamical effect being such as to stimulate the heart to action, and so save the patient.

The same cannula that I have shown, attached to eighteen inches of tubing, with a funnel at the other end, makes a capital injecting apparatus.

Care must be taken to exclude air, and the solution will pass into the vein of the recipient by gravitation alone on raising the funnel, the current being easily regulated by compression of the tubing.

At the London Hospital a saline solution has been injected four times—twice successfully—which is encouraging.

The popularising of the operation of transfusion is a most important matter. It would seem to depend on the introduction of a simple, portable, cheap instrument, that cannot get out of order, and can always be ready at hand, together with the confidence of practitioners in the method of operating and in the choice of what to inject.

If blood is not used the operation would present no difficulty, and to many would be shorn of its chief objection. Whether blood, or a saline solution, or only hot water is used, it should be a maxim in midwifery that no woman should die of puerperal hæmorrhage without being transfused.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

EMPYEMA—LOCAL BULGING OF CHEST-WALL—EXPLORATORY PUNCTURE—THREATENED RUPTURE—FREE INCISION—RECOVERY.

Under the care of Dr. FINLAY.)

Wm. M., aged three years and nine months, was admitted on December 4, 1882.

Family History.—The father and mother living and healthy. He is one of nine children, of whom three died during early infancy of troubles incidental to dentition and rickets. His mother has had three miscarriages and one stillborn child.

Previous History.—It is stated that the child was not very well for some few months following vaccination, and that he then suffered from bronchitis, but that his health latterly has been very good.

Present Illness.—Ten weeks ago he was in his usual health; then he caught cold, was feverish, and had difficulty in breathing, with increased frequency of respiration. He lay for the most part on his back or on his left side. Little else could be elicited, except that his side appeared to have become perceptibly larger during the past week. His bowels have acted regularly from the first, though the motions have been offensive; he has passed an abundance of urine, and has sweated for the last few nights. His appetite has been bad. He has not had any rigors or convulsions since this illness commenced.

On admission (December 4), it was noted that the child was fairly healthy in appearance, with good colour in his face. He has an almost constant cough, with an occasional thin, greenish, muco-purulent expectoration. His finger-ends are clubbed slightly. On inspecting his chest, both sides appear to be bulged, and move but little during respiration. Over the left back the resonance is impaired; breath-sounds are feeble towards the base, and somewhat tubular towards the apex. In front the resonance is impaired below the level of the third rib, where the chest is decidedly bulged, and its surface presents considerable enlargement of the cutaneous veins. On the right side the resonance is good both in front and behind. On auscultation, breath-sounds are merely harsh. The heart's sounds, which are normal, are well heard in the proper apex situation, and also over the upper part of the left chest, both in front and behind. The sounds are loudest towards the left border of the sternum, but they are also heard to the right of the sternum. Other organs appear healthy. His temperature is 99° Fahr.; pulse 120; respirations 34.

December 7.—His cough is troublesome; there is a slight muco-purulent expectoration. He complains of tenderness on palpation in the left infra-mammary region; the chest-wall seems more bulged here than elsewhere. The greatest dulness is found in the axillary region, where also the heart-sounds are very audible. In front, breath-sounds are harsh as far down as the nipple, from which point downwards and obliquely outwards they gradually get weaker until they disappear at the base. Over the back, the breath-sounds are distinctly tubular above; faint, and finally almost absent, below. Temperature 97° Fahr.

8th.—Dr. Finlay now noted that "There is a spot where a more localised bulging is observable—in the sixth interspace, one inch and three-quarters outside the nipple-line; the tissues over this spot are rather boggy. An aspirator needle, introduced at this spot, drew off two ounces of pale green inodorous pus, after which there was much less dulness over the back and front basic regions and axilla. The breath-sounds were also better heard towards the base (although still absent at the extreme base posteriorly); the breathing over the upper half of the left back was much less markedly tubular, having this characteristic well marked only over a small spot midway between the spine and lower angle of scapula, close to its internal border."

10th.—Has had a restless night. Temperature 101° Fahr.

11th.—Over the localised bulging referred to in the note of the 8th, there is now situated a small abscess about one inch in diameter.

12th.—Under chloroform the pleural cavity was opened by Mr. Hulke in two places—the anterior opening near the site of the aspiratory puncture; the posterior one three inches behind and at about the same level. Only about one ounce of inodorous pus was evacuated. A drainage-tube was passed through.

13th.—Had a somewhat restless night. The dressings were found soaked through with sero-purulent discharge.

14th.—There has been but little discharge during the night. The drainage-tube was therefore withdrawn from the anterior opening, with a view to allow it to close.

18th.—There has been a fair amount of discharge since last note; the anterior opening has nearly closed.

22nd.—The discharge continues free—it has been slightly offensive. The child was ordered to be placed in a warm bath containing Condy's fluid, so that the chest-cavity might in this way be thoroughly washed out.

30th.—Discharge is less; it is now quite inodorous. Temperature 99·4°.

January 11.—The drainage-tube has been shortened. A weak solution of iodine has been injected once or twice.

February 5.—The discharge has continued gradually to lessen in quantity, varying a little from day to day. The general condition improving slowly; neither losing nor gaining weight.

16th.—The drainage-tube, which had been gradually reduced to the length of an inch and a quarter, was this day removed. The bath too was discontinued.

18th.—No discharge; the wound is almost closed.

20th.—Dr. Finlay dictated—"Resonance fair except at extreme base, where breath-sounds are scarcely audible; higher in the chest the sounds are tubular, and in front are accompanied about the level of the former openings by moist creaking sounds."

23rd.—The left shoulder is considerably depressed. Scarcely any adventitious sounds to be heard in the chest. About the angle of the left scapula, breath-sounds are high-pitched and tubular in character, and there is marked bronchophony.

March 2.—The wounds are now completely cicatrised. Breath-sounds are daily improving; at present they are rather harsher than normal, but are unaccompanied by any adventitious sounds. He has been gaining weight.

4th.—Discharged, cured.

Note.—When seen about the middle of April, he had much improved in every respect. He had a good colour, had gained flesh, and on examining the chest it was found practically normal.

Remarks.—The foregoing case represents the average course of an empyema in a young child. The amount of effusion does not appear to have been large at any time, but it nevertheless quickly tended to produce those local changes which lead to external rupture; showing that this does not always depend on the amount of pus present. The

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spot at which rupture took place is not the "seat of selection" of many authors. Thus it is at some distance from Marshall's "weak spot." Doubtless any spot in the chest-wall may be involved, and especially so, seeing what a large proportion of the total are more or less loculated empyemata. After free incision had been made, progress towards recovery began; it was slow, but sure. At one time the discharge became slightly offensive; for this a bath was ordered, the child being placed in it so that the opening into the chest cavity was below the level of the water. In this way the chest can be thoroughly washed out, and its interior soaked well with some antiseptic fluid. The child, by its efforts of respiration, unconsciously washes the chest, for with each inspiration the water is sucked into the chest and expelled by expiration; thus struggling and pain are avoided, and the operation is performed more satisfactorily than in any other manner.

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Medical Times and Gazette.

SATURDAY, MAY 5, 1883.

THE MEDICAL ACT AMENDMENT BILL.

The Medical Bill has been passed by the House of Lords. On Thursday, last week, on the order that the report of amendments made in committee be received, Lord Carlingford submitted an amendment relating to the constitution of the Medical Board for England. He proposed that the number of representatives given by the Bill, as it stood, to the five Universities of England should not be altered, but that the two great medical Corporations—the Royal College of Physicians of London and the Royal College of Surgeons of England—should receive an addition of two members, being one for each. He had found, he said, great difficulty in comprehending the enormous and vital importance that the medical authorities of the three divisions of the kingdom seemed to attach to the exact numbers that they should have a right to return to the Medical Boards. But, after having given the best consideration in his power to the whole matter, he had come to the conclusion that there was sufficient reason for increasing by two the number of representatives returned by the two principal medical Corporations. Nothing could be of more importance than the influence of the Universities upon the Board, and they would lose that influence under his proposal. But in this country the lion's share of the duty of examining and licensing candidates for the medical profession unquestionably fell to the two great Corporations. This view had been pressed upon him by the most eminent, he might say the most illustrious, members of the profession; and it was the view of the Royal Commission on the Medical Acts; and there could be no doubt that the part played by the two great medical Corporations in respect to the examination and licensing of candidates was out of all proportion greater than that played by the Universities. He was glad to know one of those bodies—the University of London—was satisfied with the proposal that he had made. The amendment was carried, and the number of members constituting the Board was increased from fifteen to seventeen. The Marquis of Salisbury had suggested, during the discussion, that the Apothecaries' Society of London really had not a strong claim to be represented on the Board, and that the University of Victoria had as yet done nothing; the members proposed to be given to those two bodies might therefore very well be transferred to the two large Corporations, and the intention of the amendment would be gained without enlarging the Board; but he did not press the proposal, though, so far as concerned the Apothecaries' Society, he was supported by Lord Camperdown. On Friday, however, on the third reading of the Bill, Lord Salisbury took courage to formally propose, as an amendment, that half of his suggestion. He moved that the name of the Apothecaries' Society be removed from the Medical Board for England; and the amendment was agreed to. To return to the discussion on Thursday evening, the Earl of Galloway proposed amendments in the constitution of the Medical Board for Scotland, the effect of which would have been to take three representatives from the Universities in that division of the kingdom, and to add them to the number of the representatives returned by the Corporations; but, as may be supposed from all that had been said hitherto on that subject, he met with no support. Several of the peers spoke against the proposal. Lord Balfour pointed out that the Corporations are only examining bodies, while the Universities are teaching as well as examining bodies; and he further remarked that complaints had been made about the examining bodies in Scotland, but that if any charge of improperly admitting candidates to become medical practitioners had been brought home to any Scottish examining body, it had certainly not been brought home to the Universities. He thought, therefore that the amendments ought not to be accepted; and as regarded the University of St. Andrews, that seemed to be looked upon as a fair University for everybody to have a hit at. The amendments were negatived. In Clause 20, an amendment, moved by Lord Carlingford, was agreed to, providing that "any revocation or alteration of a scheme in pursuance of this section shall not be of any validity until it has been approved by the Medical Council and confirmed by the Privy Council." Lord Aberdare proposed to add to Clause 26, relating to medical titles, words empowering any registered medical practitioner who has passed a final examination under the Act to use the title of Licentiate in Medicine, Surgery, and Midwifery, or any letters indicative of such title. But Lord Camperdown objected to any addition to the number of medical titles, of which there are already sixty-two. The proposal would moreover, he observed, interfere with the existing titles. Lord Carlingford also opposed the amendment, and it was negatived. On Clause 36, relating to expenses and medical funds, Lord Carlingford moved an amendment drawing a distinction between administrative expenses and expenses for maintaining museums and libraries, and for providing that the fees paid by University graduates or undergraduates

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shall go to defray only the charges for administrative expenses; and the amendment was agreed to. Clause 51 was amended, on the motion of Lord Carlingford, so as to provide that, in the case of existing authorities, members shall be returned to the Medical Boards in the same way that representatives are now returned to the Medical Council, and, in the case of any new authority, in the manner to be directed by the Privy Council. Clause 52 was amended so as to postpone the time when the Medical Council shall first come into office from March 31 to April 30, 1884. Some other amendments, of no importance from the medical point of view, were made, and the Bill was ordered for the third reading. On Friday, April 27, the measure was read a third time, and on the order that it do pass, the amendment, of which we have already spoken, for removing the Apothecaries' Society from the Medical Board for England, was agreed to; and the Bill passed.

The measure has thus passed safely through the Upper House of the Legislature, and it has been much improved during the process. There may be some difference of opinion as to the value of one or two of the amendments that have been made, but that on the whole the Bill is now decidedly a better Bill than when it was first introduced will not be disputed. Lord Carlingford deserves the thanks of the profession for the great pains he has taken to make himself fully acquainted with the subject of the Bill, for the very careful attention he has given to all the disputed points, and for his impartial consideration of all the opinions pressed upon him, and of all the amendments offered, from whatever quarter they came; and several of the peers have earnestly and ably aided his endeavours to make the measure generally acceptable. The result will be, we believe, that the profession at large will gladly see the Bill become law, and an end thus put to the threats of, and efforts at, legislation that have for so many years harassed and agitated the profession and the various medical authorities. But it would be rash and futile to speculate as to the probability of the Bill getting through the House of Commons. All that can be said now on the point is, that, looking at the present state of Government business, the prospect as to the success of the Medical Bill does not seem very bright or hopeful.

UNQUALIFIED ASSISTANTS.

The General Medical Council has during its present session exercised its disciplinary function more vigorously than it has ever done before. The Council has been in existence five-and-twenty years, and the reproach has been generally cast at it that it has talked, inquired, inspected, reported, etc., but done nothing. The medical profession may be said to enjoy a monopoly. Those on the Medical Register possess certain privileges and rights enjoyed by no others of Her Majesty's subjects. It is the duty of the Medical Council to see that only proper persons are by registration permitted to occupy this responsible position. Until this session and the last it appeared as if the Council thought that its only duty was to so regulate examinations that none but persons of a certain standard of general and technical knowledge should be registered; but that, once a man got on the Register, so long as he was not convicted by a court of law of some grave offence, the Council had no concern with the manner in which he chose to practise his profession. Now, at last, it has stirred. It has declared that an offence which legally is not a felony, nor even a misdemeanour, it holds to be "infamous conduct." At present it has thought that the expression of this opinion will be sufficient to check the practice condemned; but we cannot doubt that removal from the Register will be the penalty if either of the gentlemen whose mode of practice has been condemned as "infamous" should be again before the Council, and be proved to have continued the same mode of practice. We heartily approve the Council's action. First, upon the general ground, that it is for the benefit of the profession and the public that a high standard of professional honour and integrity should be maintained in our profession. There are many offences against professional honour with which a court of law cannot deal, because they can only be understood by persons who themselves are engaged in medical practice, and know from experience the relation in which medical men stand to their patients and their professional brethren. There are in every profession (even in our own) men to whom honour is less than lucre. Such men are not to be constrained by the pressure of professional opinion; the fear of punishment is the only thing that will control them. For such men we need a body which can and will exercise a disciplinary power. We are glad to see that the Medical Council is at last acting as such. The offence to which we refer is one which in its worst form is a great deal too prevalent in poor localities. The Council was told, by its Committee, of medical men who each employ several unqualified assistants, who take entire charge of patients just as qualified practitioners would do, the medical man who "covers" them signing the death certificates and pocketing the greater part of the receipts. These unqualified assistants are really independent practitioners, who, because unable, through want of education or ability, to get a diploma, pay heavy blackmail to a qualified man for covering them with his name. There cannot be two opinions that such a use of the responsible and privileged position of a registered medical man is dishonourable and infamous. Those who may hereafter be struck off the Register for fraud of this kind will neither deserve nor get much sympathy. But the Council will need to examine carefully the cases which come before it, for there are many medical men of high character who employ unqualified assistants in a way which, although not to be held up as an example for imitation, yet is in a measure forced upon them by circumstances. In poor districts a medical man, to make a living, has to work very hard, to see a great many patients, whom he also supplies with medicine, and often to travel long distances. A man in large practice of this kind requires a dispenser and bookkeeper, for his time is filled up with seeing the patients. He cannot get a good qualified man to spend a large part of his day in the work partly of a dispensing chemist and partly of a clerk. His choice therefore lies between an unqualified man whose duties will be confined to dispensing and bookkeeping, and one who, in addition, is as capable of attending labour as a midwife, and as competent to prescribe as the neighbouring chemist, whose counter practice is probably large. If the practitioner whose circumstances we have described had the income of a bishop, probably he might limit his assistant to pharmaceutical and clerical duties. But having himself to work hard to make both ends meet, it is small wonder that, when he has in his employ one who can, although imperfectly, relieve him of some of the most laborious and ill-paid part of his work, he should let him occasionally visit as his deputy, and attend labours. Such practice as this we do not wish to see extended, for we think that practitioners would gain in respectability, and act more fairly towards their patients, if they confined their assistants strictly to their legitimate duties; but it does not deserve to be called by the hard name of "infamous," especially when we remember how extensively it is followed. The difficulty is, how to distinguish between these cases of, we will not say legitimate, but excusable employment of an unqualified assistant, and the systematic lending of his name, by a registered

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medical man, to cover the independent practice of several unqualified and ignorant men, a large portion of whose gains he appropriates for doing so. There are medical men whose employment of unqualified assistants is to an extent intermediate between the two classes we have sketched, and much careful inquiry will be needed if the Council is to do justice in the cases that come before it, to avoid unmerited severity in some, undeserved leniency in others. We should like to see the Council adjudge matters of this kind in a spirit of equity rather than of law, considering not merely the comparative accident of whether a particular certificate has been signed or not, but the habitual mode of practice of persons accused of infamously covering the practice of unqualified persons.

THE GENERAL MEDICAL COUNCIL.

On the third day of the session of the Medical Council a report by the Pharmacopœia Committee was received and adopted. Professors Redwood, Bentley, and Attfield have undertaken to prepare a new edition of the Pharmacopœia, under the direction of the Committee, for the sum of £300, which is to include the cost of any preparations that may be required, the correction of the press, and the preparation of an index. An instructive report from these gentlemen was appended to the Committee's report, describing certain alterations they propose to make in chemical nomenclature, in symbolic notation, and in the method of representing the quantities of ingredients to be used in the preparation of medicines. They advise also the addition of twenty-nine articles to, and the omission of three from, the new edition of the Pharmacopœia, the three articles to be omitted being *Hydrargyri iodidum viride*, *Succus rhamni*, and *Syrupus rhamni*. On the fourth day of the session the report of the Finance Committee was received. It showed a very satisfactory state of the finances of the Council, the excess of income over expenditure for the year 1882 amounting to over £2343. The excess of income for the year 1881 was £1722. A lengthy communication was received from Dr. A. H. Jacob, of Dublin, stating that it was notorious that in that city certificates of diligent attendance could be, and were, obtained from certain schools and hospitals by the payment of fees, without any real attendance, and asking the Council to declare that "the issue of factitious certificates is not tolerated by it, and that a nominal attendance, at night, upon the course of medical study, by students engaged all day at other engrossing avocations, is an evasion and not a compliance with the recommendation of the Council, which declares, 'The course of professional study . . . . shall occupy four years . . . . passed at a recognised school.'" A considerable amount of time was occupied on this day, and on the sixth day of the session, in discussing resolutions proposed, condemning in the strongest manner the practice complained of by Dr. Jacob; but in the end his letter was referred to the Irish Branch Council, for such inquiry as they may think needful, and for report thereon. Not a little time was also consumed on Monday, the fourth day, by the discussion of Mr. Macnamara's motion, "That the Council resolve itself into a committee of the whole Council for the consideration of the provisions of the Medical Act Amendment Bill," but on a division being taken, nine members voted for and nine against the motion, which, therefore, was "not carried." A large portion of the sitting on Wednesday, April 25, was devoted to the question whether examinations in dentistry *sine curriculo* should "cease and determine" after the last day of the present year. Dr. Storrar proposed a resolution to that effect, and urged it strongly on the Council, declaring that there was a very aggravated feeling among the dentists of England on account of the persistence of examinations *sine curriculo*. In England these examinations have ceased entirely for many years; but in Scotland and in Ireland licences in dental surgery can still be obtained by examination *sine curriculo*, and it appears that, for some reason or other, candidates for the licences very much prefer Dublin before either Edinburgh or Glasgow. Mr. Macnamara made a very plausible defence for the Irish College of Surgeons, pointing out that they do not admit students in dentistry *sine curriculo*, but only persons on the Dentists' Register, and that it was a good thing to induce men who had got on the Register without any qualification to work up to an examination. This view was taken by Dr. Humphry also, and was supported by other members of the Council. When a sufficient amount of time had been spent over the matter, the Council agreed, by a very large majority, to an amendment, moved by Dr. Humphry and Mr. Marshall, to Dr. Storrar's motion, to the following effect:—"That, in the opinion of the Council, the examination in dentistry *sine curriculo* should be limited to persons who are already on the Dentists' Register." For the last day of the session—the Council managed to sit seven days—a somewhat new manner, or it would perhaps be more strictly correct to say a more perfect evolution of an old one, of filling up time in a busy way, enabled the Council to get through the day. Dr. Haldane moved, and Dr. Heron Watson seconded the motion—"That the constitution of the Medical Board for Scotland, as laid down in Clause 9 of the Medical Act Amendment Bill (as amended in committee), is unsatisfactory, and should be amended." It is difficult to believe any member seriously expected or wished the Council to pass such a bald and useless resolution; for it must have been utterly without any possible good effect unless supplemented by some statement as to the manner in which, in the opinion of the Council, the constitution of the condemned Board should be amended, and no notice was given of any such supplementary motion. But Dr. Haldane, who found grievous fault with the large preponderance of representation given to the Universities over that given to the Corporations, argued the matter at great length, and predicted that terrible evils would result from the power thus given to the Universities. The Corporations would be repressed; the examinations would be in the hands of the Universities, and students would fear to present themselves as candidates unless they had attended the classes of the University professors; the effect of this would be to extinguish the extramural schools; and the extinction of the extramural schools would be most injurious to the Universities, as those schools are most valuable nurseries for the University professors. Dr. Pitman and Dr. Humphry moved as an amendment that the Council do not express any opinion on the subject. They argued that the matter was not at all one for the Council; that Government had not asked their opinion; that the discussion of medical politics was outside their duties; and that to pass the motion would be asking the Council to judge between the Scottish Universities and the Scottish Corporations, which would place them in a very unpleasant position. Moreover, if the Scottish Corporations thought they had a grievance, why had they not acted like the English Corporations, and represented their grievance to the Lord President, instead of bringing it to the Council? Eight other members of the Council also took part in the discussion, making in all twelve speeches; and the end was that both the motion and the amendment were, by leave of the Council, withdrawn. Four other motions for amendments of the Bill were severally proposed, seconded, and then by leave withdrawn; and one, moved by Mr. Macnamara and seconded by Dr. Pyle, in favour of compulsory affiliation, was negatived without discussion. The whole sitting was taken up with

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fruitless discussions and talks about the Medical Bill, till the time came for passing the customary business resolutions and the usual complimentary votes. The vote of thanks to the President was seconded by Mr. Simon in a very eulogistic and impressive speech, and carried by acclamation. The session then terminated, having lasted seven days.

THE WEEK.

TOPICS OF THE DAY.

Last week's *Gazette* announces that Her Majesty has been pleased to create a new Order to reward services rendered by those who undertake or are employed to nurse the sick and wounded of the Army and Navy. The decoration is to bear the name of "The Royal Red Cross," and is to consist of a cross, enamelled crimson, edged with gold, having on the arms the words "Faith, Hope, and Charity"; it is to be exclusively reserved for women who have conspicuously distinguished themselves in their devotion to the wants of the sick and wounded of the naval and military services.

The well-known surgeon of New York, Dr. Lewis E. Sayre, has entered a vehement protest against what he calls the absurd practice of uncovering the head at funerals, especially during the inclement months of winter and spring. He maintains that the public are far from having an adequate conception of the number of cases of pneumonia and bronchitis, and the number of deaths, directly engendered by attendance at funerals, and he contends that there should be no difference of opinion as to the desirability of abandoning a usage which is likely to lead to such disastrous consequences. Every medical man in this country will endorse Dr. Sayre's remarks as to the danger of attendance even, still more of uncovering, at funerals in severe weather; but although of late years we have brought ourselves to discard some of the customs of our forefathers in respect to interments, it would, we think, be difficult to persuade Englishmen to remain covered during the most impressive portion of the ceremony. We shall wait with some curiosity the result of Dr. Sayre's well-intended efforts in this direction, but whatever success may attend his warning in America, we doubt it having much, if any, effect in England.

At the rooms of the Society of Arts, Captain Douglas Galton, C.B., recently read a paper on "Economy in Sanitation." He urged that the sanitary works in our houses, which are necessary adjuncts to the diminution of preventable disease, can be effected economically, and that a great saving to the community will arise from the diminution of preventable disease. As to house sanitation, local authorities should not stop at inspection, but they should undertake the proper construction and reconstruction of house-drains. The work would be done more economically than now, and, being well done, it would afford a means of effectually checking disease. The improvement effected in sanitary administration and in the habits of the people may fairly take the credit of a reduction in the mortality of about two per 1000, taking into account increased density of population, which, with unchanged hygienic conditions, would increase the mortality. This represented an annual saving of about 48,000 lives in England and Wales, excluding London. London, with a density of 25,761 per square mile, was more healthy than other districts with 12,357 per square mile. If we could introduce into our towns generally the mortality of the healthy districts we should diminish our death-rate and sickness by nearly one-fifth. In conclusion, he remarked that it was important, in the pending municipal reorganisation of London, to secure such concentration as was necessary to obtain efficiency and economy in sanitary administration. The Chairman, Mr. Rawlinson, C.B., urged that this was a question demanding the strictest attention of statesmen both at home and abroad, and especially in some of the health-resorts of the Continent.

A Select Committee of the House of Commons, presided over by Mr. David Plunket, recently passed a Bill, promoted by the Lambeth Water Company, authorising the purchase of lands near Brixton-rise and Crown-hill, Upper Norwood, on which lands it is proposed to sink wells and supply water therefrom. The Bill also sought powers to raise £375,000 additional capital; but the Committee, in giving their decision, stated that, having regard to the report of the Committee on the London Water Supply, they did not feel justified in allowing this Company to raise any further capital beyond what was absolutely necessary for the increasing demands for water in their district, and for this purpose they thought an increase in the capital of £75,000 was sufficient.

Probably emboldened by the disastrous result of the recent debate on the Contagious Diseases Acts in the House of Commons, the Anti-vivisectionists recently held a meeting at Exeter Hall to keep the subject well within view of the public. Sir Patrick Colquhoun presided, and in his opening address recapitulated the sensational side of the question for the benefit of his hearers; but as he only travelled over the well-worn arguments without advancing any new points, it is unnecessary to reproduce his remarks. The Rev. J. Bennett moved a resolution to the effect that the practice of vivisection is contrary to the principles of Divine law and to the dictates of humanity, and in so doing expressed his belief that it only required that the English people should thoroughly understand what vivisection meant to have an end put to the practice. Complaints, he said, were often made by the hospitals of want of means, but as long as these institutions were the headquarters of the vivisectionists it was not to be wondered at that funds were not forthcoming. This argument is, to say the least of it, a singular one to emanate from a clergyman, since the class which suffers from the crippled state of the London hospitals—the sick and suffering poor—can have nothing to do with the practice of vivisection. It is, however, on a par with other arguments put forward by a section of well-meaning but certainly misguided persons.

Dr. John Woodman, Medical Officer of Health for the City of Exeter, recently considered it his duty to present a special report to the Sanitary Committee of that city on an outbreak of typhoid fever which had occurred there. He stated that his attention had been called to the fact that cases of typhoid fever had been reported in two houses situated at some distance from each other, but both supplied with milk from the same dairy. Inquiries elicited the fact that this disease was present in other houses also procuring milk from the same source. He was further informed that the daughter of the dairyman had died of typhoid, that cases of the same disease were also then existing close to the dairy, and that the water used in the dairy was chiefly, if not entirely, taken from a pump, the well of which was situated outside the Urban Sanitary District. He accordingly wrote to the medical officer of the district in question, and received in reply an assurance that all necessary precautions should be taken. The milk used in Exeter, Dr. Woodman adds, comes in a great measure from farms and dairies situated outside the district of the City Sanitary Authority, and impure or contaminated milk is one of the most insidious ways in which zymotic disease is spread; he therefore suggested to the Committee that steps should be taken to have all dairies and farms, sending in supplies, periodically inspected and reported on. The Committee resolved that a copy of their

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medical officer's report be sent to the Local Board for St. Thomas (the district in which the suspected dairy farm was situated), with a request that they should be informed of the steps taken to prevent any spread of the disease.

In pursuance of his previously expressed intention, Mr. Firth, who has taken a leading part in the agitation for metropolitan reform, on Monday night, from his place in Parliament, asked the First Lord of the Treasury whether the Government still hoped and expected to be able to introduce the London Government Bill to the consideration of the House during the present session, and whether, in arriving at a decision on this point, they had considered the enormous evils and loss attendant upon leaving the various questions of metropolitan reform, and especially the question of the London water-supply, still unsettled. Referring to the latter part of the question, Mr. Gladstone remarked that he had no hesitation in saying that he regarded the further postponement of the consideration of this subject as a serious political evil and inconvenience; but he gave no definite promise as to the introduction of the measure, and the general impression seems to be that the Home Secretary's Bill will be brought in, but that, owing to the block of business, it will be impossible to make any sensible progress with it before the prorogation.

PROPOSED NEW HOSPITAL FOR NORTH LONDON.

A LARGE meeting was held on Saturday afternoon, April 28, at the Highbury Athenæum, to promote the establishment of a new general hospital for North London. The Duke of Westminster was to have presided on the occasion, but, after a delay of some twenty minutes beyond the hour at which the meeting was to have been opened, the chair was taken by Lord George Hamilton, M.P., whose first task was to read a letter from the Duke of Westminster giving the reason of his absence. The letter, written on the previous day to Professor Leone Levi, one of the prominent supporters of the movement, runs thus:—"When I undertook, at your kind invitation, to preside at a meeting to take steps for establishing a hospital for the North of London, I was not aware of that which I have only just heard—namely, that the Committee of the Great Northern Hospital are actually engaged in raising funds for enlarging their sphere of operations, and have collected some £4000 for that purpose. Under these circumstances, I feel that I cannot, in all justice to that Hospital in its endeavour to increase its efficiency and to meet the requirements of that part of London, take part in a meeting which must cut the ground from under its feet, and I only regret that I was unaware till to-day of the state of things in connexion with that Hospital, or I would have communicated with you before this eleventh hour to express my very great regret if I caused any inconvenience to the arrangements of the meeting." Lord George Hamilton then proceeded to state that the provisional Committee of the proposed new hospital, representing a very strong, if not an almost unanimous, feeling entertained by the inhabitants of North London, considered that they had waited long enough for the required increased hospital accommodation, and hence this movement. The first resolution—viz., "That this meeting is fully convinced of the urgent necessity for increased hospital accommodation in North London"—was proposed by Mr. Marshall Lang and seconded by Mr. M'C. Torrens, M.P.; but before it was put an amendment was moved by Mr. R. Adams to the effect that, "looking at the difficulty of maintaining existing hospitals, and at the fact that existing institutions already provided sufficient hospital accommodation for North London, it is not desirable to found a new hospital." Mr. Adams's argument was untenable; but he spoke well, and his amendment was seconded. Then a curious and unfortunate episode occurred. The chairman wished to put the resolution before the amendment, and only changed the procedure to the customary one out of deference to the strongly expressed wish of the meeting. The amendment met with not a little support, but was negatived by a large majority; and then the chairman either declared the original resolution carried by the fact of the amendment being negatived, or put the resolution so hurriedly that his doing so escaped recognition. Some of those present certainly did not hear the resolution put. Anyhow, the chairman refused to accept a second amendment; and the friends of the Great Northern Hospital were prevented from putting in one to the effect that the needed increase of hospital accommodation would be best effected by the enlargement of existing hospitals. An opportunity of justifying the action of the Duke of Westminster was also thus lost. Several other resolutions were carried by the promoters of the new hospital, and the proceedings terminated. It was quite evident, however, that the meeting was not by any means unanimously in favour of the new hospital, and we have reason to believe that a very large number, if not the majority, of the medical practitioners in the district are against the movement, and in favour of the enlargement of the Great Northern Hospital. The Committee of that charity have for some time been, and still are, we understand, carrying on negotiations for a new site in a more central part of the northern district, a change of position which they have long wished to effect. They have funds in hand towards a new building, though not as yet sufficient funds, and they are free from debt. If the inhabitants of the district really entertain a very strong, if not almost unanimous, feeling in favour of increased hospital accommodation, it is as unfortunate as it is strange that they have not long ere this adopted the quickest and cheapest means of obtaining it, namely, by supplying the required funds for the enlargement of the Great Northern Hospital. And we suspect they will hesitate long, to say the least, before they supply the £30,000 or £40,000 asked by the promoters of this new movement, to try the very costly experiment of a large hospital to be managed on a new system and new principles.

THE CONJOINT SCHEME OF THE ROYAL COLLEGES OF PHYSICIANS AND OF SURGEONS.

MR. MARSHALL, the representative of the Royal College of Surgeons on the Medical Council, had given notice of a motion to be put during the recent session, asking the Council to sanction the Scheme for a Conjoint Examination of the two English Colleges. Dr. Quain had also given notice of three motions having reference to Mr. Marshall's motion. Dr. Quain proposed to ask, among other things, whether the Colleges had acted upon that article of the Conjoint Scheme of 1877 by which liberty was given to any of the co-operating medical authorities to withdraw from the Scheme at any time after five years from the 1st day of October, 1877, *upon giving to each of the other co-operating authorities one year previous notice in writing, dating from the 1st day of October in that year, of their intention to do so.* The College of Surgeons would have had no cause for hesitating to meet this question, as they have consistently maintained that as the Scheme never came into operation its conditions never acquired any force; but the College of Physicians have maintained the contrary, and, as in fact no such notice as was required by the condition above quoted had been given, that College would have found Dr. Quain's question a very awkward one. Another difficulty might also have been raised, we believe, which would have affected both Colleges alike: the Council had in 1877 been formally asked to give, and had given, its sanction to the Conjoint Scheme of 1877; and the Council had never received any

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formal notice that the Scheme had not come into operation; how, then, could they sanction any other scheme for the same division of the kingdom? In these circumstances it seemed advisable that Mr. Marshall should withdraw his notice of motion, and this was done. It is a pity that the want of a little constant careful attention to forms should have prevented the new Scheme from receiving the sanction of the Council. No one can say, looking at the state of the Government business, that the Medical Bill is more likely than not to pass; and should it not pass, the Collegiate Conjoint Scheme, instead of coming at once into operation, will have to wait for some months, at the least, for the sanction of the Medical Council.

INTRAVENOUS SALINE INJECTIONS.

The injection of saline fluids into the veins as a means of combating the fatal effects of severe hæmorrhage having recently been again brought before the profession, some experiments by v. Ott are of interest. They were communicated to a congress of German medical men which met at Eisenach in September last, and the proceedings of which are reported in a recent number of the *Archiv für Gynäkologie*. Von Ott investigated the after effects of the injection into the veins of a solution of common salt. He chose this because it is the most generally accessible and easily prepared saline fluid. The first effect of such an injection is to produce hydræmia. Von Ott examined the blood by evaporation and incineration, and by counting the blood corpuscles in successive days following the injection to see how soon it regained its natural composition. His experiments were performed on dogs. His conclusions are, that the diminution in albumen which follows transfusion with saline fluid is not so great as the diminution in blood corpuscles. If two-thirds of the total quantity of blood be removed, the proportion of albumen will be found lowered only to one-half. The deficiency of albumen is gradually made up, and the normal standard is reached between thirty and forty days after the injection. The regeneration of the blood corpuscles goes on more rapidly than the replacement of the albumen. In one case their number seemed to have been completely restored within sixteen days after the injection. Von Ott made similar experiments with blood serum and with defibrinated blood, and found that their effect when injected into veins was essentially the same as that of the solution of common salt.

A DECORATION FOR NURSES.

A Royal proclamation in the *Gazette* of Friday, April 27, announces the creation of a decoration to be called "The Royal Red Cross," by which special devotion in the service of nursing the sick and wounded of the Army and Navy is to be recognised. It will be a "cross, enamelled crimson, edged with gold, having on the arms thereof the words Faith, Hope, Charity, with the date of the institution of the decoration; the centre having thereon our (the Royal) effigy. On the reverse side our Royal and Imperial cipher and crown shall be shown in relief on the centre. The cross shall be attached to a dark-blue riband, edged red, of one inch in width, tied in a bow, and worn on the left shoulder." This decoration may be worn by the ladies of the Royal family. It will be conferred upon ladies or nursing sisters, whether subjects or foreign persons, who may be recommended to the Royal notice by the Secretary of State for War, or (through him) by the First Lord of the Admiralty, as having shown special exertions, devotion, and competency in providing for the nursing of sick and wounded soldiers and sailors; or in the performance of nursing duties with the army in the field, or in naval and military hospitals. To preserve pure this honourable distinction, the Sovereign reserves the right of removing from the register of those upon whom this distinction has been conferred, anyone who shall, by her conduct, have become unworthy of it. We are sure that the medical profession will recognise in this step a fresh proof of that sympathy with its beneficent aims, and appreciation of labour directed to the relief of pain and suffering, and the alleviation of the horrors of war, which Her Most Gracious Majesty has always shown. But do we not often see in our civil hospitals quite as high a degree of courage and self-sacrifice displayed by nurses as in those of the naval and military services? Why should these nurses be ineligible for this honourable distinction?

THE VICTORIA UNIVERSITY.

The Council of the Victoria University has appointed the following external examiners in the Medical Department of the University:—Professor Gairdner, in Medicine and Pathology; Professor Lister, in Surgery; Professor Banks, of the University College, Liverpool, in Anatomy; Dr. Priestley, in Obstetrics; and Dr. Lauder Brunton, in Materia Medica. Associated with them as examiners will be the Medical Professors of the University; the Professors of Chemistry, Botany, Zoology, and Natural Philosophy; the Lecturers on Medical Jurisprudence (Dr. C. J. Cullingworth), Public Health (Dr. Arthur Ransome), Practical Surgery (Mr. Thos. Jones), and Ophthalmology (Dr. David Little); and the external examiners already appointed in the cognate biological sciences and in Physiology.

THE METROPOLITAN ASYLUMS BOARD.

The usual fortnightly meeting of the Managers of the Metropolitan Asylums Board was held on Saturday last, Mr. Galsworthy presiding. Amongst other business brought forward, it was referred to the chairmen of the several hospital committees to consider the difficulties experienced in obtaining eligible candidates to fulfil the duties of hospital attendants, and advise the Board upon the matter. Mr. Bostock moved—"That the Finance Committee be requested to report as to the possibility of their exercising control over the expenditure of the several committees of the Board." He contended that this course was exceedingly desirable in view of the large expenditure which the Board was about to undertake. They had already agreed to pay upwards of £4000 for an ambulance steamer. In the event of their having to deal with another class of disease, it would become necessary to authorise the construction of a second, similar steamer. They would also be asked to authorise the construction of two ambulance stations; to consider the purchase of two wharves on the river Thames; and probably also the acquisition and fitting up of another man-of-war or other large vessel for use as a floating hospital. Another matter of serious importance was the proposal to purchase three large sites on which hospitals were to be erected, each for the accommodation of 600 patients. All these schemes would cost a large sum of money, and, although it was absolutely necessary for the safety of the metropolis that they should be carried out, the expenditure in connexion with them ought to be rigidly supervised. This resolution was seconded and adopted, with the recommendation that the Finance Committee should suggest some means of exercising the desired control. The fortnightly returns of the fever patients under treatment during the past fortnight, in the several hospitals of the Managers, showed a decrease of forty-seven. The number of small-pox patients treated during the same period was seventy-three, showing a decrease of eleven as compared with the previous fortnight.

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THE ROYAL COLLEGE OF PHYSICIANS.

At the meeting of the Royal College of Physicians of London, held on Thursday last week, seven gentlemen who had passed the required examination were admitted as Members of the College; and thirty-one candidates for the College licence, who had conformed to the by-laws and regulations, and passed the required examinations, had licences to practise physic granted to them. Lists of these Members and Licentiates will be found elsewhere in our columns. Ten other candidates passed in medicine and midwifery, and will receive the licence on obtaining a qualification in surgery recognised by the College. Nine members of the College, whose names we published last week, were elected to the honour of the Fellowship. The College received a communication from the Grocers' Company, stating that they had established three scholarships, and a discovery prize for the encouragement of research in sanitary science. (The scheme of this munificent endowment was made known to the profession in our number of March 24.) The President of the College was empowered "to nominate one or more Fellows of the College who propose to attend the International Congress on Colonial Medicine at Amsterdam, to represent the College at the Conference, who, in his opinion, may be qualified to act in that capacity." The most important part of the business before the College was, however, the consideration of the report of the Council on special examinations (see *Medical Times and Gazette*, March 3, page 241). After a lengthy discussion the College resolved—"That, in accordance with the recommendation of the Council, an examination be instituted in Hygiene and State Medicine." The recommendation with regard to a special examination in Psychological Medicine was not agreed to.

THE PARIS WEEKLY RETURN.

The number of deaths for the sixteenth week of 1883, terminating April 19, was 1342 (720 males and 622 females), and of these there were from typhoid fever 36, small-pox 16, measles 31, scarlatina none, pertussis 12, diphtheria and croup 49, dysentery 2, erysipelas 4, and puerperal infections 3. There were also 63 deaths from tubercular and acute meningitis, 263 from phthisis, 58 from acute bronchitis, 145 from pneumonia, 71 from infantile athrepsia (23 of the infants having been wholly or partially suckled), and 39 violent deaths (males 30 and females 9). The number of deaths registered this week is greater than the mean of the last four weeks, which is 1300. All the epidemic affections exhibit an increase with the exception of scarlatina. The sudden increase of the number of deaths this week, which is greater than has been met with this year, is not only due to the greater number of deaths from epidemic diseases, but also to those from the respiratory and cerebro-spinal apparatus. The births for the week amount to 1312, viz., 668 males (487 legitimate and 181 illegitimate) and 644 females (482 legitimate and 162 illegitimate): 112 infants were either born dead or died within twenty-four hours, viz., 58 males (45 legitimate and 13 illegitimate) and 54 females (39 legitimate and 15 illegitimate).

THE CONTAGIOUS DISEASES ACTS.

Orders have been sent to Chatham, Plymouth, and Portsmouth, to the effect that the police hitherto employed in carrying out the Contagious Diseases Acts in those places are to cease their operations. The Medway Board of Guardians discussed the matter at their weekly meeting on the 2nd inst., and unanimously resolved to send to the Home Secretary an expression of regret at the steps taken by the authorities, as the Acts had been the means of doing a great deal of good.

THE STONE TESTIMONIAL.

The many friends of Mr. T. M. Stone, who was so long a faithful servant of the Royal College of Surgeons of England, will regret to hear that he has for some time suffered so much from illness that he has been unable to come to town to receive the testimonial it has been arranged to be presented to him. In consequence, it was decided that a deputation from the Stone Testimonial should proceed on Tuesday last to his residence at Wimbledon, and present the testimonial to him there. The deputation consisted of the President of the College, Mr. Arthur Durham, Mr. G. A. Ibbetson, Dr. J. H. Paul, Mr. Francis Mason, and the Honorary Secretary, Mr. James Shuter. Letters were read from Sir Erasmus Wilson and other gentlemen, regretting their inability to attend. Sir Spencer Wells, in presenting the richly illuminated album and purse to Mr. Stone, alluded to the fact that it was just a quarter of a century ago that a handsome silver tea and coffee service was presented to Mr. Stone, and how much he deserved all that was then engraved on the salver accompanying it. Mr. Stone, who was much affected, briefly returned thanks. The following is the inscription:—"This illuminated address, together with a purse of money, subscribed for by Fellows and Members of the Royal College of Surgeons of England and other friends, was presented by Sir Thomas Spencer Wells, Bart., President of the Royal College of Surgeons of England, to Thomas Madden Stone, Esq., on his retirement from official connexion with the College, as a token of friendship and esteem, and as an acknowledgment of the intelligence, courtesy, and zeal with which he had served the College and its *alumni* for a period of fifty years.—Signed, T. Spencer Wells, President of the College; Erasmus Wilson, Treasurer of Testimonial Fund; G. Anderson Critchett, Chairman of Executive Committee; Luther Holden, James Shuter, Honorary Secretaries.—May 1, 1883." The subscribers numbered 312, including several past Presidents of the College and members of the Council and Boards of Examiners. Amongst the foreign friends of Mr. Stone who renewed their acquaintance with him at the recent International Congress, and were subscribers, were the Baron Gustavus von Düben, Professor Santesson, Professor G. Retzius and his wife, and Professor Darling of New York.

THE METROPOLITAN WATER-SUPPLY FOR THE MONTH OF MARCH, 1883.

The first recovery from the adverse influence of the winter months upon the metropolitan water-supply is recorded in the monthly report of the London Water Examiners for the period of March last. Writing of the state of the Thames water previous to filtration, Colonel Bolton says it was bad in quality from the 1st to the 9th of the month, when it became good, and remained in that condition for the rest of the month. During the early part of March the river Thames was again in a very bad state of flood, and the intakes had to be closed as much as possible to avoid taking in water much polluted by the large quantities of decayed vegetation and other impurities floating in it. In reporting on the state of the water as delivered for consumption, Dr. Frankland says the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies was, as regards dissolved impurities, of very much better quality than in the two previous months of the year, the supplies of the Southwark, Lambeth, and Grand Junction Companies containing an exceptionally small proportion of organic matter; the Grand Junction and Lambeth Companies' waters were, however, very slightly turbid, and contained moving organisms. The water taken from the Lea and distributed by the New River and East

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London Companies also showed an improvement, although not such a marked one, upon the quality of the preceding months. Both waters were efficiently filtered before delivery. The deep-well water furnished by the Kent and Colne Valley Companies, and by the Tottenham Local Board of Health, was of its usual excellent quality for drinking; and the Colne Valley Company, by softening their water with lime, thereby rendered it also well fitted for washing and all other domestic purposes.

OSSEOUS LESIONS IN GENERAL PARALYSIS OF THE INSANE.

Dr. J. C. Shaw (*Seguin's Archives of Medicine*, April) has brought forward some cases of general paralysis in which certain bone affections occurred similar to the well-known arthropathy of locomotor ataxy. In the first case the upper part of the right femur was removed after death, and marked absorption of the head was found to have taken place, the whole bone here having become unusually spongy; there was also a deposit of bone just below the trochanter, but separate from the femur. There was every reason to believe that the left femur was in a similar condition, but permission could not be obtained to make any further examination. The second patient had redness and swelling of the small joints of every finger of both hands, with distinct crepitus on movement. This patient died, but no examination could be obtained. The third patient had a swelling over the right side of the inferior maxilla; there was crepitus here, and the existence of two fistulous openings indicated that extensive necrosis had occurred. A large abscess formed in connexion with the right hip-joint, but was not associated with any very marked lesion of the bone The last case was one where the head of the right femur was found to be commencing to undergo absorption, no symptoms of this condition having been observed during life. Although these cases are too few in number and too incomplete to justify any conclusions, yet they may prove of great use in calling attention to the possibility of bone affections amongst general paralytics. It is evident that these lesions require to be looked for; none of the patients alluded to above made any complaint of pain. The subject is one of great importance, in a medico-legal point of view, in regard to the charges of violence that are from time to time raised against attendants in lunatic asylums, and we hope that Dr. Shaw will pursue his researches.

THE MINUTES OF THE MEDICAL COUNCIL.

The indefatigable Registrar of the General Medical Council has already brought out a volume containing the complete Minutes of the Medical Council for this year. It gives the whole of the Minutes of the recent session of the General Council, and the Minutes of the Executive Committee and of the English Branch Council from the beginning of the year down to the present day. The volume is edited with the Registrar's wonted completeness, and contains, in addition to the matters spoken of, many tables of useful information regarding the roll of the members and the sessions of the General Council, and gives also the standing orders of that august body.

VOLUNTEER MEDICAL ORGANISATION.

The second meeting in connexion with this organisation was held on April 27, in the Board-room of Charing-cross Hospital. Many persons interested in the subject were invited by the Committee to attend. Amongst those present were:—Surgeon-General Hunter (chairman); Surgeon-General Mackinnon, C.B.; the Hon. Colonel Paul Methuen, C.B.; Andrew Clark, F.R.C.S.; John H. Morgan, F.R.C.S.; Surgeons-Major Beattie, Cross, and Evatt, A.M.D.; Dr. Danford Thomas; Andrew Maclure, Esq.; John Farley, Esq.; Dr. Stephenson, Woolwich; Dr. Harvey Hill; and representatives from most of the Volunteer regiments in London. Dr. Evatt again explained the object of the organisation. The following resolutions were passed:—Proposed by Mr. Platt, and seconded by Mr. Morgan, "That communications be sent to the dean of every medical school and university in the kingdom, explaining the object of the organisation, and to obtain from them representative names to be placed on the Committee." The motion was unanimously carried. Proposed by Dr. Maclachlan, seconded by Mr. White, "That the War Minister be petitioned to grant opportunity to surgeons to proceed to a military school to obtain special instruction in ambulance drill." The motion was unanimously agreed to. Most of those present took part in the discussions. The provisional Committee, with Mr. Cantlie as secretary, was constituted an Executive Committee, with power to add to their numbers.

COMPULSORY VACCINATION.

The House of Commons having carried, on Tuesday, the 1st inst., the Prime Minister's motion that the adjourned debate on the Parliamentary Oaths Bill should have precedence over the other orders of the day, Mr. Hopwood lost his opportunity of bringing on his resolution condemning compulsory vaccination. The Government have thus, for the present, succeeded in avoiding the, to them, painful task of having to decide whether they will openly support compulsory vaccination, or openly condemn it, or will treat it as a question so devoid of national importance or interest as not to deserve the serious and united attention of the Ministry.

THE MICROCOCCI OF DYSENTERY.

Morphological differences are totally insufficient to furnish the means of diagnosis of one micro-organism from another. That fact is now almost universally recognised. Dr. Prior has communicated to the *Centralblatt für Klin. Med.*, No. 17, an article the burden of which is to the effect that a micrococcus is almost certainly the *fons et origo* of dysentery. Further, the micrococcus is for all practical purposes indistinguishable from the same species of bacteria found in pneumonia, erysipelas, diphtheria, and cerebro-spinal meningitis. If we understand rightly the opinion entertained by Dr. Prior, it would appear that the practical identity of appearance of the micrococcus of any one of these diseases with the micrococcus of any other one of the group is sufficient to make us strongly suspect that all these diseases are very intimately allied, if not almost identical. Dr. Prior has detected micrococci in enormous numbers, not only in the recent stools of an alleged case of dysentery in a child five years old, but also in the juice from the tissues, and in the tissues of the affected intestines themselves, but not in the blood. He compared the bacteria from this case with those found in stools of healthy children, and of infants suffering from various diseases. The constant difference which he detected was the always enormous number of micrococci with dysenteric motions as compared with the micrococci in other stools. On the other hand, the number of bacilli in the disease in question was quite small in the motions, and none were found in the affected tissues. The micrococci when stained with gentian violet failed to retain the violet colour when treated with a second colouring matter (bismark brown), in this respect greatly differing from the bacilli of tubercle, leprosy, and possibly other forms of bacteria. No cultivation experiments were carried out, nor were any experimental inoculations made. Notwithstanding Dr. Prior's caution in endeavouring to obtain the preparation of the blood and slime in the shortest possible time after it had been passed, we feel that we cannot place much reliance on the results of

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his studies. The alimentary canal is as much outside the organism as is the space which is partly bounded by the skin, and is liable to the action of similar agencies. Besides, we have yet to learn whether all refracting oval bodies which stain with various dyes, which vibrate to and fro, and which abound in the motions and tissues, are necessarily living principles. We have no wish to be captious, but we certainly must lend our voice to deprecate the tendency there seems to be nowadays to rush at conclusions in the field of bacterial pathology. Something more is required than the mere detection of a constant micrococcus.

MUNIFICENT GIFT TO THE TOWN OF DUNDEE.

At a meeting of the directors of the Blind Asylum, Dundee, held on April 30, it was intimated that Mrs. Molison (aunt of Mr. Baxter, M.P., and sister of the lady who recently gave a very large sum for the College) had generously offered to provide a new institution at a cost of £10,000. Lately, Dundee has been presented with gifts amounting to at least a quarter of a million sterling, providing the community with a college, a completely equipped high school, a sailors' home, etc. This last generous and magnificent gift was duly accepted, and the donor awarded a cordial vote of thanks.

THE EXTIRPATION OF THE CANCEROUS UTERUS.

In a discussion in the Gynæcological Section of a Congress held at Eisenach in September last (and reported in a recent number of the *Archiv für Gynäkologie*), Olshausen stated that he had extirpated the cancerous uterus by the vaginal method in twenty cases. In three others he attempted the operation, but had to desist on account of adhesions to rectum and bladder; of these one was left with a recto-vaginal, another with a vesico-vaginal fistula. Of the twenty in whom the operation was completed, fourteen recovered, six died. In three cases the body of the uterus was the part diseased, in nineteen the cervix. In one the diagnosis proved to be erroneous, the disease being a small myoma of the posterior wall of the cervix; this was taken for cancer on account of the roughness of its surface and the fœtor of the discharge; the patient recovered. Of the thirteen other recoveries, one patient died fifteen, another seventeen months after the operation, from relapse; in a third, yet living, the disease had recurred. Some of the others were known to be, fifteen months after the operation, free from relapse. Martin (of Berlin) stated that he had undertaken the operation thirty-one times, but five times had been unable to complete it: of these patients, two died. Of the twenty-six in whom the operation was finished, four died; of the twenty-two who recovered, only one had gone as long as a year and a half without recurrence. Sänger (of Leipzig) said he had done two cases, both of which recovered: one died from recurrence of the disease ten and a half months subsequently; the other operation had only been done four weeks.

The ceremonies of the annual oration and *conversazione* of the Medical Society of London, which, in the ordinary course, should take place next Monday, are postponed for a few weeks, to allow of the completion of the Society's new meeting-room and other premises for the occasion. The date will be announced as early as possible.

The ceremony of graduation in connexion with the University of Glasgow took place recently in the Lower Hall of the Museum, Gilmorehill. The University and class prizes were also awarded, and thereafter Principal Caird delivered an address, in the course of which he referred to several of the points dealt with in the Scotch Universities Bill.

Professor Bayley Balfour, Regius Professor of Botany in the University of Glasgow, has been appointed Examiner in Botany and Vegetable Physiology in the University of London.

Sir Stafford Northcote has consented to become the Conservative candidate for the Lord Rectorship of the Edinburgh University in November next. Mr. G. O. Trevelyan, as already announced, is the Liberal candidate.

Among the fifteen candidates for election to the Fellowship of the Royal Society of London who have been nominated by the Committee of Selection for the present year, are the following names:—Surgeon-Major James Edward Tierney Aitchison, M.D.; James Crichton Browne, M.D., LL.D.; Surgeon-Major George Edward Dobson, M.B.; and James Matthews Duncan, M.D.

A vocal and instrumental concert will be given by the "Wandering Minstrels," under distinguished patronage, at the Grosvenor Hall, Buckingham Palace-road, on Thursday evening, May 31, in aid of the building fund for the extension of the Dental Hospital of London.

On the 12th of last month the medical profession of New York gave a dinner to Dr. Oliver Wendell Holmes, taking the opportunity of his retirement from the chair of Anatomy, at Cambridge, U.S., to express publicly and impressively their appreciation of the honour he had conferred upon American medical men by his contributions to general and medical literature. Some 225 persons were present at the banquet, and the whole affair appears to have been an admirable success.

FROM ABROAD.

French Surgeons on French Surgery.

At the end of a report which he presented upon some communication to the Société de Chirurgie (*Bulletin*, February 14), Prof. Verneuil expressed himself as follows:—

"I feel tired and irritated at seeing our French surgery pitied, contemned, and even insulted; and I am not less pained at finding some of our fellow-countrymen more willingly saluting the foreign flag than defending our own, and raising it in the case of its falling. I believe that I may claim for myself that I have never run down any person or thing, while I have very often warmly defended and propagated great and useful ideas, whether theoretical or practical, from whatever country they may have come. Thus, practising equity for all, I demand for our national science, if not enthusiasm, at least respect and justice. But I cannot believe that we are reduced to the servile imitation of others, and that we must copy even their exaggerations and errors. I cannot accept that we must remain mute in the present scientific concert. Because we may no longer be found at the extreme advanced guard in the region of resounding or disastrous adventures, it comes to be believed that we have deserted the combat, while we have simply shifted our position and directed our activity elsewhere. After having, with Velpeau, Lisfranc, Roux, and so many others, with the écraseur and thermo-cautery, done as much, I believe, as our rivals, we have ceased to invent methods and procedures in order to occupy ourselves, as our illustrious Malgaigne desired, with the real value and degree of utility of these methods and procedures. If we appear to have thrown back operative surgery to the second rank, this has been in order to advance surgical therapeutics into the first rank. If we have shown but little eagerness to extirpate cancers of the larynx and uterus, to excise the œsophagus, the pylorus, or the lung,

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to tie the aorta, etc., this has been because our Gallic good sense has enabled us without difficulty to foresee the inevitable destiny of these extravagant vivisections, and that it appears to us of no utility boasting to-day of that which will be rejected to-morrow. If in our surgical wards we greatly hesitate to transport the results obtained in laboratory experiments, that is because we do not assimilate man with batrachians and rodents, or even with the mammalia, the most elevated in the animal scale.

"And why, moreover, should we be so very humble when such immense progress has been accomplished? The septicæmic doctrine and the antiseptic method have revolutionised modern surgery, and have covered it with glory; but has not our country had its part in this great event? Must we remind those of short memories of the names of Gaspard and Sédillot at one end of the series, and at the other that of Pasteur, whom we have a right to celebrate although living. We esteem our sympathetic friend Lister at his high value, but we hold also in great honour the mode of dressing of our eminent friend Alphonse Guérin. Let us, then, hold up our heads, for we have the right to do so. The French surgeons of the present day are, as regards the great majority, prudent, reflecting, and, above all, profoundly humane. They do not sacrifice the *tuto* to the *cito*, but weigh carefully the *pros* and *cons* of their actions. They undoubtedly perform fewer operations, but there is nothing to prove that they cure fewer patients; and if their work is less bold, it is most certainly far less sanguinary (*meurtrière*). While they are less ardent and less ready to seize hold of the knife and to prostrate themselves before this god of the day, they are not working less usefully for the progress of our art. They are incessantly endeavouring to fix the bases of the treatment of surgical affections, which are more extensive and more multiple than is supposed; since in a case in which intervention is or seems necessary we should successively weigh and resolve the questions relating to the indications and contra-indications for operation, the opportunity, the preparation, the selection, the technicalities, the therapeutics, and the efficacy of operations as judged of by the ulterior results. It seems to me, gentlemen, that if our French school of surgery arrives at the solutions of these questions before its rivals, we may very well console ourselves for not having been the first to employ thymol or to excise the pylorus."

Prof. Trélat observed: "I associate myself with the warm expressions of Prof. Verneuil in vindication of the true place of French surgery. Without abandoning the search for operative skilfulness, which for us is a patrimony, we are by education, by nature, by the organisation of our hospitals which furnish us with patients to treat, by medical therapeutics as much as by works of the hand, more inclined than our neighbours to the nicety of diagnosis, to severe discussion of indications, and to precise determination of methods and procedures. For these same reasons of education, of nature, and of hospital organisation, foreign surgery, and especially German surgery, tends to become exclusively operative. The amphitheatre is a workshop in which final success—beneficial and durable success—does not always bear relation to the enterprise executed almost before it has become conceived. Truly, there is no reason to abandon our course. Look back, and see what has become since thirty years of the great question of excision in chronic affections of the joints. What a resection fever prevailed around us then! At the present time the cause has been gained both in and out of France. By taking greater care of our patients, we have become able to determine the true indications for operation. When these are present we act up to them; but how much more rare are they than surgeons affected to believe abroad! and who can tell the number of joints that we have saved from the knife and the saw? This example is encouraging. Let us profit by it, and maintain our disposition for work, prudence, and good sense."

M. Desprès remarked "that certain surgeons who in 1860 were so enthusiastic as to foreign surgery have, thanks to age and maturity, modified their ideas, and now admit that it is not to modes of dressing alone that we have to pay attention. And since a comparison between French and English surgery has been touched upon, I may also state my opinion. If we operate less in France, it is because, without paying any regard to the social position of the patients, in no case are we lavish of human flesh, and never sacrifice the limbs of the poor at random."

MEDICAL MATTERS IN PARLIAMENT.

House of Lords—Thursday, April 26.

The Medical Acts Amendment Bill.— On the order that the report of amendments to this Bill be received, Earl Granville said he had received the following letter from Professor Acland, with regard to the University of Oxford:—"My Lord,—I venture, with reference to the relation of Oxford to the profession of medicine, to which allusion was lately made in the House of Lords, to state this much to your lordship. In medical education and for the advancement of medicine there are three quite separate parts—(1) general philosophical education, as represented by the old *Litere Humaniores*; (2) the study of the natural sciences which lie at the foundation of all knowledge of diseases, whether in man or animals; and (3) the actual study of disease itself. Formerly, Oxford could only attempt the first. In the last thirty years the University has laid the foundation of complete theoretical and practical study of the second, or of biological science considered in the widest aspect. And it leaves only at present the study of disease itself to the vast opportunities of the metropolitan hospitals and schools. I hope and believe, therefore, that Oxford will in the future supply highly trained and scientific youths to the great clinical schools in a way and to an extent she has never done before; and that in the view of national education for the profession of medicine, and of present changes, the influence of the University will be of great public advantage, and greater than she has ever had before.—I have, etc., H. M. Acland." The noble Earl added that he had not a word to say against any statement in the letter, but that he adhered to what he had said on the previous Thursday.

The report of amendments was then received, several new amendments were proposed, some of which were adopted; the report was agreed to, and the Bill was ordered for the third reading. The further amendments made in the measure are described elsewhere in our pages.

House of Commons—Thursday, April 26.

Nazareth House, Hammersmith.—In reply to a question from Mr. Daly, the President of the Local Government Board was understood to say that he had directed one of the medical inspectors of his department to inquire into the subject, and had received from him an interim report. He had also himself been over Nazareth House. There were seventy-five children in the place, and about a hundred and thirty old men and women. The outbreak of typhus fever was confined to the children; there were in all thirty-one cases, spreading over a period of several months. As soon as the full report of the medical inspectors was ready it should be laid before the House; but, meanwhile, he would say that the interim report stated there was no foundation for the rumour that the sisters had disregarded cleanliness, and it stated that the amount of space given to the children was ample and sufficient. The disease was brought in from without.

A Case of Murder by a Lunatic.—In reply to a question from Mr. Corbett, respecting the murder of John Flanagan by his son Hugh, Mr. Trevelyan said: It is the case that Hugh Flanagan was in a lunatic asylum in Glasgow, and was brought over to Ireland last December and placed in Ballyshannon Workhouse, from which place he was removed by his father on the following day. The Local Government Board will request to see the warrant of removal from Scotland, and will make inquiry as to the circumstances connected with the removal.

Vaccination in India.—Mr. P. Taylor put to the Under Secretary of State for India the question respecting compulsory vaccination in India that he put on Thursday, the 19th, and which we reported last week.—Mr. J. K. Cross replied that Mr. Taylor had furnished him with a copy of the *Western Star of Cochin*, from which he gathered that the facts were correctly stated in the question put by his hon. friend. Vaccination was not compulsory in Madras.

House of Lords—Friday, April 27.

The Medical Acts Amendment Bill.—This Bill was read a third time. On the order that the Bill do pass, the Marquis of Salisbury moved that the number of members of the Medical Board for England be reduced from seventeen to sixteen,

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by removing the Society of Apothecaries of London from the Board.—The Earl of Camperdown supported the amendment, and observed that the effect of it would, of course, be that the Society would lose their power of granting licences to medical candidates.—Lord Carlingford said he did not see any representative of the Society in the House, and he himself did not feel in a position to represent their case to their lordships. On the information he had obtained, he thought the claims of the Society to representation on the Board were of the slightest; and he was, therefore, prepared to accept the amendment of the noble marquis.—The amendment was then agreed to, and the Bill passed.

HOUSE OF COMMONS—FRIDAY, APRIL 27.

The Army Medical and Transport Services.—In reply to a question from Lord E. Cecil, the Marquis of Hartington said that he hoped to have the report of the Committee on the Army Medical and Transport Services in his hands in a few days; and he promised that there shall be no unnecessary delay in laying it on the table of the House.

MONDAY, APRIL 30.

The Criminal Lunatic Asylum at Dundrum.—In reply to a question put by Mr. Corbet, Mr. Trevelyan said that the number of deaths occurring annually in the Asylum since it was opened could be given, but as that would be going back so far as 1850, the statement could not be conveniently given in an answer to a question. The number of post-mortem examinations could not be given for an earlier period than 1870, because the former records had been destroyed in a fire. The present medical officer states that, so far as he knows, the fees for post-mortem examinations were paid to his predecessor. During the last twenty-eight months the mortality had been greater than in any similar period since the asylum was opened; but the inspectors stated that this was not referable to any particular exceptional causes. In answer to a further question referring to a charge of tampering with the faith of a patient, Mr. Trevelyan said, at the close of 1882 an inquiry was held into various matters at the asylum—including religious observances. But no particular case was brought under notice in which a patient entered on the books as a Roman Catholic was prevented from seeing the Roman Catholic chaplain.

Open Spaces in the Metropolis.—Mr. Hollond asked whether a report had been received by the Home Office from the Inspector of Burial-Grounds (Dr. Hoffman) with respect to the disused burial-ground—of about three acres in extent—by the Hampstead-road, belonging to St. James's, Westminster? and whether Dr. Hoffman said, "Except for the sake of undoubted public improvements, disused burial-grounds should not be disturbed, but should be turfed, and planted with shrubs and flowers, and permanently kept in good order? In an Act entitled 'The Metropolitan Open Spaces Act' (1881), the Metropolitan Board of Works have power to deal with disused burial-grounds in this very way. In this instance the comparatively large size of the ground renders it still more important that the necessity for the Company's scheme should be carefully considered before an extensive encroachment is permitted." Mr. Hollond asked further: Whether the London and North-Western Railway were seeking powers, in a Bill now before Parliament, to appropriate one-half of this burial-ground; and whether such report would be laid on the table of the House?—Sir C. Dilke replied that the statements made in the question were correct. The report would be laid on the table.

TUESDAY, MAY 1.

The London and North-Western Railway (Additional Powers) Bill.—Mr. Hollond moved to recommit the Bill for the purpose of striking out the clause sanctioning the appropriation of part of the disused burial-ground in St. Pancras. He was strongly supported by Mr. Shaw-Lefevre, the Chief Commissioner of Works, but that official did not speak as representing the Ministry; and Sir Charles Dilke was careful to point out that the report of the Inspector of Burial-Grounds related solely to the sanitary aspect of the question, and to impress upon the House that the Home Secretary, in sending that report to the Committee, had said that he must not be supposed to offer any opinion on the Bill. Mr. Hollond's motion was negatived by 178 to 90. The railway interest is very powerful; and the Government "offered no opinion" on the matter in dispute

REVIEWS.

Die Massenverhältnisse des Menschlichen Herzens. By WILHELM MÜLLER, Director of the Pathological Institute in the University of Jena. Hamburg and Leipzig: Voss. 1883. Pp. 220.

RECORDS of careful and elaborate investigations into the absolute and relative changes of weight to which the human heart may be subjected during life are well known in medical literature. The subject has already been approached from various sides, and the methods adopted have varied in an equal degree. The writer of the present work may claim for himself, without fear of contradiction, that, while many of his methods of investigation are entirely original, the accuracy of his results are deserving of acceptance, since no previous investigator has so perseveringly laboured to keep his statistics clear of possible as well as probable error.

Fully impressed with the view that the heart is but a machine which is called upon to supply a certain amount of power in a given time, Dr. Müller insists that some definite relation must exist between the bulk of power-producing muscle in the heart itself and the bulk of the body which makes the demand for power upon it. Other observers have come to divers conclusions upon this point, and their views and their methods of investigation are, in an early chapter of this work, passed in review and subjected to searching criticism. To most of his predecessors' work he raises the objection that their observations have too limited a range; only by the collection of a very large number of cases, and the careful elimination of various sources of error, can any trustworthy results be obtained. These sources of error are for the most part to be found in the incomplete removal of sub-pericardial fat and of the intra-pericardial portions of the great vessels, which, in some cases healthy, and in others atheromatous, must render the tables of comparative weights untrustworthy. To determine, further, the relative bulk of the two sides of the heart and of the auricles and ventricles, it is necessary clearly to determine beforehand the proportion in which the muscular tissue is divided between the walls of the cavities and the septum respectively. It may be added, in passing, that the chapter here devoted to the criticism of previous labours in the same field has a distinct value of its own, owing to the completeness of the summary of all the most valuable publications, and the reproduction *in extenso* of many of the most important tables upon which the writers have founded their conclusions. The observations made by Dr. Müller extended over four years, and, in all, 1481 bodies were examined. In every case accurate records were made of the age, nationality, place of birth, height, etc., and before preparing the heart for investigation by his own method, the gross weight of the organ with its fatty and vascular appendages was taken, and the results carefully tabulated for future comparison. From the results thus obtained Dr. Müller is inclined to explain the conclusion, arrived at, amongst others, by the late Dr. Peacock, that the heart increases in weight until the end of life. In Dr. Peacock's paper, however, published in 1854, it appears clearly that he was equally alive to the source of error involved by indiscriminately accepting the gross weight of the organ. The method of separating the various divisions of the heart from the great vessels and from one another is given in detail. To carry it out faithfully would undoubtedly demand a well-skilled hand. For the purpose of examination the hearts were divided, each into six divisions—the auricular walls, the ventricular walls, and the auricular and ventricular septa. These, being weighed, gave the absolute weight of the whole heart-muscle, and this again divided by that of the body expressed its relative weight. The mode of eliminating the sub-pericardial fat by mechanical and chemical means is next entered into, and the degree of error which is introduced by neglecting this precaution is clearly shown. In order to obtain minutely accurate results Dr. Müller ingeniously constructs a formula to determine the extent to which the right and left ventricle respectively combine to form the septum, and by means of it subsequently carefully apportions the septum to each in cases of hypertrophy or atrophy of either. Minutely to follow the author through the mazes of painstaking calculation of which the voluminous tables and statistics which are

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here collected give evidence, would be beyond the scope of the present notice. It must suffice that we observe that the same accuracy of observation and attention to details of method are as apparent throughout the statistical tables and the summaries with which each is concluded, as in the preliminary steps to which we have already alluded. The relations of the heart-muscle, in all ages of life, commencing with the embryo, to the body-weight, its relations to the superficial area of the body, to the height, to the sex, and to the age, are all in turn worked out in voluminous tables. The relations of the various parts of the heart to one another under the varying conditions of age are discussed and tabulated with equal precision. Following each set of tables will be found a statement of the deductions which the author has drawn from a careful study of them. Statistics, it is proverbially said, can be made to prove anything, and in the work before us it is possible that sceptical readers might feel inclined to disagree with many of the conclusions at which Dr. Müller arrives, but owing to their clear method of arrangement, the tables themselves will be acceptable from the facts which they record, not less than from the admirable model which they present for future investigations upon the same subject.

GENERAL CORRESPONDENCE.

THE PICRIC ACID TEST FOR SUGAR.

LETTER FROM DR. J. L. CRAWCOUR.

[To the Editor of the Medical Times and Gazette.]

SIR,—In testing for sugar by means of Dr. George Johnson's new method of picric acid and potash, I find an unexpected and serious source of fallacy. Dr. Johnson says (*Medical Times and Gazette*, March 24), "Grape sugar, when boiled with picric acid and potash, reduces the yellow picric acid to the deep red picramic acid;" and again, "during the process of boiling the pale yellow colour of the liquid is changed to a beautiful claret red." This is perfectly true; but if picric acid be added to a solution of potash, and the liquid be heated, the yellow colour also immediately changes to a claret red, and this without the addition of any sugar. In this way we may perhaps account for the fact that in the 300 specimens of normal urine tested by Dr. Johnson he uniformly found traces of sugar.

I would suggest the following method, which I have found by experience to be free from fallacy:—Add first the picric acid to the potash, and boil. A red colouration will immediately ensue. If now the urine be added drop by drop the colour will deepen if sugar be present, and the depth of colour will be in exact proportion to the amount of sugar present. If sugar be in large excess, the colour will be a dark crimson, almost approaching black. If the urine be perfectly free from sugar, no change will take place. By using the test in this way we become possessed of a valuable method, which is free from all source of fallacy.

I am, &c., J. L. CRAWCOUR, M.D.

194, Camp-street, New Orleans, U.S.A.

ERYTHEMA NODOSUM WITH PLEURO-PULMONARY COMPLICATIONS.—Prof. Germain Sée terminates a clinical lecture on this subject, delivered at the Hôtel Dieu (*Progrès Médical*, April 21), with these conclusions—1. Erythema nodosum is a specific fever analogous to the eruptive fevers, and not a cutaneous manifestation of rheumatism. 2. Mild in general, it may, like other specific fevers, become complicated by affections of the respiratory organs. 3. Pleurisy is the most frequent complication, although broncho-pneumonia may occur. 4. According to published observations, this pleurisy does not seem in general to possess any special characteristics. 5. Nevertheless, in a fatal case there was noted the development of successive and distinct patches or centres of fibrinous exudations of abnormal thickness and abundance, with a small quantity of effused liquid. 6. Ordinarily, these pleuro-pulmonary complications are, like the primary malady itself, of favourable prognosis. Still, in two cases they gave rise to a fatal termination. 7. These complications are not any more than the erythema itself of a rheumatic nature, but are due to the specific character of the disease.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 17.

ARTHUR E. DURHAM, Esq., Vice-President, in the Chair.

OCCLUSION OF MINUTE CEREBRAL VESSELS BY OIL.

DR. WILKS introduced Dr. Handfield Jones to the meeting, who was anxious to bring under the notice of the Society a case where the minute vessels in the brain were found to be filled with an oily and fatty material which was believed to be due to the degeneration of atheromatous and fatty material.

DR. HANDFIELD JONES said that the patient was a man aged forty-eight, who had been under the care of his colleague, Dr. Broadbent. During life he had suffered from certain nervous symptoms (*e.g.*, liability to fainting), and had been nervous, excitable, unable to attend to his business, and troublesome. After this state had persisted a little while he died, there being at that time a considerable amount of albumen in the urine. At the autopsy there was general œdema of the body, effusion into both pleuræ, and ascites. The heart was hypertrophied, the liver enlarged. The kidneys were large, and their capsules slightly adherent. There was atheroma of the large arteries at the base of the brain, and this change could be traced into quite small branches; in the very small branches—those not much removed from the capillaries—there were diffused patches of oil-drops or semi-solid fatty masses, mostly spherical, sometimes elongated, either alone or mixed up with granular molecular matter; these masses occupied nearly the whole lumen of the vessel. There was an appearance in places more or less resembling thrombosis. In places the coats of the vessels were much thinned; in others they were thickened, with narrowing of the calibre of the vessels. The points upon which he relied were—that the presence of these oily masses in the small vessels coincided with atheroma in the larger ones; that degeneration of atheromatous particles would be capable of giving rise to the formation of oily and fatty substances; and further, these oily masses were stained black by osmic acid. No corpuscles could be seen amongst either the large or small oil-drops, *i.e.*, no sign of the process being at all an inflammatory one. There was no reason for regarding these oil-masses as embolic. He thought that their presence gave a satisfactory explanation of the nervous symptoms observed during life. Since he had seen this case he had examined the brain in four other cases where the arteries at the base were atheromatous, but they did not show any change in the smaller vessels.

DR. WILKS thought that the specimens and drawings ought to be referred to the Morbid Growths Committee. it was very important to decide what these masses in the vessels were, and also what their significance was.

DR. CAVAFY asked if the serum of the blood had been examined; if it had been found to be milky that would point to the presence of fat in the blood.

DR. HANDFIELD JONES said that the blood had not been examined.

The specimen was referred to the Morbid Growths Committee.

CYSTIC TUMOUR OF TESTICLE WITH DEPOSITS IN LUNGS AND LIVER.

MR. VICTOR HORSLEY brought forward this case, which he said was interesting from two points of view—one physiological, namely, the occurrence of a patent foramen ovale with double pulsation in the neck, and venous pulse as far as the elbows, but no cyanosis; and the other pathological, namely, the occurrence of adeno-sarcoma in the testicle, with extremely rapid growths in the viscera. First, with reference to the cardiac malformation. During life this was suspected, owing to (*a*) the extension of the cardiac area of dulness to the middle of the right costal cartilage; (*b*) a loud blowing murmur, heard loudest at the third costal cartilage on the left side, but conducted up and down the sternum for a little distance; and (*c*) the presence of a venous pulse. A double pulsation was noticed beneath the right sterno-mastoid. A tracing being taken of this (with Marey's tambour), it was found to consist of a carotid wave, followed by a second wave about two-thirds the height of the

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former. This second wave was proved not to be the dicrotic wave exaggerated, and it was therefore assumed to be the jugular pulsation. At the necropsy the great vessels of the thorax and neck were found to be normal, except that the right external jugular vein was small. The heart presented the following abnormalities:—Some hypertrophy of the wall of the right auricle; a patent foramen ovale, of a roundish outline and one and a quarter inches diameter; thickening (fibrous) of the tricuspid valve and chordæ tendineæ; and union of the segments of the pulmonary valve into a fibrous cone with partial atresia of the valvular orifice. The debatable point on which discussion was invited was the causation of the venous pulse. Mr. Horsley assumed that it was most probably produced by the auricular contraction. Of previous records in the Society's *Transactions*, in only two cases was a venous pulse noted. In the second place he discussed the tumours with which the man died. The history of the tumour of the testis was as follows:—The patient was a slightly developed man, who gave no personal or family history of hereditary disease; he had had pleurisy twice, gonorrhœa once, but had never had syphilis. He had received a blow on the left testicle eighteen months before his death; he suffered intense pain at the time, but took no notice of it for four days; at the end of that time the testis began to swell, and continued to do so up to admission, having grown more rapidly the last two months. On admission into the University College Hospital, the left side of the scrotum was found to be occupied by a firm tumour, fluctuating in its upper third. There was no enlargement of the lymphatic glands. The other viscera, except the heart, were at that time apparently normal. The testicular tumour was removed, but the wound, owing to the formation of an abscess just inside the abdomen, never healed. He became jaundiced (growths appearing in the liver and the lung), and died of syncope. The tumour of the testis was an adeno-sarcoma, but the whole tumour was riddled with small cystic cavities, lined by columnar epithelium, and containing glairy mucus. The stroma consisted of fibrous tissue, with here and there small masses of sarcoma tissue (mixed round-celled). The necropsy showed that all the organs were sound, except the heart, lungs, liver, and bladder. The lungs and liver were riddled with masses of new growth, the liver being almost destroyed by the tumour. The lungs were but slightly affected; there was one nodule an inch and a half broad in the upper lobe of the right lung, and a few scattered nodules in the left lung. In both the liver and lung the sarcoma tissue was alone represented, and into this extensive hæmorrhages had occurred, one of which, rupturing into the abdomen, had caused death from loss of blood. The sarcoma tissue was the same as that found in the testicle growth, namely, mixed round-celled. In the outer wall of the bladder was a small nodule of the growth. The lymph glands were unaffected, and seeing that the disease in the liver was fully six times as marked as that in the lungs, it seemed to have been improbable that the mechanical, or rather hydraulic, theories of infection in new growths would explain the case. Taken in conjunction with the occurrence of congenital defects in other parts, the case seemed to him to lend support to the theory that the occurrence of new growths was to be attributed to active development, starting up in masses of persistent embryonic tissue included in the tissue of the various organs. Whatever the remoter antecedents, the case was an instance of what was called traumatic malignancy.

Mr. Butlin said the question had been raised as to the connexion existing between the tumour of the testicle and the other tumours; he did not see any reason for associating them with the undeveloped tissues in the body. Following a blow on the testicle, the man had a cystic tumour (apparently an ordinary lympho-sarcoma) develope, which afterwards was found to be associated with deposit in the lungs, liver, and wall of the bladder. If he had understood Mr. Horsley rightly, the latter attributed all the tumours to the blow, a view in favour of which, he thought, there was no evidence. The most remarkable feature of the case, to his mind, was that none of the lymphatic glands were invaded secondarily to the testicle.

Mr. Horsley, in reply, doubted whether the tumour was really a lympho-sarcoma. Mr. Butlin had quite misunderstood him as to the sequence of growth of the tumours. Before the operation there was no evidence of anything but the disease of the testicle; afterwards they had watched the signs of tumours in the lungs and liver appear and steadily progress.

Ulcerating Tumours of the Skin.

The following cases were shown:—

1. Mr. Davies-Colley said that a woman aged twenty-nine, single, came under his care at Guy's Hospital in 1881 for an ulcer on the buttock. Her previous and family history had been good. She had had no children, and there was no suspicion of syphilis. Some months before she came under observation, two small tumours had formed on her back, but had disappeared after a while; then one had formed on the left buttock, and also one just to right of spine. The former of these had ulcerated, so that, on admission, on the left buttock there was an ulcer, the upper margins of which were smooth; the lower margins were swollen, and the surrounding skin was tender. On the other side was a large, hard tumour, measuring five inches in each diameter and one inch raised; the skin over it was glossy. After she came under observation another tumour formed just above the ulcer. Anti-syphilitic remedies were tried, but they brought no improvement. The ulcer sloughed. She gradually became weaker, and died of exhaustion eight months after the appearance of the tumours. The base and margins of the ulcer were found to be occupied by a firm new growth of greyish aspect, which infiltrated the psoas muscle. The tumours presented a similar appearance. There was softening of the body of the third lumbar vertebra. Microscopically, the tumour was found to consist of a firm connective tissue, with round nucleated cells embedded in it. Of course syphilis had been thought of, but against it were the facts that there was no history of it, that she did not improve upon anti-syphilitic remedies, and that there was nothing found at all resembling a gumma. There was no evidence of tubercle. He was inclined to call it a lympho-sarcoma, though it differed in many points from the growths that usually received that name.

2. Dr. Frederick Taylor showed a portion of the skin of the back and the skull-cap of a man who had died in Guy's Hospital. The patient was a man aged forty-two, who had been ailing a little for six months, having previously enjoyed good health. He came to the hospital for certain nervous symptoms—viz., staggering gait, nystagmus, tremor of the hands, and difficulty of speech: these had been coming on for six weeks, and they all pointed to the diagnosis of insular sclerosis of the brain and spinal cord. Syphilis was denied; but he was, nevertheless, put upon iodide of potassium. His nervous symptoms improved, but a swelling appeared on his back between his shoulders, and also one on the inner side of the right thigh near the knee. These swellings did not seem to have any relation to the iodide of potassium that he was taking. The swelling on the thigh gradually subsided, and ultimately disappeared; that on the back increased in size, and ulcerated, the surface of the granulations being smooth, and there being very little discharge. In the opinion of all who saw the patient, this ulcer was syphilitic, and calomel was ordered. After a short time there appeared slightly raised erythematous patches on the trunk and limbs. They came out gradually; some sloughed, others simply ulcerated. Then the ulcer of his back began to slough. About this time a swelling appeared in front of the inner end of the right clavicle, but subsided after a while. The nervous symptoms had by this time completely disappeared, and there seemed reason for expecting complete recovery, but fever set in and he rapidly lost ground. Albuminuria and anasarca appeared, followed by hoarseness and aphonia, and in this state he died. At the autopsy no disease of the nervous centres was found to explain the symptoms observed during life. The skull was thick, and there were two patches, each about the size of a shilling, where the pericranium was thickened and red. There was ulceration of the larynx above the vocal cords, laying bare one of the arytænoid cartilages. There was acute pericarditis, lungs œdematous, the kidneys were large and white. Some of the tumours of the skin were merely boils, others were deep ulcers. The epididymis was swollen, smooth, dense, and white. In the back the trapezius muscle was exposed; there was a dense white mass of tumour here, ill defined, and yielding very little juice on scraping. Microscopically, it consisted of small round cells with very little reticulum; it was very vascular, infiltrating the surrounding tissues in all directions, portions of which (including some muscular

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fibres) were found embedded in it. The swelling of the epididymis seemed to be of precisely the same nature. As in Mr. Colley's case, the question of syphilis had been raised, but there was no history of it; antisyphilitic remedies failed, there was nothing found at all resembling a gumma, and, moreover, it was not the testicle, but the epididymis which was affected. There was nothing of the nature of tubercle found about the growth. He would prefer to leave it unnamed for the present.

Mr. DURHAM said that these were very remarkable cases. He had seen Dr. Taylor's patient during life, and the case recalled to his mind that of a young woman who had come under his own care for an enlarged gland in the neck. The skin became invaded, and ulceration took place, followed by sloughing; a good deal of thickening and infiltration of the surrounding tissues took place; and this went on in all directions until her death. He remembered another, somewhat similar, case—that of a man aged fifty-six, in whom a "pimple" formed on the right leg, and gradually increased in size; little tumours gradually appeared all over the body; they continued to increase in size, and some ulcerated and sloughed. Ultimately the man died. The tumours were found to be more allied to sarcoma than to anything else.

Dr. PYE-SMITH had seen Dr. Taylor's patient during life, and was strongly of opinion that the disease was not of syphilitic origin. He alluded to the case of a man who had had small sarcomata scattered throughout his skin and subcutaneous tissues secondary to a growth in the cæcum. The case had been published by Dr. Fagge.

Dr. STEPHEN MACKENZIE mentioned the case of a man who was the subject of lymphadenoma, and who had a large ulcer on his chest; and also a patient of Dr. Sansom's, who was suffering from anæmia, and in whom hundreds of tumours developed in various parts of the body, but in this case there was no ulceration of the skin.

Dr. HOWARD BENDALL referred to a case that had been published in the *Lancet* a year ago, of a man with large, flat, oval tumours, some of which ulcerated after some of the ulcers had healed. The patient had died, and a tumour was found in the heart. The tumours were confined to the true skin. There was no history of syphilis.

Mr. BUTLIN observed that the difficulty was to determine whether these tumours belonged to the group of infecting tumours or not. He considered it was hardly possible at present to decide. The possibility of their being due to micro-organisms occurred to him, and he could not help thinking that the time might come when it would be shown that all forms of carcinoma and sarcoma were dependent upon the entrance of micro-organisms into the system.

CONGENITAL HYPERTROPHY OF LIMBS.

Mr. EVE showed the left foot of a girl aged twenty-four. It was four inches and a half longer than the other one, the increase in size being mainly due to the enormous overgrowth of the skin of the sole of the foot; it had been from birth larger than the other one, but was increasing rapidly in size, and the right foot having begun to grow too for four months, the patient had been admitted into the Westminster Hospital, where the foot was amputated. The patient died from exhaustion, and it was found that the head, brain, and tongue were bigger on the right side than on the left. She evidently had a tendency to tumour formation, as there was a fibrous tumour of the sclerotic, an epulis, and exostosis on the os calcis and one of the metatarsal bones, all on the left side. He also showed the hand of a man which had been larger than the other one from birth, but which had afterwards grown rapidly. In this case too the increase in size was mainly due to overgrowth of the corium. In both there was a peculiar form of ulceration of the skin, there being an ingrowth of epithelium not actually amounting to an epithelioma.

The following card specimens were exhibited:—

Dr. PERCY KIDD—Primary Cancer of the Pancreas.

Dr. LEDIARD—1. Dry Caries of Knee-joint. 2. Melanotic Spindle-celled Alveolar Sarcoma from the Calf of the Leg, and a Gland.

Dr. F. TAYLOR—Intestinal Obstruction from Adhesion of the Intestine to the Mesentery.

Dr. ABERCROMBIE—Complete Atresia of the Right Ventricle in an Infant.

Dr. SAVAGE—1. A Brain with Symmetrical Tumours. 2. A Brain with one-half the Cerebellum absent.

Dr. MORRISON—Laryngeal Phthisis.

Mr. HORSLEY—Syphilitic Intestine and other Organs in a Child (recent specimen).

Mr. WATSON CHEYNE exhibited a series of Preparations of Tubercle-Bacilli.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 4.

Dr. GERVIS, President, in the Chair.

KNOTTING OF UMBILICAL CORD.

DR. GODSON exhibited a four months' fœtus, with placenta, showing a knot in the umbilical cord, with atrophy of the cord on either side of it, leading, he believed, to the death of the fœtus.

DERMOID CYST.

Dr. EDIS exhibited a dermoid cyst removed by him. It was so extensively adherent that it was difficult to determine whence it had sprung. Both ovaries and broad ligaments were removed with it. The patient recovered.

HERNIA OF A UTERINE FIBRO-MYOMA.

Mr. KNOWSLEY THORNTON showed a uterine fibro-myomatous tumour, weighing eleven pounds and a half, removed by him. The abdomen had been opened some years previously, but the operator then finding the tumour uterine, closed the wound. A hernia of the tumour resulted; it became adherent, ulcerated, and bled. Mr. Thornton removed it with the uterine appendages. The tumour was of the soft kind, and, he thought, might have been cured by removal of the uterine appendages; but it was impossible to close the wound without removing the uterus. He believed the case unique. The patient was doing well.

AXIS-TRACTION VULSELLUM FORCEPS.

Dr. ROBERT BARNES showed a sessile submucous fibro-myoma, and a new axis-traction vulsellum forceps which he had devised and used for its removal. By this instrument the tumour was dragged within reach without undue or misdirected force, and room was left for manipulation in front. He thought this application of the principle of Tarnier's forceps would prove of great value.

Dr. AVELING had invented and published forceps of the form permitting axis-traction ten years before Tarnier's forceps of the same form was made known.

Dr. HEYWOOD SMITH suggested that this forceps would be better if the blades were made separable.

CYST AND TUMOUR OF PLACENTA.

Mr. MARK (for Dr. John Williams) exhibited a placenta having on its fœtal aspect a cyst the size of a Tangerine orange, at the base of which was a tumour, apparently fibrous, the size of an almond.

ON THE "PRESSURE OF THE FEMORA," AND ITS INFLUENCE ON THE SHAPE OF THE PELVIS.

This paper by Dr. CHAMPNEYS was then read. After a brief review of the history of pelvic literature, special mention was made of the study of the fœtal pelvis by Fehling, which showed that many characters previously supposed to be the result of the operation of mechanical influences after birth were really congenital and antecedent in date to the operation of such influences. The same applied to the rickety fœtal pelvis. It followed from this that the scope of mechanical influences, as hitherto accepted, had to be reconsidered. In considering the influence of the "pressure of the femora" fallacies were pointed out, and all possible sources for this pressure were reviewed. These included: 1. Passive resistances: (*a*) bones, (*b*) ligaments, (*c*) couples. 2. Active operations: (*a*) action of muscles. These were in turn scrutinised, and the conclusion reached that "the action of the muscles joining the femur and the pelvis is a true cause of the 'inward pressure of the femora,' and is aided by the muscles favouring inversion of the foot." A corollary followed, "that use of the lower limbs will increase the 'inward pressure of the femora.'" In unsymmetrical pelves, and pelves in which the acetabula are within the line of the body-weight, other consequences followed. These were illustrated by three figures. The phrase "increased pressure on the over-weighted side" was shown to include many different factors.

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Dr. Robert Barnes suggested that one factor in producing flattening of the rickety fœtal pelvis might be pressure from the attitude of the fœtus, with the thighs doubled up.

Dr. Matthews Duncan agreed with the paper in the main. Dr. Champneys had given a valuable sketch of the history of the subject, and his special study of the action of femora as a result of body-weight and muscular force made the paper a great contribution to pelvic literature. He (Dr. Duncan) would not give muscular action a paramount position, and for that still vindicated the great force of body-weight.

Dr. Aveling drew attention to a pelvis in the Society's museum, the shape of which was normal, although congenital dislocation of the hip was present.

Mr. Doran thought muscular action in the fœtus was a force too slight and intermittent to be capable of altering the shape of cartilaginous bones.

Dr. Champneys agreed that gravity was the most powerful of the forces acting on the pelvis. Although the action of mechanics might have been pressed too far, it was impossible, in the face of the malacosteon pelvis, to upset it. He did not think that the fœtal attitude was capable of flattening the fœtal pelvis, for the fœtus floated in fluid, and therefore was not exposed to any inequality of pressure; and its attitude was not, for it, one of constraint.

Case of Labour with Atresia Vaginæ.

This paper, by Dr. Fancourt Barnes, was then read. The patient was aged twenty-one, pregnant for the first time. The vagina was represented by a *cul de sac* about one inch and a half deep, at the bottom of which was a pin-hole aperture, the orifice of a canal of no larger dimensions leading into the uterus. This canal traversed about two inches of tissue before reaching the uterine cavity. The patient was anæsthetised, the canal stretched with a Priestley's dilator, then incised on each side with Simpson's metrotome, and still further enlarged by laceration with the finger. Delivery was then accomplished with Barnes's forceps, it being found impracticable to apply Tarnier's. The operation lasted an hour, and was performed under carbolic spray. Mother and child did well.

Dr. Edis confirmed Dr. Barnes's account of the case.

Dr. Heywood Smith mentioned a case he had formerly brought before the Society.

Dr. Fancourt Barnes replied.

The report of the Committee upon the specimen shown by Dr. Wynn Williams at the last meeting was read, to the effect that the tumour was a submucous fibroid.

THE ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

Monday, April 2.

Joseph Walker, M.D., President, in the Chair.

Some interesting specimens of abnormal dentition having been exhibited by Messrs. Hutchinson, Stocken, and Corbett, a paper was read by Mr. J. B. Sutton, L.R.C.P., "On the Development of the Lower Maxilla." After showing that great differences of opinion had existed amongst anatomists as to the mode of development of the lower jaw—even so recent an authority as Professor Humphry considering that it was usually formed from one centre,—Mr. Sutton described its growth from *six* centres, illustrating his description by means of specimens. The first centre to appear was that which formed the greater part of the body of the bone; next came centres for the condyle, coronoid process, and angle; and then one in front known as the "mento-meckelian." These united, and then on the inner side of the mass thus formed (the dentary) a thin plate of bone appeared, at right angles to it and quite distinct. This was the "splenial"; above, it supported the dental follicles, whilst below it were Meckel's cartilage and the inferior dental nerve. A little later the splenial sent down a process from its inner edge, which enclosed the nerve, uniting below with the outer plate or dentary, with which also it united by its outer edge above the nerve. The descending process of the splenial formed the inner wall of the maxilla, and a growth upward from it formed the inner wall of the alveoli. After the fourth month all trace of the separate parts was lost, and the bone assumed the condition which it presented at birth. Mr. Sutton next referred to Serres' "loi de conjugaison"—*i.e.*, that foramina in bones are always formed by the apposition of two or more distinct bones, or of two or more distinct centres of ossification,—and showed that this afforded strong *à priori* evidence of the compound origin of the lower jaw, which was fully confirmed by the results of actual investigation. Lastly, he pointed out the homologies of these centres in the compound jaws of fish, amphibia, and reptilia, showing that these parts, which in man united at so early a period that their very existence had been doubted, remained separate throughout life in some of the lower vertebrata, and that thus the evidence of comparative anatomy also tended strongly to confirm the compound origin of man's lower jaw.

A short discussion followed, after which a paper was read by Mr. Alfred Coleman, F.R.C.S., on "Spontaneous Fracture of the Teeth." He related the particulars of four cases which he had met with in the course of his practice in which fracture, or splitting, of teeth had occurred without any apparent assignable cause, and referred to other cases recorded in the Society's *Transactions*. It had been suggested that the splitting was due to accumulation of gases in the pulp-cavity, but he (Mr. Coleman) thought it was in some way connected with the calcification of the pulp, which he had found to be a constant concomitant; and he gave some reasons in support of his hypothesis.

In the discussion which followed all the speakers were of opinion that in these cases of so-called spontaneous fracture of the teeth the accident was always due to some form of mechanical violence, but that the real cause was overlooked or forgotten owing to the fact that a considerable time might elapse before any symptoms appeared to call attention to the fracture. Cases were related by Messrs. Charles Tomes, Hutchinson, and Hern, in which there had been complete absence of symptoms for periods varying from three months to nearly two years after the occurrence of such accidental fractures. Mr. Hutchinson also suggested that the calcification of the pulp which was so generally present was due to irritation set up by the fracture, and was therefore a result of the accident, and not the cause of it.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Friday, March 16.

Dr. Tripe, President, in the Chair.

The evening was by previous arrangement devoted to a discussion of certain practical recommendations of the Royal Commissioners appointed to report on Hospitals for Infectious Diseases, viz.:—1. That the provision of hospital accommodation for persons suffering from infectious disease shall be disconnected from Poor-law administration, and treated as part of the sanitary arrangements of the metropolis. 2. That the certificate of disease shall be sent to the medical officer of health for the district, who shall satisfy himself that the patient can be isolated at home, and, if not, shall notify the case to the Metropolitan Asylums Board, who will take charge of the patient. 3. That if the sick person cannot be removed or isolated by his friends, the medical officer of health shall be bound to take all necessary steps for his isolation, with power to clear the house of its inmates, to have the house disinfected, and to require the revaccination, in the case of small-pox, of all persons not otherwise protected.

Dr. Tripe, in opening the discussion, remarked that all were agreed as to the first point, it having been repeatedly urged by the Society on the Local Government Board and on Parliament, and that little or no exception would be taken to the subsidiary recommendation that the work should at present devolve on the Metropolitan Asylums Board, and that information of the existence of such disease should be given by the person in charge of the case or by the occupier, or in default of these, by the medical attendant, a small fee being paid to the latter. But the recommendation that the medical officer of health should intervene in all cases he considered impracticable. He had had as many as fifteen cases of small-pox reported to him in one day, and at all hours of the day and night. To visit each personally

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would obviously be impossible, and he would rather that the certificate of any medical man should be forwarded direct to the Asylums Board, the medical officer of health being called in only in case of the patients objecting to removal. Again, in the case of non-paupers a medical man might, and indeed probably would, oppose the removal of a patient who, though he could not be isolated, was likely to pay; and if, on the medical officer of health appealing to a magistrate, the latter were to take the side of the attendant, a painful conflict of authorities would ensue.

Dr. DUDFIELD thought these difficulties had been greatly overrated by Dr. Tripe. He did not consider it necessary for the medical officer of health to visit a case personally unless he had reason to doubt the correctness of the diagnosis or the veracity of the medical attendant. If removal became the law of the land the certificate of any medical man must be accepted, though it was desirable that a special form for making out such certificates should be supplied by the sanitary authority. The shortest course for effecting a removal would in practice be found to be the notification of the case to the medical officer of health, who, or his deputy, would send word to the ambulance to take the patient to the hospital. He always communicated with the medical man in charge of any case that came to his knowledge, offering his assistance and advice. In some glaring instances he had overridden the medical attendant without protest, and did not fear any serious conflict of authorities, but sooner or later, if legislation went much further in this direction, the medical officer of health must be debarred from private practice.

Dr. BRISTOWE anticipated concealment of cases, and questioned the safety of relying on the certificate of every medical man. The medical officers of fever and small-pox hospitals could tell of numerous errors of diagnosis made in good faith, and indeed his own inspectors had often corrected a medical opinion.

Dr. TRIPE mentioned, in illustration of the difficulties attending the removal of an unwilling patient backed by his medical attendant, a case of siege maintained for the whole duration of the illness (viz., small-pox of a severe type), all food, etc., being brought in and the doctor's visits paid at night, when the sanitary authority had no right to enter. Once the officer succeeded in getting into the house, but was immediately expelled with no small violence. The parties were fined for obstruction, but their purpose had been attained.

Messrs. LOVETT and CORNER pointed out the danger of spreading an epidemic by the dispersion of the occupants of an infected house, as had many times followed the breaking up of a school on account of the appearance of scarlatina among the pupils.

Dr. DUDFIELD fully realised the danger, and urged the establishment of a house or houses for quarantine, whither such persons as had been exposed to infection might be removed for observation when the actual patient could neither be isolated nor removed. Even if several houses or a whole street were required for this purpose in a wide-spread epidemic, he did not apprehend much difficulty in carrying out a well-devised Act, for the expenses, which would be borne by the district, would be a far less burden on the rates than the maintenance of widows and orphans saved by the limitation of its ravages; and the poor themselves, as we learnt in the cholera time, would be the last to object. Compensation to persons thrown out of employment thereby would indeed be a wise economy, and when sanctioned by the law would, before long, be appreciated as such by the public.

A SOCIABLE DOCTOR.—Dr. S. Weir Mitchell has presented $5000 to the Philadelphia College of Physicians as the nucleus of an entertainment fund, the income of which is to be devoted to an annual dinner, or in any other way preferred by the College, in order to promote sociability.—*Boston Medical Journal*, March 29.

THE PARIS NIGHT SERVICE.—Dr. Passant states in his report for the first quarter of 1883 that the total number of visits amounted to 1865, of which males formed 32 per cent., females 54, and children less than three years old 14 per cent. In forty-seven instances the patient was dead before the doctor could arrive. The visits of the quarter were 113 less in number than those of the same quarter in 1882.—*Gaz. des Hop.*, April 26.

OBITUARY.

BENJAMIN WILLS RICHARDSON, F.R.C.S.I., ETC.

AFTER a long and painful illness, this well-known surgeon died at his residence, 22, Ely-place, Dublin, on Sunday, April 29. Up to the time of his death, Mr. Richardson occupied posts of trust and honour in the Royal College of Surgeons in Ireland, which he joined as a Licentiate and Fellow in the year 1844. He was Senior Examiner in Surgery and in Dental Surgery, and had for many years sat on the Court of Examiners in the College. When a young man, Mr. Richardson acted as Demonstrator of Anatomy in the Richmond Hospital (afterwards called the Carmichael) School of Medicine. He subsequently became Surgeon to the Adelaide Hospital in Peter-street, where he did much good work during many years. Mr. Richardson possessed inventive powers of no mean order, and among the instruments he devised mention may be made of a dovetailed stricture dilator, the dovetailed urethrotome and urethrometer (a bulbed stricture sound, of which the object was to sound a stricture from behind forwards), the tubular *pneumartère*, a modification of Ricord's phimosis forceps, a modified American apparatus for the treatment of fractures of the shaft of the femur, besides various new ether-inhalers. In the *Dublin Monthly Journal of Medical Science* for December, 1876 (vol. lxii.), he published a description of a carbolic spray apparatus worked with the foot and Fletcher's bellows. Although he never wrote a book, Mr. Richardson was the author of many papers on pathology and operative and clinical surgery in the medical periodicals. To the pages of the *Dublin (Quarterly) Journal of Medical Science* he contributed articles on "Slow Pulse and Fatty Degeneration of the Heart," and on "Fatty Degeneration of the Kidney and Liver, with Observations on the Supposed Uræmic Poisoning." At a time when histology and microscopic pathology were scarcely known as branches of medical science, Mr. Richardson had gained a reputation as a skilful microscopist, and to the last he found pleasure in histological and pathological research. So lately as the year 1881 he described in the *Journal of the Royal Microscopical Society* a method of staining sections of the spinal cord, and of animal and vegetable tissues. For many months before his death Mr. Richardson had been in delicate health, the affection from which he suffered being recognised as dilated aorta. At the time of his death he was sixty-four years of age.

SURGEON-GENERAL BARNES.

BRIGADIER-GENERAL JOSEPH R. BARNES, M.D., late Surgeon-General U.S. Army, died at Washington, on April 5, in the sixty-sixth year of his age. After pursuing a distinguished career in the Medical Department of the U.S. Army, he was, on what has always seemed to us the unjust dismissal of Surgeon-General Hammond, appointed, during the Civil War, by Secretary Stanton, to the Surgeon-Generalship of the U.S. Army. In consequence of the great friendship which Secretary Stanton entertained for him, he was enabled to place the Medical Department of the Army on a proper and independent footing enjoyed by no other army; and it was on his proposal that the theatre in which President Lincoln was assassinated was converted into the Museum and Library of the Medical Department of the Army, since become so famous in medical history. "It is largely due to his personal influence and administrative ability," the *Philadelphia Medical News* observes, "that we possess the 'Medical and Surgical History of the War,' the Army Medical Museum, and the invaluable Library of the Surgeon-General's Office. The secret of his success is an open one, and yet it is one which comparatively few can grasp and apply. It consisted in quick perception in selecting the right men for different kinds of work, in giving the men thus selected ample powers and responsibility, and allowing them full credit for the results. He did not try to supervise all the details of the work of his department—a mistake which too many bureau officers are apt to make,—but gave each of the officers under him an opportunity to develope his work in his own way, subject, of course, to the approval of his chief. He had no thirst for personal notoriety, and his subordinates felt that while they would be held responsible for the completeness and correctness of their work, they might be sure

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of his support so long as that work was well done. Under his administration, the Medical Department of the U.S. Army has become the best organised and best supplied of any similar department in the world."

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Members on April 26:—

Fraser, Donald Manson, M.D. Aber., Haverstock-hill, N.W.
Gibbons, Robert Alexander, M.D. Edin., 32, Cadogan-place, S.W.
Granville, Joseph Mortimer, M.D. St. And., 16, Welbeck-street, W.
Maguire, Robert, M.D. Lond., Manchester.
Parker, George Williams, 39, St. Mary's-road, S.E.
Sinha, Narendra Prasanna, L.M. Calcutta, 37, Glo'ster-crescent, N.W.
Stevenson, William Edward, M.B. Cantab., 15, Henrietta-street, W.

The following gentlemen were admitted Licentiates on April 26:—

Bloxam, George Edward, Wimbledon Hill.
Bown, Arthur Thomas, West Combe, Evercreech, Bath.
Braine, George Marcus Panton, 7, Crossfield-road, N.W.
Cave, Edward John, Melbury Osmond, Dorchester.
Christian, John Barrow, Ashwell Station.
Crago, William Henry, Middlesex Hospital, W.
Cresswell, Francis, Winchmore Hill, W.
Gale, Arthur Knight, Fulham Hospital, Seagrave-road, S.W.
Glover, John Philip, 2, Osborne-terrace, S.W.
Goddard, Charles Ernest, 14, Cambridge-gardens, N.W.
Haynes, Walter Frederic, 53, Devonshire-street, N.
Hind, Alfred Ernest, 37, Guilford-street, W.C.
Howse, Percy William McDowall, 74, Victoria Dock-road, E.
Jones, John Edwards Evans, Head Master's House, Maitland-park, N.
Lessey, Sandford Scobell, 4, Park-gardens, Ealing, W.
Lewers, Arthur Hamilton Nicholas, 86, Gower-street, W.C.
Masters, Edgar Ernest, 84, Railton-road, S.E.
Mickle, Herbert, 3, Lansdowne-place, W.C.
Robson, William Waller Constable, 25, Brompton-square, S.W.
Rowell, Herbert Ellis, College Park, S.E.
Saneyoshi, Yasusumi, 65, Lambeth-palace-road, S.E.
Stone, Frederick William Stanley, Hospital for Children, Shadwell, E.
Style, Mark, St. Mary's Hospital, W.
Thornton, Henry John, Middlesex Hospital, W.
Trinder, Alfred Probus, St. Bartholomew's Hospital, E.C.
Unicume, Thomas, Ramsgate.
Vogan, James Norman, 45, Eastlake-road, S.E.
Welch, George, St. Bartholomew's Hospital, Rochester.
Whitworth, William, 43, Frederick-street, W.C.
Wholey, Thomas, 2, North Side, Victoria-park-square, E.
Williams, John Henry Hywell, Haverfordwest.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology, at a meeting of the Board of Examiners on the 26th ult., and when eligible will be admitted to the pass examination, viz.:—

Barrett, S. Edward, student of the London Hospital.
Clarkson, F. H. Frederick, of St. Bartholomew's Hospital.
Deane, Edward, of Guy's Hospital.
Hassard, E. Moresby, of St. Bartholomew's Hospital.
Hasell, R. William, of the London Hospital.
Hirst, Herbert, of the University of Edinburgh.
Lucy, R. Horace, of the University of Edinburgh.
Lynch, G. W. Augustus, of St. Thomas's Hospital.
Macartney, E. Kendrick, of University College Hospital.
Manning, P. Percy, of King's College Hospital.
Monk, H. G. Hawkins, of King's College Hospital.
Robinson, A. William, of St. George's Hospital.
Stafford, William, of the Glasgow School.
Taylor, William, of the University of Edinburgh.
Walsh, C. Lawrence, of St. Bartholomew's Hospital.
Wordsworth, George, of the London Hospital.

Eight candidates were referred to their anatomical and physiological studies for three months. The following gentlemen passed on the 27th ult., viz.:—

Adamson, C. Edward, student of University College Hospital.
Agnew, E. Dalton, of St. Bartholomew's Hospital.
Brown, D. Matthews, of the Edinburgh School.
Burton, F. William, of University College Hospital.
Cholmeley, H. Patrick, of St. Bartholomew's Hospital.
Collinson, F. Arthur, of King's College Hospital.
Farrar, J. Frederick, of the Edinburgh School.
Mallam, Lawrence G., of the Edinburgh School.
Nash, Charles, of King's College Hospital.
Oxsard, A. Tronson, of the London Hospital.
Parry, R. Henry, of the Glasgow School.
Pockley, F. Antill, of the Edinburgh School.
Staveley, W. H. Charles, of St. Thomas's Hospital.
Steer, A. W. Thorburn, of St. Bartholomew's Hospital.
Stocker, E. Gaved, of St. Bartholomew's Hospital.
Wood, A. Thorley, of St. George's Hospital.
Wyncoll, J. William, of the Edinburgh School.

Seven candidates were referred. The following gentlemen passed on the 30th ult., viz.:—

Barnett, J. E. Sewill, student of Charing-cross Hospital.
Batten, Harold A. W., of St. Bartholomew's Hospital.
Bostock, R. Ashton, of St. Bartholomew's Hospital.
Bowman, Reginald, of the Edinburgh School.
Brighouse, H. William, student of St. Bartholomew's Hospital.
Crisp, John, of Guy's Hospital.
Gardner, Henry W., of St. Bartholomew's Hospital.
Hope, George, of St. Thomas's Hospital.
Nichol, F. Edward, of St. Thomas's Hospital.
Nicholson, Edgar, of the Middlesex Hospital.
Osmund, E. Bartrum, of the Middlesex Hospital.
Smith, H. E. Hill, of King's College Hospital.
Stephen, W. H. George, of the Edinburgh School.
Taylor, J. Cleasby, of the Edinburgh School.

Eight candidates were referred for three months, and two for six months. The following gentlemen passed on the 1st inst., viz.:—

Barber, R. David, student of St. Bartholomew's Hospital.
Bond, B. Mayston, of St. Bartholomew's Hospital.
Creasy, Rolf, of Guy's Hospital.
Dove, A. Charles, of St. Bartholomew's Hospital.
Duer, S. Unwin, of the Middlesex Hospital.
Ellis, H. Hanlock, of St. Thomas's Hospital.
Kidd, H. Cameron, of St. Thomas's Hospital.
Lewis, C. James, of the Edinburgh School.
Lindon, Albert, of King's College Hospital.
MacGregor, John, of the Edinburgh School.
Niven, George, of the Cambridge School.
Peake, Solomon, of the Middlesex Hospital.
Richards, A. Izod, of the Middlesex Hospital.
Snow, L. Mason, of St. Bartholomew's Hospital.
Sprigge, S. Squire, St. George's Hospital.
Strickland, P. C. Hutchinson, of St. Bartholomew's Hospital.
Stubbs, P. B. Travers, of St. Bartholomew's Hospital.
Symonds, G. H. Hamilton, of the Edinburgh School.
Thomson, H. Alexis, of the Edinburgh School.
Walker, Edward, of the Edinburgh School.
Whiteley, D. Flockton, of St. Bartholomew's Hospital.
Wright, R. Wallace, St. George's Hospital.

Three candidates were referred. The following gentlemen passed on the 2nd inst., viz.:—

Aldous, G. Frederick, student of St. Bartholomew's Hospital.
Allen, Vernon, of St. George's Hospital.
Bulstrode, H. Timbrell, of St. Thomas's Hospital.
Comber, A. Wandesforde, of King's College Hospital.
Edwards, Percy, of University College Hospital.
Ewart, Charles, of St. George's Hospital.
Gilford, Hastings, of Guy's Hospital.
Griffin, J. Hubert, of St. Bartholomew's Hospital.
Gutch, G. Hancock, of St. Thomas's Hospital.
Larcombe, Samuel S., of Charing-cross Hospital.
McDonogh, Bernard, of the Westminster Hospital.
Mariette, E. P. Alphonse, of King's College Hospital.
Metzgar, Charles, of Guy's Hospital.
Morgan, David, of University College Hospital.
Nairn, Robert, of St. Thomas's Hospital.
Powne, Leslie, of the Middlesex Hospital.
Pratt, G. Arthur, of University College Hospital.
Stephens, J. William, of St. Bartholomew's Hospital.
Winckler, W. Joseph, of University College Hospital.

Five candidates were referred for three months.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 26:—

Bird, Henry, Brampton, Huntingdon.
Edwards, Charles Augustus, Bourne House, Wiveliscombe.
Hamilton, Francis Dancy, Lower Sydenham.
Mitchell, Henry, 22, Eastbourne-terrace, W.
Stevens, Henry George Lewis, Bury St. Edmunds.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Bowling, George Augustus Lovelace, London Hospital.
Lewis, James King, Charing-cross Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

BEATLEY, WM. CRUMP, M.B. Durh., M.R.C.S. Eng., L.S.A.—Assistant Medical Officer to the Somerset and Bath Lunatic Asylum.

POLLARD, FREDERICK, M.D. Lond.—Physician to the Liverpool Infirmary for children, *vice* M. G. B. Oxley, M.D., now Consulting Physician.

BIRTHS.

BARTLETT.—On April 27, at 40, Elgin-road, St. Peter's-park, the wife of Edward Bartlett, M.R.C.S., of a son.

MAITLAND.—On March 24, at Madras, the wife of John Maitland, Surgeon Indian Medical Department, of a daughter.

NAPPER.—On April 22, at Broad Oak, Cranleigh, Surrey, the wife of A. Arthur Napper, M.R.C.S., of a son.

PULLEN-BURRY.—On April 18, at Baldock, Herts, the wife of H. B. Pullen-Burry, L.R.C.P., M.R.C.S., of a daughter.

TRAVERS.—On April 25, at 2, Phillimore-gardens, W., the wife of W. Travers, M.D., F.R.C.S., of a son.

WATTS.—On April 28, at Fort Pitt, Chatham, the wife of Brigade-Surgeon Watts, A.M.D., of a son.

MARRIAGES.

CHAPMAN—MEDDERSPOON.—On April 28, at Kensington, Charles William Chapman, L.R.C.P., to Mary, daughter of the late David Medderspoon, solicitor, Perth.

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BALLANCE—SMART.—On April 24, at Bryanston-square, Charles Alfred Ballance, M.S., M.B., F.R.C.S., of 56, Harley-street, Cavendish-square, W., and St. Thomas's Hospital, to Sophia Annie, daughter of the late Alfred Smart, of The Priory, Lee-road, Blackheath.

FALLS—ROWLANDS.—On April 26, at Carmarthen, William Coulthard Falls, M.A., M.B. Oxon., eldest son of W. S. Falls, M.D., of Bournemouth, to Katherine Edith, youngest daughter of James Rowlands, F.R.C.S., of Carmarthen.

HOWARD—READY.—On April 28, at Croydon, Horace Percival Howard, of 117A, Earl's Court-road, Kensington, eldest son of Horace Fulcher Howard, M.R.C.S., of New Buckenham, Norfolk, to Florence Mary, younger daughter of the late Robert Thomas Ready.

MACDOUGALL—MACKENZIE.—On April 26, at Garrion Tower, Lanarkshire, John Aymers Macdougall, M.D., F.R.C.S., of Carlisle, to Helen Mary, youngest daughter of John Munro Mackenzie, Esq., of Mornish, Argyllshire.

OGILVY—GILBERT.—On April 12, at Bermuda, Surgeon-General Ogilvy, M.D., Principal Medical Officer Bermuda Command, to Emma Dalsell, youngest daughter of the late O. Anghin Gilbert, Esq., of Demerara, British Guiana.

SEAGER—HETT.—On April 24, at Clapham, Herbert West Seager, M.D., of Hampton Court, to Emily Mary, eldest daughter of Edmund S. Hett, of Cavendish House, Clapham Common.

WEAVER—BARTRUM.—On April 30, at Friern Barnet, Thomas, second son of Loraine Weaver, M.R.C.S., of Clapham, to Edith Emily, youngest daughter of the late Thomas Reynolds Bartrum, of Leytonstone.

WOOD—ALLEN.—On April 28, at St. Marylebone, Edwin Stanley Wood, L.K.Q.C.P., of Pontypool, Monmouthshire, to Mary Anne Taylor, younger daughter of David John Allen, M.D., of Wellington House, St. John's Wood.

DEATHS.

Corrigendum.—THANE, THOMAS, second son of George Dancer Thane, M.D., of 15, Montague-street, Russell-square, W.C., at Parramatta, New South Wales, on March 13, in his 27th year.

MASSEY, WILLIAM, L.R.C.P., of Castle Donington and Melbourne, on April 23, aged 52.

RACKHAM, WILLIAM ABEL, M.R.C.S., at Beachamwell, Norfolk, on April 27, aged 69.

TILTON, ROWLAND, L.R.C.P. Edin., of Park Villa, Stonehouse, Gloucestershire, at Clifton, Bristol, on April 22, in his 65th year.

WEAVER, LORAINE, M.R.C.S., at 185, Clapham-road, S.W., on May 1, in his 68th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

DENBIGHSHIRE INFIRMARY, DENBIGH.—House-Surgeon. Salary to commence at £85 per annum, with board, washing, and residence in the Infirmary. Candidates must be duly qualified, and conversant with the Welsh language. Applications to be sent to the Secretary, on or before May 26.

ST. MARY'S HOSPITAL, W.—Surgeon for the Ophthalmic Out-Patients' Department. Candidates must be Fellows or Members of one of the Colleges of Surgeons of the United Kingdom. Applications, with three recent testimonials, to be sent to the Secretary, on or before May 19.

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, WELBECK-STREET, LONDON, W.—Two Honorary Physicians. (*For particulars see Advertisement.*)

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Cannock Union.—Mr. John Alfred Masters has resigned the Hednesford District: area 8453; population 11,096; salary £30 per annum.

Sunderland Union.—Mr. Rankine has resigned the Bishopwearmouth East District: population 32,208; salary £75 per annum.

Watford Union.—Mr. J. H. Bartlett has resigned the Sarratt District: area 1550; population 690; salary £50 per annum.

Witney Union.—The offices of Medical Officer for the Witney District and the Workhouse are vacant by the death of Dr. Augustine Batt: area 12,990; population 7245; salary £150 per annum. Salary for the Workhouse £60 per annum.

APPOINTMENTS.

Pembroke Union.—Louis G. Leslie, L.R.C.P. Edin., L.R.C.S. Edin., to the Third District.

Ross Union.—George Richards, L.R.C.P., L.S.A., L.F.P.&S. Glasg., to the Third District.

Thame Union.—Erasmus Bush, L.R.C.P. Lond., M.R.C.S. Eng., to the Thame District and the Workhouse.

Wilton Union.—Francis G. Hayes, M.R.C.S. Eng., L.R.C.P. Lond., to the Dunster District.

Yeovil Union.—Charles J. Marsh, L.R.C.P. Edin., M.R.C.S. Eng., to the First District and the Workhouse.

THE Library of the Royal College of Surgeons of England will be closed on May 4, 11, and 12 for the purposes of the examinations.

HANDSOME BEQUESTS.—The late Mr. Thomas Ogilvie, Woodfoot, Kennishead, bequeathed the following sums to charities, which have been recently paid:—To local charities, including Pollokshaws Destitute Sick Society and Glasgow Eastwood Club, £359; to the Royal Infirmary and to the Western Infirmary, £324 each.

APPOINTMENTS FOR THE WEEK.

May 5. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Mr. A. Geikie, "On Geographical Evolution."

7. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

ROYAL INSTITUTION, 5 p.m. General Monthly Meeting.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 p.m. Casual Communications by Messrs. Ackery, Canton, and Dewes. Dr. Dyce Duckworth, "On the Characters of the Teeth in Persons of the Arthritic Diathesis."

8. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

ANTHROPOLOGICAL INSTITUTE (4, St. Martin's-place, W.C.), 8 p.m. Mr. Frederick Bonney, "On some Customs of the Aborigines of the River Darling, New South Wales." Lieut.-Col. H. H. Godwin-Austen, F.R.S., "On the Discovery of some Worked Flints, Cores, and Flakes from Blackheath, near Chilworth and Bramley, Surrey." Admiral F. S. Tremlett, F.G.S., "Notes on Stone Circles in Brittany." Mr. C. Staniland Wake, "On the Nature and Origin of Group Marriage."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Angel Money, "On Gliomatous Enlargement of the Pons Varolii in Children." Dr. Seymour Sharkey, "On a Case of Asymmetry of the Brain, presenting peculiarities which bear upon the question of the Connexion between the Optic Nerves and certain definite areæ of the Cerebral Cortex." Dr. Barlow will show a Case of Arrested Development of both Clavicles.

9. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

ROYAL MICROSCOPICAL SOCIETY, 8 p.m. Dr. P. M. Braidwood, "Observations on Three Human Contagia."

10. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "Count Rumford."

OPHTHALMOLOGICAL SOCIETY, 8½ p.m. Drs. Edmunds and Lawford, "On the Immediate Causation of Optic Neuritis, with Cases." Mr. W. Jennings Milles, "On Cases of Recovery from Mild Sympathetic Ophthalmitis." Mr. Snell, "On a Case of Recovery from Sympathetic Ophthalmitis." Mr. J. R. Adams, "On Peculiar Changes at the Yellow Spot." Mr. Priestley Smith, "On a New Self-registering Perimeter." Mr. Couper, "On a New Refraction Ophthalmoscope." Mr. J. R. Adams, "An Ophthalmoscope for Artists." Dr. Bradley, (1) "On a Case of Pseudo-Glioma"; (2) "On a Second Case of Asthenopia treated by a Vertical Prism"; (3) "On a Case of Muscular Asthenopia in a Child." Living specimens at eight o'clock."

11. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

CLINICAL SOCIETY OF LONDON, 8½ p.m. Mr. Dalby, "Examples of the Two Classes of Cases in which Cerebral Abscess, Meningitis, or Pyæmia originate in Disease of the Ear." Mr. Nettleship and Mr. Higgens, "On a Case of Morphœa in the Region of the Fifth Nerve, with Paralysis of the Intraocular Branches of the Third." Dr. R. Lee, "On a Case of Nystagmus Infantilis." Mr. A. E. Barker, (1) "On a Case of Goitre producing great Difficulty of Breathing on Exertion; Excision; Recovery, and Complete Relief"; (2) "On a Case of Sebaceous or Dermoid Cyst of the Tongue; Removal by Submental Incision; Cure." Mr. J. H. Morgan will exhibit a Case of Congenital Deficiency of the Femur. Dr. Stephen Mackenzie will exhibit a Case of Myxœdema in a Male. Dr. Bernard Roth will exhibit a Case of Lateral Curvature of Spine now under Treatment.

ROYAL INSTITUTION (Council Meeting, 8 p.m.), 9 p.m. Prof. Huxley, "On Oysters and the Oyster Question."

HYPERTROPHY OF THE BREASTS.—At the last meeting of the Société de Chirurgie, M. Desprès presented the portrait, painted by Horace Vernet, of a patient operated upon by M. Manec for hypertrophy of both breasts—the one weighing sixteen French pounds, and the other fifteen. The young girl who was the subject of the case afterwards married and had four children.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, April 28, 1883.

BIRTHS.

Births of Boys, 1217; Girls, 1297; Total, 2514.
Corrected weekly average in the 10 years 1873-82, 2782·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	849	796	1635
Weekly average of the ten years 1873-82, corrected to increased population ...	851·5	786·8	1637·3
Deaths of people aged 80 and upwards ...	...	...	86

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669033	...	4	3	1	7	...	1	1	6
North ...	905947	1	9	4	5	7	...	1	...	5
Central ...	282236	...	7	...	1	1	...	...	...	1
East	692786	...	11	7	4	9	1	2	...	...
South	1265937	...	9	3	9	11	...	6	...	7
Total	3816483	1	40	17	20	35	1	10	1	19

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·499 in
Mean temperature	45·2°
Highest point of thermometer	60·1°
Lowest point of thermometer	31·7°
Mean dew-point temperature	40·2°
General direction of wind	N.E. & S.E.
Whole amount of rain in the week	0·90 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 28, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending April 28.	Deaths Registered during the week ending April 28.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Daily Mean Values.	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	Rain Fall. In Centimetres.
London	3955814	2514	1635	21·6	60·1	31·7	45·2	7·33	0·90	2·29
Brighton	111262	75	41	19·2	61·3	31·0	44·0	6·67	0·90	2·29
Portsmouth ...	131478	72	58	23·0	...	...	...	...	...	...
Norwich	89612	47	34	19·8	...	...	...	...	...	...
Plymouth	74977	51	39	27·1	58·6	35·0	45·1	7·28	0·36	0·91
Bristol	212779	144	78	19·1	62·6	31·8	43·0	6·11	0·36	0·91
Wolverhampton	77557	43	31	20·9	58·0	28·1	42·1	5·62	0·58	1·47
Birmingham ...	414846	285	194	24·4	...	...	...	...	...	...
Leicester	129483	87	42	16·9	58·2	33·0	43·9	6·61	1·42	3·61
Nottingham ...	199949	137	73	19·1	59·8	32·0	43·8	6·56	0·83	2·11
Derby	85574	43	43	26·2	...	...	...	...	...	...
Birkenhead ...	88700	55	41	24·1	...	...	...	...	...	...
Liverpool	566753	389	302	27·8	61·1	35·5	45·0	7·22	0·42	1·07
Bolton	107862	76	36	17·4	59·8	28·1	41·8	5·45	1·40	3·56
Manchester ...	339252	244	195	30·0	...	...	...	...	...	...
Salford	190465	126	87	23·8	...	...	...	...	...	...
Oldham	119071	86	75	31·9	...	...	...	...	...	...
Blackburn	108460	87	52	25·0	...	...	...	...	...	...
Preston	98564	64	42	22·2	...	...	...	...	...	...
Huddersfield ...	84701	39	48	29·6	...	...	...	...	...	...
Halifax	75591	38	39	26·9	...	...	...	...	...	...
Bradford	204807	103	80	20·4	56·1	32·1	42·0	5·56	1·79	4·59
Leeds	321611	214	125	20·3	57 0	32·0	43·0	6·11	0·70	1·78
Sheffield	295497	185	136	24·0	58·0	32·0	42·4	5·78	1·76	4·47
Hull	176296	150	84	24·9	...	...	...	...	...	...
Sunderland ...	121117	98	48	20·7	60·0	36·0	42·8	6·00	0·90	2·29
Newcastle	149464	94	62	21·6	...	...	...	...	...	...
Cardiff	90033	55	38	22·0	...	...	...	...	...	...
For 28 towns ...	5620975	5601	3758	22·7	62·6	28·1	43·4	6·33	0·95	2·41
Edinburgh	235946	124	89	19 7	56·7	33·1	43·3	6·28	0·89	2·26
Glasgow	515589	398	343	34·7	59·0	32·5	42·9	6·06	0·39	0·99
Dublin	349·85	188	209	31·2	52·8	27·2	42·9	6·06	1·44	3·66

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·50 in. The highest reading was 30·07 in. at the beginning of the week, and the lowest 29·24 in. on Friday afternoon.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

"AN APPEAL."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I know the sad case mentioned by Dr. Symes Thompson and Mr. J. Gay very well, and beg, from my intimate knowledge, to recommend it to the favourable consideration of the profession, and especially to the Committee of that excellent institution, the Medical Benevolent Fund. As a subscriber to that Fund, I shall be glad to sign the appeal paper to the Committee. Be so good as to add my guinea to the fund.

King's-road, Wimbledon. I am, &c., T. M. STONE.

"A VERY DESERVING CASE."

THE REV. F. MILLER acknowledges with thanks the following contributions on behalf of the widow of the late Dr. Moore:—

	£	s.	d.		£	s.	d.
W. Y. Martin, Esq. ...	0	10	0	R. Dunstan, Esq.	1	1	0
Lawson Tait, Esq.	2	2	0	Bisset Hawkins, M.D. ...	2	2	0
Reginald Harrison, Esq...	1	1	0	R. J. Shaw, Esq.	2	2	0
W. T. Pauli, Esq.	0	5	0				

Kineton, Warwick, May 2.

Dr. Ayres.—The *Medical Times and Gazette* just forwarded.

Psychologist.—You will find the lines in *Romeo and Juliet*, act ii, scene 3, where Friar Laurence, in addressing Romeo, says:—

> "Care keeps his watch in every old man's eye,
> And where *care* lodges, sleep will never lie."

A Wholesome Warning to Railway Companies.—At the Assizes at Manchester, just held, a case of overcrowding in railway trains was tried. The manageress of an hotel at Altrincham sought to recover compensation from the Lancashire and Yorkshire Railway Company for injuries she received through falling over a milk-can in the guard's van of one of the defendant's trains. There being no room for her in any of the crowded carriages, she was hustled into the brake, and in her fall over the can sustained a serious injury to the spine. The jury awarded her £900 damages.

W. Clarence N.—The City of London Lying-in Hospital was established in 1750 at Shaftesbury House, in Aldersgate-street, not far from the reputed London residence of Shakespeare, and in 1770 was removed to its present location in the City-road.

Small-pox, Walsall.—The Chairman of the Walsall Town Council Sanitary Committee announces that the epidemic of small-pox has disappeared. There were only two or three patients remaining in the hospital, and they would very soon be discharged; while no fresh case had been reported. A vote of thanks to the Sanitary Committee was accorded by the Council for their exertions in connexion with the epidemic.

Open Spaces, Lambeth.—With regard to the old burial-ground in Lambeth, the Vestry has resolved—"That the churchwardens be requested to take such action as allowed by the Acts of Parliament relative thereto, as would place the area as a recreation ground for the parishioners, and in charge of the Vestry of Lambeth."

The Order of St. John.—The British Hospice and Ophthalmic Dispensary, Jerusalem, opened some months since by the Order, is conferring great benefit on the people. The British Consul, the Turkish Pasha, and other officials, are loud in its praises. The number of patients, Jews, Mohammedans, and native Christians, between December 1 and March 1 ranged from 20 to 133 daily, the total attendance being 2676. The Secretary (Sir Edmund Lechmere) of the Order, who has just returned from Jerusalem, has purchased, under most advantageous terms, a house and six acres of land on the Bethlehem road, for the permanent Hospice, in place of the temporary building hitherto utilised for the purposes of the Hospice.

Sea-sickness: a Fatality.—At an inquest held by the Coroner at Plymouth on the body of a poor girl, an emigrant from Ireland, who died of sea-sickness between Cork and Plymouth, it appeared that deceased was attacked with sickness soon after leaving Cork, and became quite prostrate. The ship's surgeon was called to her, but was unable to induce her to take brandy, and she died. The House-Surgeon at the Plymouth Hospital, who made a post-mortem examination, stated that the girl's heart was weak, and excessive vomiting was quite sufficient to have brought on a fatal attack of syncope.

The Hygienic Exhibition, Berlin.—The German Empress has fixed the opening for May 10.

Decline in the English Death-rate.—Mr. Noel A. Humphreys, at a meeting of the Statistical Society lately, read a paper on the recent decline in the English death-rate, which the Registrar-General's mortality statistics have proved beyond doubt. He hoped that the hands of sanitary authorities and of medical officers of health, in their struggle against the vast amount of still remaining apathy in health matters, would now be strengthened.

H., St. Bartholomew's.—Mr. F. S. Eve, the "Erasmus Wilson Lecturer," will commence his course of lectures on "Cysts and Cystic Tumours in general" in the theatre of the College of Surgeons some time in the ensuing month.

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Mr. Hunt.—Sir Thomas Spencer Wells, recently created Baronet, was admitted a member of the London College of Surgeons April 28, 1841, and one of the honorary Fellows August 26, 1844; he was elected a member of the Council in 1871. In July last he received the highest collegiate honour, that of being elected President, and he delivered the Hunterian Oration last February.

The Holborn Guardians and the Local Government Board.—At the last meeting of the Holborn Board of Guardians, a letter was read from the Local Government Board, in reply to a request from the Guardians, for permission to utilise the new infirmary at the Mitcham schools for the sick children for the whole Union. The Board refused to comply with the request, as they were of opinion that, notwithstanding the many additions and alterations which had been made, the total capacity for which the schools can be certified is 476, while the number at the end of the last month was 526, and this in the winter period was greatly exceeded. They suggested several alterations in the old infirmary. This decision of the central authority excited "not a little surprise."

A Sanitary Accommodation Withdrawn.—The St. Giles's-in-the-Fields Board of Guardians have informed the Strand Union Board that they cannot any longer allow the latter Board the use of their fever and small-pox ambulances. The Strand Guardians have, in consequence, decided to communicate with the Metropolitan Asylums Board with a view to obtaining the use of the ambulances of that Board.

Rabies.—Dr. Rithmeister, of Powlowak, in Finland, has recorded several cases to prove that the blood of a rabid animal, when drunk, is a specific against canine hydrophobia. Dr. Stockmann, a Russian physician, states this practice to be both common and effectual in Russia.

Praiseworthy.—The *employés* in the firm of Messrs. J. Allison and Co., Regent-street, assisted by some of their friends, gave a concert last week at the Langham Hall, Great Portland-street, in aid of the funds of the London Fever Hospital, which resulted in adding to the funds of the Hospital the net amount of £45 16s. The hire of the hall was defrayed by Messrs. Allison.

Vivisection, Prussia.—A correspondent of one of the daily papers states that Prince Bismarck has at last gained his object. Vivisection is henceforth prohibited in Prussia. On the same day the French Prefect of Police publishes a notice that all stray dogs will be handed over to "establishments for public scientific research."

Infant Mortality, Glasgow.—A correspondent writes that the infant mortality in this city results to a great extent from preventable causes, and something requires to be done to remedy the evil. Surprise is expressed that with a large proportion of the population composed of women who have to work, no adequate provision seems to have been made for taking care of their babies, who are so often left to the tender mercies of the incompetent or the inconsiderate. He appeals to the "well-to-do" mothers of Glasgow to give attention to the subject.

Unmerciful to Poor-law Officers.—The President of the Local Government Board has announced that the Board will issue, before the end of the year, a consolidated order which will give Poor-law guardians the power of dismissing their officers (without restriction), giving them reasonable notice.

Street Newsboys, Bradford.—These boys are in future to be under the control of certain regulations. A licence (for which a nominal charge will be made) is to be compulsory. Children under ten years of age are not to be allowed in the thoroughfares for the sale of papers after eight o'clock at night.

The Consequences of a more Generous Diet.—At a meeting of the supporters of the Devon and Exeter Hospital it was stated that the forthcoming balance-sheet would show an expenditure of £3000 in excess of income, which was largely due to the increased charges for housekeeping consequent on the more generous diet which medical men are now in the habit of ordering. At present a governor's recommendation holds good until the patient has recovered, regardless of the time the case may take to cure. It was decided to order certain returns with the view of limiting the duration of these recommendations.

W. W., Brompton.—The resolution passed some time since by the Town Council of Boulogne for the drainage of the town is now carried out.

A Royal Nurse.—The Princess Christian has consented to open the new wing of the North-West London Hospital, Kentish Town-road, some time in June. We may add that Her Royal Highness has been awarded a certificate in nursing, after attending a course of lectures at the Kensington (Major Gildea's) centre of the St. John Ambulance Association.

Drainage of Paris.—An experiment has been tried in one quarter with the pneumatic system of exhausting the sewers of their contents, and it has led to such remarkable results in the decline of typhoid fever that it is to be extended to other quarters of the city.

Cetacean.—Dr. D. Bridges, of Hull, first discovered a method of converting spermaceti into a composition well adapted for burning as wax. The Hull spermaceti candles which he manufactured were burned in almost every drawing-room in the kingdom. He, unfortunately for his family, entrusted the secret to his workman, who then soon left him, and, setting up in business for himself, left a large fortune, whilst the Doctor's family came to great poverty.

A Royal Visit.—The Princess of Wales and Princess Christian honoured Queen Charlotte's Lying-in Hospital with a visit on the 29th ult. They remained nearly an hour, visiting nearly every ward, and evinced great interest in the poor patients, to each of whom they addressed a few kind words. They expressed themselves very pleased with everything they had seen.

A Luminous Verdict.—Lucidity is not always a characteristic of the verdicts of English coroners' juries, but we seldom hear of such a remarkable fate as that of Norendro Nath Bannerji, a well-known actor, of Bombay, who "met his death by the balcony, because he had indulged freely in liquor, and while under its influence met with the above accident." Whether the balcony is progressing favourably is not reported.

Fish Dinners for Paupers.—It is stated that the Canterbury Board of Guardians has tried the experiment of fish dinners for the paupers once a week. Although strongly recommended by the medical officer, the change has given such dissatisfaction to the inmates of the workhouse that the old dietary has been resumed.

New Orleans.—In his last report M. Consul de Fonblanque states, *inter alia*, that the streets are impassable during most of the winter months; the prisons and asylums are a disgrace to any civilised community; and the sanitary condition explains the constant prevalence of yellow fever. It is alleged this deplorable state of things is due chiefly to a system of municipal government which is, probably, the worst in the world. Everything that is done well in New Orleans is done by private enterprise.

The Metropolitan and National Association for Providing Trained Nurses for the Sick Poor.—The continued prosperity of the Association is the subject of congratulation in the seventh annual report, just issued. In the past year 542 cases had been nursed from the Central Home and 20,208 visits paid. A branch had been opened at Greenwich, and it is hoped and intended to further extend the usefulness of the institution.

"*Non-Alcoholic Beverages.*"—The following is a list of temperance drinks offered at the bar of a Pennsylvania temperance house:—Soda water, Congress water, Lelogh water, Buakhill water, Delaware water, spring water, eye water, rose water, salt water, cucumber pump-water, rain water, courthouse-roof water, gaol-roof water, and water.

COMMUNICATIONS have been received from—

Mr. Hasslock, Nashville, U.S.A.; Dr. H. Erichsen, Detroit, U.S.A.; The Registrar of the Apothecaries' Hall, London; The Registrar of the Royal College of Physicians, London; Mr. John Bellamy, Local Government Board, London; Mrs. Meredith, London; Dr. J. Ward Cousins, London; Dr. Thomas Bowen, Barbadoes; Dr. W. B. Carpenter, F.R.S., London; Mr. Lawson Tait, Birmingham; Dr. Willoughby, London; The Secretary of the Medical Faculty of Aberdeen, Aberdeen; Dr. Clifford Beale, London; Mr. J. Chatto, London; The Honorary Secretary of the Medical Society of London; Messrs. Merrywreather and Sons, London; The Secretary of the University of Edinburgh; Mr. C. F. Wardley, Buxton; The Secretary of the Royal Microscopical Society, London; The Registrar-General for Scotland, Edinburgh; Dr. Birkbeck Nevins, Liverpool; The Sanitary Commissioner of the Punjaub, India; Dr. J. L. Crawcour, New Orleans; The Secretary of the Odontological Society, London; The Secretary of the Royal Institution, London; The Secretary of the Ophthalmological Society, London; The Secretary of the Anthropological Institute of Great Britain and Ireland, London; The Secretary of the National Veterinary Association, London; The Secretary of the Clinical Society of London, London; The Secretary of the Dental Hospital of London, London; Professor McKendrick, The University, Glasgow; Mr. Kenneth Millican, Kineton; Rev. F. Miller, Kineton; Mr. Cantlie, London.

BOOKS, ETC., RECEIVED—

Temperance and Total Abstinence, etc., by Spencer Thomson, M.D., L.R.C.S.—Descriptive Catalogue of the Pathological Museum of University College, Liverpool (Royal Infirmary School of Medicine)—History of Rome, by Victor Duruy, part iii.—Over-Legislation in 1883—Report of the Health, Sanitary Condition, etc., of Kensington, March 25 to April 21—The Dispensatory of the United States of America, by Dr. George B. Wood and Dr. Franklin Bache—Buxton as a Health Resort, by Dr. Thresh—Observations on Lithotomy, Lithotrity, etc., by Reginald Harrison, F.R.C.S.—Hospital Construction and Management, by Frederick J. Mouat, M.D., F.R.C.S., and H. Saxon Snell—Hygiene, by E. A. Parkes, M.D., F.R.S.—The Treatment of Pulmonary Consumption, by Dr. McCall Anderson.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—Exeter and Plymouth Gazette, April 24 and 28—American Journal of Neurology and Psychiatry—Nashville Journal of Medicine and Surgery—Ophthalmic Review—Boston Home Journal, April 14—Modern Thought—Cape Argus, April 9—American Journal of Physiology—Edinburgh Medical Journal—New York Medical Journal—Indian Medical Gazette—Medical Enquirer—Italian Times, April 28—Archives Générales de Médecine—Le Progrès Médical—Philanthropist—Glasgow Medical Journal—Belfast News-Letter, April 26—Medical Register—Night and Day—L'Impartialité Médicale—Veterinarian.

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ORIGINAL LECTURES.

THE LUMLEIAN LECTURES ON URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

By ALFRED B. GARROD, M.D., F.R.S., F.R.C.P., etc.,
Consulting Physician to King's College Hospital.

LECTURE II., PART I.

HAVING stated to you, in the former lecture, my views as to the production of uric acid in the animal economy, reserving only certain points to be discussed as we proceed; and having shown that the difficulties which beset the theory that the kidneys are nothing more than the strainers-off of this principle are extremely great, if not insuperable, and that, therefore, there is no little probability that uric acid is a true product of the renal organs themselves; I will at once proceed to draw your attention to the subject of human urine and the alterations which it undergoes, under certain conditions, which lead to the production of those morbid formations which are commonly called gravel and calculi.

It will be quite unnecessary for me, in lecturing to such an audience, to detail the characters and composition of healthy human urine; still, there are two or three points in relation to it which I must very briefly allude to. In the first place, healthy urine, omitting the trace of mucoid matter contained in it, which consists of the *débris* or washings from the mucous membrane of the urinary tract, is a perfectly clear fluid. Its weight varies much within the limits of health, according to the ratio between the dissolved solids and the water; a specific gravity of 1020 may be taken as the average. Its reaction is decidedly acid, but the amount of its acidity depends on the time of its excretion, especially in relation to food; at times the urine may, for a short period, become neutral or even alkaline. Healthy human urine consists of water, holding in solution both organic and inorganic principles: the former are, urea, uric, and hippuric acid; the latter, chlorides of different metals, especially sodium, and phosphates of sodium, magnesium, and calcium. In Table I. are shown the relative quantities of the principal organic ingredients; also the amount of those ingredients which are thrown out for each pound (avoirdupois) of the body weight.

TABLE I.—*Mean of many Observations.*

	Fl. ozs.
Quantity of water daily excreted by kidneys ...	55·5
,, ,, hourly ,, ,, ...	2·1
	Grains.
Quantity of urea daily excreted by kidneys ...	512·0
,, ,, hourly ,, ,, ...	21·0
Quantity of uric acid daily excreted by kidneys ...	8·67
,, ,, hourly ,, ,, ...	0·361
Hippuric acid	(?)

Amounts thrown out in twenty-four hours for each pound (avoirdupois) of body weight:—

	Minims.
Of water	129
	Grains.
Urea	3·53
Uric acid	0·06
Hippuric acid	(?)

It is to uric acid that we must chiefly direct our attention; and I must endeavour to show you (1) in what state of chemical combination it exists in the urine; (2) why it is held in solution in an acid fluid; (3) what are the causes which lead to its precipitation from the urine; and (4) what are the different shapes which it assumes when it is thus precipitated from its state of solution.

1. About fifty or sixty years ago, when Berzelius and Prout were investigating the subject, there was much discussion as to the condition of the uric acid when in solution in the urine—whether it is free or combined with a base, whether it is held in solution by the colouring matter of the urine, and so forth. For the details of such discussion, if still interesting, I will refer you to Dr. Prout's well-known work.

At the present day, I believe that the subject is fully cleared up; and it may be asserted that uric acid, when in solution, is combined chiefly with sodium, but that there are also varying quantities of other bases present, depending on the amounts of different salts contained in the urine. I have already shown you, in my first lecture, that when urate of ammonium is dissolved in blood-serum in which the soda salts are present, it is converted into urate of sodium; and, bearing this fact in mind, we can explain the discrepancies which are found in the different analyses of urate deposits, both in health and disease. I may, however, say that the deposit, which, until recently, was commonly called lithate of ammonia, is composed almost entirely, in healthy urine, of urate of sodium. If, however, the urine, at any time, becomes ammoniacal from the decomposition of the contained urea, then the uric acid, meeting with a large excess of the new-formed base, gets deposited as urate of ammonium—a salt which is very insoluble.

2. The next point to be considered is the reason of its existence as urate of sodium in a fluid having such a well-marked acid reaction as healthy urine. This fact was for a long time difficult of explanation; but Liebig showed that, if to a warm solution of the common phosphate of sodium, which has an alkaline reaction, uric acid be added till it no longer dissolves, the solution becomes strongly acid, and there is contained in it urate of sodium and the acid phosphate of sodium, which latter salt exhibits a full acid reaction, but does not possess the power of precipitating the uric acid. This phenomenon solely depends on the tribasic character of phosphoric acid, which allows of a solution of phosphates, which reddens litmus powerfully without containing any free acid.

3. When, however, the least trace of a free acid, even acetic, exists in the urine, the whole of the uric acid is rapidly precipitated—a fact of considerable importance in the study of diseased conditions of the urinary excretion. If our attention is directed to the subject, we see, almost daily, that, when an urine is kept for a time, perhaps only a few hours, the uric acid, which at first was in complete solution, becomes gradually deposited in the crystalline form—a change due to the generation of a free acid in the urine by the occurrence of what is called the acid fermentation.

4. Our last point is to ascertain what shape the uric acid assumes when it becomes insoluble, and is precipitated from the urine. It may be thrown down either in combination with a base—that is, in the form of an urate—or as free uric acid. When as an urate, it is often from simple concentration, or from the presence of too small a quantity of water in the urine, and it seldom happens that such deposition takes place in the urinary organs themselves, unless there is a something present, such as a foreign body or the nucleus of a calculus, which greatly facilitates it. When, however, such urine is removed from the body, and cooled down to the temperature of the air, more especially in cold weather, the appearance of turbidity is extremely common, and often becomes, though most unnecessarily, a source of great mental disquiet to patients.

The simple evaporation of healthy urine *in vacuo* will usually cause, at a certain point in its concentration, the deposition of the same urate of sodium, and produce a similar appearance. When the urine, either concentrated or not, becomes abnormally acid, it at first causes the urate existing in it to be less soluble; but soon afterwards the acid itself is separated and deposited in the crystalline condition, forming what is commonly known by the name of cayenne pepper-gravel, so called from its resemblance to that condiment. We have been so accustomed, even from our student-days, to see the numerous forms which uric acid assumes, that we may feel little or no surprise that a body of so definite a composition and character as uric acid should be found under so many shapes, and perhaps most of us have paid little or no attention to the subject. Dr. W. Ord, however, has given no little thought to it, and has made a great number of observations and experiments which throw much light on the changes which the crystals of uric acid experience when acted upon by the various colloid substances, some of which

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are present in healthy urine, as the result of disease. Let us take what may be looked upon as pure uric acid, dissolve it in boiling water, and then allow it to cool and crystallise; it will be found in oblong tabular crystals, which are both homogeneous and transparent.

When uric acid crystallises out from urine, it is more or less coloured, from yellow to brown, and in the form of thin rhomboidal prisms, showing that there must exist in the urine something which causes an alteration not merely in the colour, but also in the crystalline form. Dr. Ord makes the following remarks, which I cannot do better than quote, as they express the character of the changes to which I wish to allude. He says: "It follows from this comparison of the pure and urinary acids, that there must exist in the urine causes leading to a complete turning away of the substance from its proper crystalline form. The change is also in a definite direction. The faces and angles of a crystal from urine are almost always, some or all of them, curved and rounded. Such a crystal is a resultant of the operation of two distinct influences—of crystalline polarity, under which the flat surfaces and sharp angles are determined; and of 'molecular coalescence,' in which polarity is lost and particles become arranged in spherical masses, by virtue of their unhindered mutual attractions. Furthermore, in urine the crystals are very frequently gathered into large glomeruli, to which such names as 'gravel' and 'cayenne pepper-grains' are given. These, on examination, are found to be regularly constructed of rhombs or prisms."

Dr. Miller, Dr. Beale, and other writers on micrology and chemistry, have suggested that the substances associated with uric acid in urine are the determining causes of the several differences; and the researches of Mr. Rainey have pointed the way to a solution of the problem.

Dr. Ord, in his work on "The Influence of Colloids upon Crystalline Form and Cohesion," from which I have just quoted, and to which I would refer you for much valuable information, gives the results which he has obtained from the crystallisation of uric acid under the influence of urea, colouring matters, mucus, albumen, cane and grape sugar, gum arabic, starch, gelatine and glycogen.

It appears to me that the researches of Dr. Ord and Mr. Rainey are not only valuable, but also seem to throw a ray of light—dim, it is true, at present—upon those phenomena which, as it were, connect true chemical changes with those we are accustomed to look upon as due to the agency of life.

The result of our inquiries, as far as they go, may be summed up in a few words. Perfectly healthy urine should show no appreciable deposit; when, however, it becomes concentrated from deficiency of the watery excretion, then the uric acid is thrown down in the form of an urate. This may occasionally occur within the body, but far more frequently after the urine has been voided; sometimes, however, this change ensues so rapidly, that the urine is erroneously supposed to have been passed in that condition. The presence of a solid body in any part of the urinary tract favours deposition very much, and hence urine which would otherwise remain clear, may yield a deposit to any substance previously present in the same tract, and may thus add considerably to an already existing calculus. The appearance of the numerous layers so frequently seen around a central nucleus, both in renal and vesical calculi, is thus easily explained. When, however, the urine becomes further altered in composition—if, for example, a free acid is either excreted with the urine, or rapidly generated in it through the setting up of the lactic fermentation,—the uric acid becomes liberated from its state of combination, and, in a form more or less altered by the presence of colloid matters, is deposited on a previously existing calculus, or is passed as separate rhomboidal crystals or in aggregated masses, constituting gravel or sand. I should feel disposed to confine the name of "sand" or "gravel" exclusively to such deposits, which, I believe, seldom form the nucleus or become the starting-point of any calculus. I may add, that urine possessing these characters is frequently voided for months and years, without the occurrence of any appreciable inconvenience to the patient. It is true that a calculus may be augmented by contact with such an urine; but, as I have said, it seldom originates in this way.

According to this view, which I feel inclined to adopt, gravel or sand consists of uric acid previously in a state of solution, which has become precipitated by the occurrence of some change in the urinary excretion.

It is a fact, ascertained by repeated analytic observations, that some individuals pass a larger daily quantity of uric acid than others; but, at the same time, those who pass the largest quantity may have a urine little disposed to deposit the principle; and it will be found, as a result of experience, that changes in the urinary excretion, leading to the crystallisation of its contained uric acid, are much more potent factors in the production of sand or gravel than the mere quantity of this acid which is eliminated. If there is a simultaneous occurrence of the two conditions—that is, of increased quantity of the acid and altered state of the urine—this facilitates still more the production of the morbid appearance.

Before we proceed further in the pathology of our subject, it will be necessary that some investigation be made into the physical properties of the uric acid excretion, when it exists in a form which is visible to the eye—that is to say, in a semi-solid state; and this investigation will bring to light facts which are somewhat striking and full of interest. We have already assumed that the excretion of reptiles and birds consists of uric acid, united with ammonia, and it is usually regarded as being urate of ammonium; under these circumstances it would be expected to behave like such a salt when acted upon by different reagents. We will now see whether it does so.

Let us take two graduated tubes, divided into one hundred parts, and put into one the ordinary salt, the acid urate of ammonium, so as to stand to the height of five divisions. Into the second tube let us put the dry and powdered white excretion of some large reptile, such as the python or boa, and fill each tube with a 1 per cent. solution of carbonate of lithium, up to the one hundredth division. Let us place the tubes upright in a stand, and shake them from time to time. On examining the contents of the first tube, after the lapse of hours, days, or even weeks, no change will be perceptible; the artificial urate will still occupy the same space—five divisions—and no more. In the second tube, very different appearances will be exhibited—a change occurring, to some extent even after a few minutes, with some slight puffing and some little translucency of the substance; while, in the course of an hour or two, the swelling will become very great, and go on increasing for twenty-four hours or more, till at last a solid magma will be formed, occupying eighty to ninety divisions of the tube; so that the natural urate which, in powder, originally occupied a given space, under the influence of a weak alkaline solution, will fill up, as a solid mass, a space seventeen or eighteen times larger than its original room.

If distilled water be substituted for the solution of carbonate of lithium, a similar puffing takes place, though to a much slighter extent; and the reason of this is not difficult to understand, for the urinary excretion is acid in character, and when water alone is added, a crystallisation out of some free uric acid is apt to ensue. Solutions of carbonate of potassium and sodium, corresponding in strength to those of lithium, cause similar results; still, in some respects, they differ from each other, especially as regards the amount of swelling or turgescence, by reason, apparently, of the varying action of the different carbonates upon the organic matter contained in the natural urate.

When rectified spirit, containing about 16 per cent. of water, is substituted for the alkaline solution, the change which ensues is very slow indeed—in fact, scarcely perceptible for a day or two; still, the substance gradually increases, and at last attains a bulk of several times its original dimensions.

If absolute alcohol—that is, a spirit devoid of water—is employed, no increase takes place, even after the lapse of a week or more; when, however, after the alcohol has been poured off, a solution of carbonate of lithium is subsequently added, the swelling of the urate goes on in the same way as when no spirit has been previously used.

If small masses of the excretion are digested in a strong solution of ammonia for a few hours, and afterwards dried and lightly powdered, it will be found that the property of puffing-up is entirely gone, and the same result ensues when caustic soda or potash is used instead of ammonia.

When the solid urinary excretion is reduced to a very fine powder, as by long-continued and hard friction in an agate mortar, there appears to be some diminution of its puffing-up power; but when the magma which has been produced by the long-continued action of the lithia is washed, dried,

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and then subsequently powdered, all the power of swelling up appears to be lost.

I may here mention that I have examined the excretion of a large number of different reptiles and birds, and always with the same results whenever the specimens have been in a fairly fresh condition.

Having determined the physical condition of the excretion as it exists in animals whose urine is too deficient in water to hold the urates in solution, it appeared to me to be a matter of great importance to arrive at its chemical composition. The common idea is, as I have already said, that it consists of urate of ammonium; and, in the early analyses, ammonia was always found in it, but in small quantities only. This is shown by the analyses of M. Schriebers, Dr. Prout, Dr. John Davy, and others, in which the amount varied from about 1½ to 4 per cent.

There is no doubt as to the presence of ammonia in the urinary excretion of birds and reptiles, for we have only to add a caustic alkali, and the characteristic odour is at once developed; but it is important to go a step further, and to ascertain whether the uric acid, as it exists in the fresh excretion, is so combined as to form a true urate of ammonium. To effect this I had many experiments made on the excretion of different birds and reptiles (the results of which are shown in Table II.). From these, the following conclusions may be drawn:—First, that the uric acid in the pure substance is not combined with any fixed base, such as soda, potash, or lime, but that it is combined either with ammonia itself, or some organic base which readily yields ammonia.

TABLE II.—*Exhibiting the Results of the Analyses of the Urinary Excretion of Reptiles and Birds, in relation to Uric Acid and Ammonia.*

	Percentage bi-urate of ammonium.	Percentage excess of uric acid.
Urate of ammonium (dried over lime) ...	99·7	0·3
Urinary excretion of Python regius ...	100·0	—
Urinary excretion of Australian monitor	92·0	8·0
Urinary excretion of Python molaris (probably old)	49·0	50·9
Urinary excretion of Python reticulatus (rather fresh)	32·9	67·1
Urinary excretion of Madagascar boa (fresh)	32·0	68·0
Urinary excretion of diamond snake ...	24·9	75·1

No amount of any fixed base was found (such as soda, potash, or lime), though carefully sought for; but in the ostrich there was some sulphate of calcium.

It will be seen from the table that the amount of ammonia varied very considerably in the different specimens which were examined; and, contrary to what I had anticipated, the specimens which were most perfect and exhibited least of all the appearance of disintegration were not those which yielded the most ammonia. It was also found that the swelling or puffing-up peculiarity was almost or entirely absent from those specimens in which the quantity of ammonia was greatest. This was well shown in the excretion of the royal python and of the Australian monitor (lizard), both of which specimens were much injured by decomposition.

It would appear, therefore, that beyond a certain percentage which seems to be equivalent to the formation of about 25 to 32 per cent. of urate of ammonium, the extra amount of ammonia results from some change which has taken place after the excretion has been passed. A close examination by the unassisted eye enables us to see that there has been some disintegration in the substance.

It will also be seen, on reference to the table, that, with the exception of those excreta in which decomposition has occurred, the amount of ammonia is far short of that which is necessary to the formation of the true diurate of ammonium. May it not be possible that the uric acid, when first formed, is in combination with some nitrogenised organic base, such as urea? If so, this would account for the results obtained. Or, again, may not an organic compound be first formed in the renal cells, which readily breaks up, yielding, among its chief products, uric acid and ammonia? This is a subject which I have not had leisure to investigate with sufficient thoroughness to be warranted in giving a decided opinion upon it. We have found, therefore, that the natural urate differs completely from the artificial in its physical properties, at least, in so far as regards its power of becoming distended under the influence of water or carbonated alkaline solutions. It now becomes necessary to examine carefully its microscopic structure.

A paper of mine, published in the *Medico-Chirurgical Society's Transactions*, 1848 (vol. xxxi.), under the title of "Observations on certain Pathological Conditions of the Blood and Urine in Gout, Rheumatism, and Bright's Disease," was illustrated by a plate, which contained, among other drawings, one which exhibited the microscopic appearance of the urinary excretion of the pigeon. This was the first time, I believe, that the minute characters of such excretions had been shown. The results of a re-investigation of this subject, which I have recently made, will now occupy us for a few minutes, as it bears closely on the subject of renal calculi. I have examined the excretion of a large number of reptiles, birds, and invertebrate animals; and the drawings upon the screen, which are selected from a great many others, will give an idea of the appearances presented.

There is a great uniformity of appearance in the different specimens, in fact, it would be difficult or impossible to separate by microscopic characters the urine of a reptile from that of a bird: the only variation in the different drawings is that which appears in the size and prevalence of the larger spherules: for it will be noticed that there are many more of these in the large birds and reptiles than in the smaller birds, while the small spherules are of about the same size in all specimens depicted. No spherule in the excretion of the canary-bird approaches in size many which are to be seen in that of the rhea. The measurement of the largest spherules is 0·00072 inch, and the smallest about 0·00008 inch.

It seems to me that we should be ignoring all physiological principles if we did not assume that uric acid is originally excreted in the same way by all animals, be they reptiles, birds, or mammals, including man—that, if, as we have shown by fair evidence, it is formed in the cells of the kidney in one animal, it is so formed in another, although the different influences to which it may be subsequently subjected may cause an entire change from its original physical condition.

In reptiles and birds we see that the uric acid, in combination with some base, is contained in the kidneys in the form of larger and smaller spherules, and we also see that these have a tendency to aggregate and form larger and larger balls or spherules, which are ultimately eliminated from the body. We see, in fact, that these animals are perpetually voiding renal calculi, which, although small in size, are yet perfect in form and constitution. Their urinary tract is so constructed that no inconvenience ensues; but were such urine excreted by the mammal it might at once lead to serious mischief.

May we not, however, get a lesson in pathology from reflecting on these facts which I have now brought before you? May not these spherules, which, as a rule, are soon dissolved in the watery urine of the mammal, occasionally escape solution, and become the nuclei of renal calculi? This idea is one which, up to the present time, I have never seen suggested, but it is at least worthy of some further thought.

I believe that I am correct when I say that hitherto it has been usual to regard both gravel and calculi as arising always from the precipitation of urinary principles which have been in the urine in a state of solution—a view which, as I have already shown, has some truth in it, though I think that, before I shall have finished the present lecture, I shall be able to lay before you facts which may cause some modification in the opinions which have been commonly held. Dr. Vandyke Carter has made some interesting observations on the structure of calculi, and has come to the conclusion that, in almost all calculi, the nucleus contains uric acid or urates in the spherical or globular form, and not in the ordinary crystalline condition; and that, when oxalate of calcium is present, it is in the shape of dumb-bells, and not in the characteristic octahedral crystals.

In his work on Urinary Diseases, Dr. William Roberts makes the following observations, which appear to me to sum up all that is at present known on this subject. He says:—"Considerable light has been thrown on the mode of origin of urinary calculi, by an examination of the microscopic structure of the nuclei. Dr. V. Carter found that the actual nucleus consisted nearly always of urates and oxalate of lime (dumb-bells and spheroids), and not of

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ordinary crystals of these substances. The researches of Rainey and Ord have shown that these globular forms are only produced when precipitation takes place slowly in a colloid medium; and Carter found that a colloid matrix always exists in the nuclear formations of urinary calculi. It would therefore appear probable that the initial step in the formation of a calculus is the exudation of some colloid—mucus, or some other albuminoid substance—into the urinary passages. Into this colloid, urates or oxalate of lime, or both, are precipitated, and, combining with it, form molecular aggregations of a globular character, which constitute the foundation of the subsequent growth. Under what conditions the colloid is exuded, cannot be with certainty explained; but the probability is that congestive or sub-inflammatory states of the kidneys, such as occur in the febrile state, give occasion to such an exudation, and supply a starting-point to a process which does not attract attention until after a long lapse of time.

Dr. Roberts, in this passage, thinks that the colloid exudation is the result of subinflammatory disease of the kidney; but, as far as my own experience goes, I have, in most cases of renal calculi, failed to find evidence of any inflammatory renal affection; the patients have, at any rate, been free from all febrile disturbance.

In examining several different calculi which had been passed soon after their descent into the bladder, I have found that some are apparently simple, that is, when cut they exhibit an uniform structure throughout; such calculi, however, are generally very small, the largest not exceeding in size a pin's head. Others are evidently compound in their structure, containing a central nucleus surrounded by layers which may be more or less numerous in different calculi; in fact, they resemble, when seen through a glass, the larger form of the vesical calculus.

PROFESSOR BALL'S TREATMENT OF EPILEPSY.—In a recently published *thèse*, Dr. Boyé gives an account of the treatment of epilepsy by Prof. Ball at the Ste. Anne Asylum. The alkaline bromides, and especially the bromides of ammonium and sodium, belladonna, and oxide of zinc, form the basis of this treatment. The bromides of ammonium and sodium are given in the proportion of ten grammes each to 300 grammes of water, four tablespoonfuls of this being taken in infusion of valerian at first four times a day, and gradually increased until taken eight or ten times, unless beneficial effects have been observed. Extract of belladonna and oxide of zinc, of each one gramme, are also made into forty pills, of which two are given daily, or, in obstinate cases, four daily. In subjects in whom there is congestion, there should be employed as adjuvants drastic purgatives, venesection, leeches to the temples or behind the ears, or revulsives as the seton or points of actual cautery. As purgatives Prof. Ball prescribes the following pills:—Aloes and scammony, of each one gramme; jalap and calomel, of each half a gramme—made into twenty-four pills with almond soap: of these three should be taken about once a week on getting up in the morning, and three towards the middle of the day. Dr. Boyé relates many cures in proof of the much greater utility of this mixed treatment than that of the bromide of potassium taken alone. The action of these substances is immediate, the attacks diminishing from the earliest days; but the treatment requires to be continued with great regularity for months, or even years. Another advantage of this means is that it is easily borne, no gastric irritation resulting even from large doses (*e.g.*, as much as ten grammes of each bromide) that may be given. The ill effect attributed to bromide of potassium of being followed by cephalalgia, somnolence, depression, and loss of memory and intellectual power are with these not observable, while they sometimes arouse the patients from their torpid condition. In tubercular disease, however, the bromide of ammonium induces extreme nervous sideration, while in such patients the bromide of potassium is usually well tolerated.—*Journal de Thérapeutique*, January 25.

LOCAL APPLICATION OF CHLORATE OF POTASH.—Chlorate of potash in fine powder has yielded excellent results when dusted on to the surface of ulcers and ulcerating epitheliomata. The surface should be cleansed and the powder dusted on thickly twice a day. It relieves pains and promotes healing by changing the character of the morbid processes.—*Louisville Med. News*, April 14.

ORIGINAL COMMUNICATIONS.

THE TREATMENT OF PARTURITION AND OF THE PUERPERAL STATE IN HOSPITAL PRACTICE.

By WILLIAM ALEXANDER, M.D., F.R.C.S.,
Visiting Surgeon, Liverpool Workhouse.

(*Concluded from page 471.*)

IT is the *want of* or the *irregularity of post-partum uterine contractions that brings about the much greater puerperal mortality amongst the better classes.* These ladies are far more nervous, have more mental anxiety, and are more the subjects of hysteria than their poorer sisters. They look upon the pangs of parturition with more dread. The shock of that ordeal is far greater to them than it is to the poor, whose frames are continually undergoing that process known as "perfection through suffering." The knowledge of the rich woman of puerperal mortality is greater than that of the poor, and, from the greater prominence given to the fatal cases than to the successful ones, her idea of the mortality is very much exaggerated. The mental emotions of the rich woman may, through the effects of the drilling of society, be unexpressed in the face. If so, they are expended with increased force upon the internal organs. The poor woman who shows her grief with screams, and tears, and gesticulations, can eat a hearty dinner, and probably does not lose an ounce of flesh through it. The cultivated woman of good social position goes about her duties with calm and quiet countenance, but toys with her meals, and gradually sinks into an anæmic condition, the cause of which is perfectly inexplicable to the medical attendant.

The uterus has, in the latter cases a far greater tendency to relax and to be irregular in its action than it has in the poor. For the first few days after labour, wealthy primiparæ are afraid almost to move, and are in complete slavery to the very letter of the advice of their medical attendant and nurse. If properly bandaged as I have described, I see no harm, but positive good, in their moving freely about in bed, or even in sitting up in it, after the first few days. Displacements cannot occur, for the womb is still too large for that; and hæmorrhage is less likely to occur when the natural functions of the body are performed, and the uterus stirred by slight movements into contractions. It is after the patient begins to move about, and generally when the medical attendant has taken leave of her, that displacements occur, and yet medical men often act as if they were likely to occur immediately after labour. Subinvolution is more likely to result from deficient than from excessive movement. I do not mean to imply that I would allow the patient out of bed before the end of the week, but in bed I would allow them the utmost freedom consistent with warmth. By this means the nervous prostration resulting from a too irksome decubitus is avoided, and the mental feeling of imminent danger through slight exertion is removed.

When nervous irritation or temporary despondency has produced a flabby womb and some abdominal tenderness the pressure of the hand on the abdomen will often act in a marvellous way in dispelling mental worry and in relieving the irritation produced by the retention of lochial discharge. This manual pressure must be performed carefully, gradually, intelligently, and effectually; not forcibly or brutally, else the injury to the uterus from without may be as great as that threatened from within. The operation must never be delegated to a nurse, for her mental attitude in regard to an operation can never be depended on, and she is always liable to err through ignorance of the conditions necessary for its performance. To illustrate this mental condition, I will give three experiences that I have had of it. One remedy for post-partum hæmorrhage is to grasp the uterus till it contracts. I remember one nurse who believed every one of her cases was threatened with hæmorrhage, and who grasped every uterus so forcibly as to produce subsequent tenderness. Another remedy for the same disease is the application of cold water. I had another nurse who drenched all her patients, under the delusion that otherwise they would all have died from hæmorrhage. The third nurse turned her attention especially to the advantages of having

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cleanly babies, and almost hourly ablutions of a comprehensive kind were performed on her infant charges. It is in the finding out of these aberrations of judgment that the duties of the medical officer to a lying-in hospital will chiefly consist. The best plan of finding them out is to "blow up" the nurse generally when troubles arise that we cannot get at the origin of, and wherever she in her self-defence shows herself to be *most zealous*, it is *there* we must look for the errors that are producing the mischief. It may be said that if the nurse is keeping to the strict letter of the law these things would not occur. But there is no strict letter of the law to be kept to, and in all the above cases the nurse was acting most conscientiously. For these reasons I would not entrust the uterine pressure to a nurse amongst the lower classes, and much less amongst the better. By its means the mortality amongst the rich may be considerably lessened, although this mortality will never approximate closely to that of the poor on account of the greater feebleness of the frame of the rich lady, and the greater shock and consequent reaction which parturition produces upon her. Parturition amongst the poor is not so much more severe than many of their daily sufferings, whereas amongst the rich it is altogether unparalleled in their daily life. Many rich ladies have enough to do to live even in their pampered state; consequently, in them parturition is as severe as a capital operation would be on the poor. In such cases, then, we should specially keep before our minds the facts that the uterine cavity is practically a wound that discharges for a week or ten days before it heals up; that its walls are contractile and very absorptive when not in a contracted state; that these contractions are the safeguards against absorption and the agents in securing effectual drainage; that pressure on the uterus at intervals will keep up the contractions where they have ceased; and that the binder, properly applied, is a safeguard in this direction that ought never to be neglected. The effects of mental anxiety and of emotional disturbances upon the uterus must not be forgotten; and in a lying-in hospital, where women are confined of illegitimate children, exhortations of a religious kind should not be allowed until convalescence has well set in. Previous to that time the mental state of the patient may be suitable for exhortations and for repentance, but there is a great risk of that repentance bringing about fatal consequences through the influence of the emotions on the womb.

Instead of this abdominal pressure that I have advocated and successfully carried out for some time, the generality of medical practitioners trust to frequent syringings. I have myself resorted to them frequently, and have seen much benefit result from them, and in some specially foul cases they are absolutely necessary. In the majority of cases, however, they do more harm than good, as my own experience, and that of several surgeons to lying-in hospitals, will show, and for the following reasons. If a poison has entered the uterus, it is almost impossible to clear it out by washings alone. The syringing is likely to introduce another poison unless great care be taken, and the irritation of the antiseptic fluid will probably set up some mischief in the uterus inimical to the healing of the placental wound. Syringing acts best by procuring or by promoting uterine contractions, and this mode of bringing them on is troublesome to the surgeon, dangerous to the patient, and disagreeable to both, and cannot be compared in simplicity and ease with my "laying on of hands."

The puerperal fever I have hitherto been describing is pyæmia with its embolic sequelæ. But there is a malignant puerperal fever of which I have seen about half a dozen cases. In it general symptoms of malaise and of physical prostration precede the local symptoms. It is manifest from the beginning that the patient is in the grip of a powerful poison, and the end generally follows in a very short time. In very foul wards a malignant septicæmia may be developed, whose malignancy may resemble snake-poison in the general effects being out of all proportion to the local effects. But that, I trust, is a thing of the past. The kind of puerperal fever I now refer to is that which occurs in private practice, and which follows in the wake of a doctor or a nurse. This kind cannot arise by development of germs in the lying-in room. It may arise from sewer-gas, where the germs are developed from other causes than puerperal, and may be developed in one case, and carried by the hands or the clothes of the nurse to another case. But I believe most frequently puerperal fever is in reality one of the eruptive fevers that has induced septicæmia. Scarlatina, typhus, erysipelas, or typhoid fever appearing in a puerperal woman will often rapidly interfere with the normal puerperal uterine conditions, and produce a disease whose origin is the poison of an eruptive or continued fever, and whose course is that of a modified septicæmia. If mental emotion can induce pyæmia in a lying-in woman, how much more may the physical distress of a fever and the fears thereby excited, together with the febrile state of the invasive stage of a specific fever, produce similar and more severe effects! As a general rule the victims of so-called malignant puerperal fever are moribund before the time arrives for the eruption to show itself. Scarlet fever has the shortest incubation of all the specific fevers, and when it produces puerperal fever it should be possible to detect the origin of the septicæmia. Now, this is quite in accordance with the facts. It has been proved again and again that cases of malignant puerperal fever have been of scarlatinal origin, and many medical practitioners who have fatalities in their lying-in practice through febrile diseases are quite satisfied of the scarlatinal origin of the disease if they can only hear of a case of scarlatina anywhere in the neighbourhood. I have no doubt the influence of scarlatina is exaggerated, and the wish that some puerperal mortality might have been due to an impersonal cause such as scarlatina is easily converted into the thought that it was so. Many puerperal cases pass through a specific fever without any alteration of the uterine symptoms, and many die of a specific fever unaggravated by uterine complications. In all nervous, excitable women a specific fever is almost certain to set up septicæmia from interference with the normal temperature of the patient and with the contractile action of the uterus, and then the septicæmic symptoms mask the symptoms of the specific fever, and death generally occurs before any rash appears.

In treating ordinary puerperal cases the patency of the passages should be looked after. This can be best ascertained by the permanence of the lochial flow, and, when it ceases, by securing the contractions of the uterus the patency of the passages will also be secured. If not, a careful examination by the finger and the passage of a catheter are all that is necessary, and I have not required to do this more than once in the last twelve months. It will be seen that my theory and practice of the treatment of puerperal cases depend on the fact that parturition and puerperal convalescence are in themselves antiseptic processes of a more perfect kind than surgeons could ever contrive, and bring us back to the old warning of our forefathers, that "meddlesome midwifery is bad." The interference I recommend is not meddlesome, but in accordance with nature's own efforts.

It is very amusing to me with such ideas to hear of the spray being used during parturition in some lying-in hospitals both at home and abroad. Its action, however useful in wounds, is ridiculously out of place, and unseemly when employed to supplement the natural processes that are so perfect and yet so modest. In the name of science, of female modesty, and of common sense, I would exclaim most fervently, "*Fort mit dem Spray!*" in ordinary midwifery.

THE BRAINS OF SKOBELEFF AND GAMBETTA.—The weight of the brain of the conqueror of Plevna (General Skobeleff) was found to be 1457 grammes, and therefore superior to the mean of adult European men; while the brain of Gambetta, the ex-Dictator of France, weighed only 1160 grammes, and was therefore below the ordinary mean weight. What will the phrenologists say now as to the proportion between the weight of the brain and intellectual power?—*Gaz. Med. Lombard.*, March 31.

CARBOLIC ACID IN TOOTHACHE.—Dr. Dowkonty speaks highly of the efficacy of this in toothache from caries and odontitis, as also when the fangs are affected if they are accessibly exposed. The cavity of the tooth is to be cleaned out by means of absorbent cotton, and the acid then thoroughly applied. Take a piece of wood, according to the size of the cavity (a tooth-pick or a match will do), and dip its end into carbolic acid of *full strength*; and if the hole is very large, a little cotton may be wound round the wood. Care is to be taken not to touch surrounding tissues. The acid crystals only need to be warmed to render them soluble.—*Phil. Med. News*, February 24.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

EAST LONDON HOSPITAL FOR CHILDREN.

CASE OF RECURRENT CONVULSION—? TETANUS NEONATORUM—AUTOPSY.

(Under the care of Dr. EUSTACE SMITH.)

[From notes by the Resident Medical Officer, Mr. SCOTT BATTAMS.]

ANNE N., aged six hours, was admitted under the care of Dr. Eustace Smith on April 8, 1883. The child was brought by a neighbour, who gave us the following account:—The child's mother is unmarried: the child was born at 3 a.m., labour having lasted from 10 the previous evening; it appears to have been normal. A midwife was in attendance. The umbilical cord is stated to have been coiled three times round the neck. When born, the child is said to have been quite black in the face, and apparently dead. After slapping the back and blowing into its mouth the child gradually came round and got a better colour. The mother has been ill fed and badly housed for some time past. Till within a few days she had shared her room with six or eight other people. Latterly, however, she has had a small room to herself: it was cold and draughty; there was no fire in it for two or three hours after the birth of the child.

The baby was brought to the hospital because it had seemed to be convulsed since six o'clock. It becomes livid and "screws up its face," and "trembles" all over, at the same time giving a little whine as if in pain. It had not been put to the breast. It was put into a warm bath soon after its birth. At 1 p.m. (an hour after its admission) Mr. Battams made the following note:—"The child is healthy in appearance, and fairly well nourished. The cord is tied with coarse thread two inches from the belly and again half an inch beyond, and is enveloped in a piece of coarse canvas. The head seems small; there are no evidences of any compression; on the back there are two or three small bruise-marks. The hands and feet are rather livid; the skin is otherwise normal. The lips are bluish—in fact, the whole body appears inclined to be livid. There is no dulness over the lungs; air enters fairly well. It does not cry. Its temperature in the rectum is 99·4° Fahr." The Sister reported that at 3 p.m. the child had a convulsive attack; it became quite black in the face, its mouth was screwed up, its legs were rigid, and its arms worked in short spasms. Its respiration seemed quite suspended. A hot bath was ordered. The navel string was cut off between the two ligatures; a drop of dark black blood escaped. A poultice, over which some glycerine of belladonna had been smeared, was then applied to the abdomen. The symptoms just recorded had quite passed off at 6 p.m., when it was again seen by the Resident Medical Officer; the child was of a deathly hue. When seen somewhat later, it appeared to be in a state of spasm, and it had been so for some time previously. There are periods of exacerbation during which the arms and fingers become flexed, and the legs drawn up. The arms begin to tremble with clonic spasm; it pouts the lips and draws the mouth to one side, and the eyes are generally closed; the child gives a suppressed sort of cry, and evidently one of pain. There is no opisthotonos; respiration is not much affected. At times the child's body is quite flaccid, and it seems to sleep for a few minutes. Manipulation does not markedly increase the spasm. It appears to have no idea of sucking; accordingly it was fed through a small tube passed through the nares into the stomach; this did not excite spasm. An attempt to feed it through the mouth was fruitless; most of the food ran out again. At midnight: There have been no further convulsions; the child has slept a good deal since last note, at 6 p.m. The child has passed a little brown liquid fæces and some urine. Two grains of chloral in one ounce of milk were given by the stomach-tube.

April 9.—The child slept for some hours after the dose of chloral; but at 6 a.m. the convulsions began again. They recurred also at 11 a.m., while it was being fed, and it turned quite black; the hands were affected as before; the jaws were closed; the lips pouted, and pulled towards one side. The chloral and milk were repeated; five minutes afterwards there was a return of the lividity, but no convulsions of the limbs or of the jaws. It regained its natural colour in a few minutes. 5.30 p.m.: No convulsions; it has slept quietly since the chloral till now. On awaking was taken out of bed. On attempting to take the temperature in the rectum, a violent spasm came on, the child getting quite black in the face. This lasted but a very short time, and its colour again became normal.

10th.—1 a.m.: Was again fed by the tube; no convulsion was produced. 4 a.m.: Another convulsion; and another at 6 a.m. 7 a.m.: Eyes open; colour good; arms twitching; 8 a.m.: Gasping; dark-brown mucus oozing from the mouth; surface cold and black. In a few minutes colour improved somewhat, but breathing could not be re-established although artificial respiration was kept up. She passed a quantity of dark-coloured urine while in this condition, also a small motion. Thus she died.

Autopsy, eight hours after Death (by Mr. R. W. Parker).—No rigor mortis; body much emaciated. Chest: Heart normal, left ventricle contracted; about two drachms of fluid in the pericardium. Lungs: Left—some solid patches on the posterior surface of lower lobe, which were probably due to unexpanded lung. Some emphysema was found along the free margins, and in patches also on the surface. Right lung in a similar, though less advanced, condition. The pleuræ were quite normal. Thymus gland very large. Abdomen: Liver very dark and full of blood; it felt much firmer than normal. The gall-bladder was full. Spleen slightly enlarged; soft. Kidneys small; lobules still quite distinct; dark in colour; capsules peeled off easily. Stomach and intestines appeared quite normal. Brain: Skull-cap very firm but thin; sutures and anterior fontanelle membranous. Membranes of brain normal; no appearance of tubercle. Brain substance not softer than usual; little or no fluid in the ventricles. Spine: On first opening the canal, some effused blood was found on the exterior surface of the membranes among the fat lining the canal; it was small in amount. The membranes appeared healthy; no fluid. The spinal cord was firm to the touch, and presented no appreciable naked-eye change. The cord reached down to the lower border of the second lumbar vertebra. The epiphyses of the radii presented no appearance of the changes characteristic of rickets.

Remarks.—The foregoing case, while not quite typical in its symptoms, resembles in many points the cases described as tetanus neonatorum. It differs, among other points, on account of the very early period at which the spasms commenced, for the child was hardly three hours old when the "convulsions" first commenced. No very manifest cause could be discovered, unless being born in a room without a fire be invoked as a possible factor. There were respiratory troubles from the first, and the child over and over again by its lividity showed how feebly and irregularly the pulmonary circulation was carried on. The condition of atelectasis found after death appeared hardly sufficient to account for it. On the other hand, the fixation of the chest-wall was not a very marked feature. It may be, therefore, that some narrowing of the air-tubes themselves took place during the "convulsions," which had a share in producing the lividity, or that spasm of the glottis occurred, even when spasm of other muscles was not present. If this case is to be regarded as tetanus, it will make the third case which has occurred in this hospital within the last few months. The former cases were also recorded in this journal.

SYMPHYSIOTOMY IN ITALY.—Dr. Harris, the indefatigable compiler of the statistics of obstetrical operations, furnishes an article in the January number of the *American Journal of Medical Sciences* bearing this title: "The Revival of Symphysiotomy in Italy, with comparative tables of the early and later cases, showing that the operation has been more frequently performed in that country in the last seventeen years than in all Europe during the previous eighty, and with far better results." The first table furnishes the results of 70 symphysiotomies performed, from the first case under Sigault in 1777 to 1858, viz., on the part of the mother 44 recoveries and 26 deaths; and on the part of the child 26 recoveries and 42 deaths, and 2 unknown results. In the second table, of 50 cases occurring between 1866 and 1880, the results given are 40 deaths and 10 recoveries for the mother, with 41 living and 9 dead children.

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Medical Times and Gazette.

SATURDAY, MAY 12, 1883.

KOCH *v.* PASTEUR.

Our readers may remember that at the late International Congress of Hygiene, at Geneva, M. Pasteur made a violent attack on Dr. Koch for having questioned the conclusions at which he had arrived on the subject of preventive inoculation, and an exciting debate was expected, when the German excused himself from replying on the ground of his imperfect command of the French language, and his opponent's total ignorance of any but his own. Dr. Koch, however, promised to publish his answer in the course of a few months, and he has now made his promise good. The different spirit in which the rival investigators approach the question is highly characteristic of their respective nationalities, and the discrepancies between their conclusions are owing to their different methods of procedure; besides which, it must be borne in mind that Pasteur is a chemist, and has not enjoyed the physiological and pathological training of his opponent. Pasteur assumes that all communicable diseases are parasitic. The presence of any bacterium in the body of an animal affected with such a disease is, to his mind, sufficient to identify the micro-organism with the disease. He employs fluid media for cultivation, ignoring the objections urged against them by Koch and his school, and he looks on all animals as equally fitted for experimentation, neglecting to avail himself of the differential tests that variety of species affords. Thus, using the saliva of a dead dog for the inoculation of rabbits, he described a new form of rabies, having failed to find bacteria in the secretions of rabid dogs while alive; whereas there is every reason to believe that his rabbits died of ordinary septicæmia. He fell into a like error when he announced his discovery of the bacillus of canine typhoid in the nasal mucus, not the intestinal glands, of horses after death. Even as regards splenic fever, Dr. Koch disputes Pasteur's claim to priority of discovery since his own first publication appeared in 1876, and Pasteur's not till the following year. Koch does not, some imagine, deny the possibility of the transformation of bacilli under altered surroundings into allied forms, nor the change of pathogenic organisms into innocent ones, but he insists on far more crucial and exact evidence of such change before it can be accepted as an established scientific fact, much less a law of nature. He demands that in every case we must show the parasitic nature of the disease, that the micro-organism when found shall be cultivated in solid media until all chance of accidental admixture or access of other germs is excluded, and that the disease shall be reproduced by the inoculation of the pure bacillus with spores. That such demands can be realised is proved already in the case of erysipelas, of anthrax or splenic fever, and more recently of tubercle. The Imperial Board of Health of Germany instituted a series of experiments, under the direction of Dr. Koch, to test the validity of Pasteur's assertions respecting the immunity conferred by his inoculations with mitigated virus, and his theory as to the natural mode of infection. The results of these experiments are now for the first time made public. Pasteur, as is well known, asserts that by cultivating the bacillus in meat broth at a temperature of 42° or 43° C., and freely exposed to the air, its virulence is steadily lessened. To minimise the danger, he advises two successive inoculations—the first with a very feeble virus, the second with one of greater activity. These directions were strictly followed out, the animals operated on being sheep. Injections of the *premier vaccin* produced little or no constitutional disturbance, but a considerable number of the animals operated on died after inoculation with the *deuxième vaccin*. If the survivors had been now absolutely protected, something would have been gained, but such was not the case either against artificial or natural modes of infection; for of six sheep, which, having already received the *premier* and *deuxième vaccin*, ought to have enjoyed immunity, one died within two days of inoculation with unmitigated virus taken from a case of spontaneous splenic fever. Pasteur has advanced a theory that when the carcases of animals that have died from any form of anthracosis or have been slaughtered are buried, the bacilli are apt to be brought to the surface by worms along with their casts; and that the bacilli gain access to the circulation of previously healthy cattle through the abrasions of the oral mucous membrane caused by prickly or coarse fodder. This Koch disputes, urging that it is only in the spore-bearing stage that the microphyte is infectious, and that then mere ingestion is sufficient, breaches of surface being quite unnecessary. Soft foods containing bacilli—in fact, potatoes hollowed out and stuffed with the infective matter—were carefully introduced into the throats of the animals. When the matter consisted of bacilli alone, entirely free from spores, no ill effects followed; but on the experiment being repeated with spore-bearing bacilli, whether fresh or such as had been dried for over a year, death invariably followed within two days. To test the protection afforded by the so-called preventive inoculations against natural infection, seven sheep, which had survived or resisted inoculation with pure unmitigated virus, and thus had been thrice "vaccinated," were fed with sporiferous matter in potatoes: two of the seven died of splenic fever on the second day. Dr. Koch therefore asserts that, even as regards sheep and cattle, the immunity is by no means certain, while none whatever is imparted to rabbits, guinea-pigs, rats, and mice, and man himself may suffer repeatedly from anthracosis. No protection against subsequent infection is afforded by inoculation with the bacilli of erysipelas or relapsing fever, even after the most prolonged cultivation. So that Pasteur has utterly failed on the scanty basis of his partial successes in the case of two diseases—the so-called fowl-cholera and anthracosis—to establish any law of immunity; still less has he made any progress towards realising his dream of extending its application to the prevention of

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every infectious disease to which man or beast is heir. His operations are more akin to small-pox inoculation than to vaccination. They involve the same danger of keeping up the disease by infection of others without conferring equal security on the individuals subjected to it. In short, Dr. Koch maintains that, considering the proved uncertainty of such immunity as is imparted, its probably short duration, and the danger to life not only in the case of the animals operated on, but to others, and to the men in contact with them, Pasteur's preventive inoculation cannot, at any rate at present, be deemed of practical and economical value.

THE CONTAGIOUS DISEASES ACTS.

In the House of Commons, on Friday last week, and again on Monday, the 7th inst., various questions, notice of which will be found in our Parliamentary report, were put to the Home Secretary and the Secretary of State for War regarding the action taken by Government to carry out the resolution of the House relating to the Contagious Diseases Acts; and at last Mr. Puleston obtained leave to move the adjournment of the House, in order to call attention to it as a matter of urgent public importance. Mr. Puleston protested strongly against the withdrawal of the metropolitan police employed in the administration of the Acts, and pointed to the strong expressions in favour of the Acts from the towns especially affected. Lord Hartington insisted that the Acts were not obligatory, but only permissive; and that after Mr. Stansfeld's resolution, which was a plain warning that the House would not provide the money required, no other course was open to the Government; and he declared that all the voluntary parts of the Acts, and the indirect benefits that they obtained, would remain. Several members took part in the discussion, the more part of them censuring the course taken by the Government. Sir Stafford Northcote did not enter into the merits or demerits of the Acts, but was of opinion that the Government had acted too precipitately in virtually repealing, in obedience to an abstract resolution, Acts of Parliament which had been in existence some fifteen years, and the operation of which had been repeatedly inquired into by commissions and committees. Mr. Gladstone denied that there had been any surprise or any "snatching of a vote" about the matter. If the members who paired for and against Mr. Stansfeld's resolution were added to the number of those who actually voted, it would be seen that a moiety of the whole House had expressed their opinion on the question. It was well known to be a strongly disputed question, for it had been before the House for years; and it must have been known that the Government was divided on the question. A majority of the members of the Cabinet had been parties to a Bill which they had introduced into the House, and which went the whole length of abolishing compulsory examination under the Acts. It could thus hardly be a matter of surprise if some of them thought it necessary to act according to their opinions. Opinions did indeed change; he himself had not always voted against the Acts, nor had his noble friend always voted for them. The essence of Mr. Gladstone's speech was, however, that by the fact that the Acts required that the expense of them should be defrayed out of annual estimates, it was shown that the deliberate intention of the Legislature was that their operation should depend on the will and judgment of the House of Commons; and after the passing of Mr. Stansfeld's resolution, it was impossible for the Government, many members of which had supported it, to submit an estimate, or to spend money on the Acts without an estimate. It would have been much more interesting and instructive had Mr. Gladstone told us why he changed his mind about the Acts, and voted against them; and if he would have informed us whether Lord Hartington's knowledge, as Secretary for War, of the working of the Acts had made him speak now so strongly, and vote in favour of the Acts, when he "had not always voted for them" formerly. From this point of view, Mr. Osborne Morgan's brief statement of the way in which he arrived at his clear and positive conviction of the value of the Acts as hitherto administered, was the most valuable contribution to the whole discussion. He said that in June, 1882, his friend, the then Secretary for War (Mr. Childers), had requested him to join the Committee, not for the purpose of officially representing the Government, but in order to watch its proceedings, and, if possible, assist in its investigations. His friend at the time informed him of his own views on the subject, which were exactly those expressed in his speech the other night. But on the evidence which came before the Committee the case for the Acts appeared to himself so overwhelming—on this point he could not retract a word which he had uttered in his former speech—that he was forced to bend to it, and he even requested Mr. Childers to relieve him from the duty of further attendance on the Committee. It was only on the express understanding that he was to be left perfectly free and unfettered that he consented to remain a member of it." The statement adds not a little to the weight that must attach to Mr. Morgan's opinion in favour of the Acts.

THE WEEK.

TOPICS OF THE DAY.

The Archbishop of Canterbury has now given his decision with regard to the meadow-land at the rear of Lambeth Palace. In a letter to the Lambeth Vestry, his Grace, after referring to the legal difficulties in the way of even a temporary alienation of the land of which he is only a life-owner, remarks that he believes he is consulting the best interests of the poor by maintaining and extending the usefulness of the ground as it is at present used, and by endeavouring, if possible, to give to children greater facilities for enjoying the privileges now accorded. While on the subject of open spaces, we may remark that at the last meeting of the Metropolitan Board of Works a letter was received from the Metropolitan Public Gardens and Playground Association, calling attention to the present unsatisfactory arrangements with regard to Lincoln's-inn-fields, stating their willingness to take the necessary steps for securing their dedication to the public use, and inquiring whether the Board would accept them if handed over, and, if not, whether they would interpose any obstacle to prevent the Corporation of London from obtaining power for the purpose of dedicating such open space to the public use, and for taking charge of it. This letter was referred to the Works Committee for consideration. The Metropolitan Board of Works are at the present time laying out the Hackney Downs as a recreation ground for the people, and the Hackney District Board of Works have acquired West Hackney churchyard, and a disused churchyard in Well-street, as open spaces for the people.

His Royal Highness the Prince of Wales recently presided at the annual dinner of the friends and supporters of King's College Hospital. In proposing the toast of the evening, His Royal Highness remarked how patent it must be to everybody that there existed a great necessity for good and excellent hospitals. A great many, he said, are already established, and their number is increasing, the difficulty being not so much to keep up their efficiency with regard to the buildings and the medical staff, but to obtain subscriptions for their maintenance. The

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income required to keep this Hospital going was nearly £15,000 a year, but during the last year only half that sum was received in subscriptions, donations, and dividends. The deficiency in income year after year had to be made up by sales which had gradually reduced the capital of the Hospital from £40,000 to £18,000. He pointed out that King's College was a thoroughly free hospital, where everybody who applied might be attended to. Before the close of the evening it was announced that the subscriptions handed in amounted to £4400, including a handsome donation of £500 from the Goldsmiths' Company.

It is officially announced that the Parkes Museum is to be opened in the new premises, Margaret-street, by the President, the Duke of Albany, on the 26th inst. It is hoped that the central position of the new premises will make the museum more useful than it has hitherto been to professional men, owners of property, employers of labour, artisans, and others; arrangements are to be made for granting the use of the building to professors of hygiene and teachers of sanitary science, for the purpose of demonstrating to their pupils the uses of sanitary appliances; and for this purpose the sanitary apparatus of every kind contained in it will not only be available, but in many cases will be shown in action. The drainage of the premises has also been specially planned for the purpose of illustrating the best methods, and has been carried out in a manner to render it available for teaching purposes.

The utilisation of Thames sewage was once more brought to notice at the recent meeting of the City Commissioners of Sewers, held at the Guildhall. Mr. Rose Innes called attention to the question, and pointed out that thirty years ago, when the Metropolitan Board of Works was formed, the Legislature apparently had a dim idea that the sewage might be turned to profitable account as a fertiliser of the soil. The idea had not yet been realised, and he ventured to assert that the main drainage scheme of the metropolis, so far as cleansing the river was concerned, had proved a failure. As a remedy, Sir J. Bazalgette recommended that the sewage should be carried to the German Ocean, at a cost of six millions sterling; but he (Mr. Innes) considered that this would be wicked and wanton waste of a valuable agricultural commodity. It was estimated that the Thames sewage now wasted would produce 651,000 tons of excellent manure per annum, and he thought that means could be devised for irrigating with that product vast tracts of land and sand, now unproductive, on both the Kentish and Essex sides of the river, to the great advantage of the public at large. He moved that the matter be referred to the Port Sanitary Committee; and, after some discussion, the motion was agreed to.

Recently, before Mr. Justice Field, without a jury, the case of the London School Board *v.* the Board of Works for the Strand District was brought forward for decision. In this case an information was brought on behalf of the former body for an injunction to restrain the defendants from disinfecting the clothes, etc., of patients who have suffered from scarlet fever, at a place in Denzil-street, near Clare Market. The plaintiffs sought to show that the neighbourhood is a very crowded one; that there are four large schools in the immediate vicinity of the disinfecting chamber, and that this room is a source of great danger to the children. A number of witnesses were called to prove that it is a nuisance to the whole neighbourhood. After hearing counsel on both sides, the learned judge said that he did not think that the plaintiffs had made out their case. The defendants had a large area over which they exercised jurisdiction, and a public duty devolved upon them to take means to disinfect the clothes of those who had scarlet fever. This was a very important duty, but of course they must not break the law to carry it out; he thought the defendants had a discretion where to place the disinfecting room, and that they were the judges, and had used their best discretion; he therefore refused the injunction prayed for by the London School Board, and gave judgment for the defendants, with costs.

The University authorities at Cambridge have announced the dates of the examinations that will be held for medical and surgical degrees during the present term:—First M.B. Examination, Monday, June 11; Second M.B. Examination, Thursday, June 5; Third M.B. Examination, part 1 was held on the 8th inst., part 2 will be held on Monday, May 14 An examination for the degree of Bachelor of Surgery takes place on Friday and Saturday in this week. The names of candidates for the First or Second M.B. Examination must be sent to the Prælectors of their respective Colleges on or before May 26.

The *Manchester Examiner and Times* states that further litigation in the matter of the Thirlmere Lake arbitration award has been avoided by a compromise between the Manchester Corporation and the Countess Ossalinsky, the owner of a large portion of the Thirlmere Lake estate, required for the new water-supply scheme for Manchester. The Corporation had resolved to carry the case to the Court of Appeal, but a meeting of the representatives of the Countess and the Corporation resulted in a compromise.

Our contemporary, *The Builder*, after pointing out that London is sadly deficient in markets, goes on to give some information as to how this matter is really better managed in Paris. Each neighbourhood, even the most distant from the centre, is liberally supplied with ample market accommodation. The great central market, the Halles Centrales, is an admirably organised institution, and each district market is but a diminutive of the parent establishment. There are fifty-eight other dependent markets in Paris built on the same plan. Why should not each district in London, as in Paris, have its market? Till within a generation, Paris, like ourselves, was dependent on a market not dissimilar in management to our own Covent Garden and Billingsgate thrown into one. The Halles Centrales are not only the central market (as the name implies), but a model of skilful organisation, a model of hygienic order and sanitary cleanliness; and the district markets, devoted to the outlying neighbourhoods, are no less well supplied and organised than the parent establishment. As every neighbourhood is supplied by a similar market, the prices at which are almost exactly the same as those at the central market, the facilities for existence are equally distributed over the metropolis. The question is undoubtedly one of great hygienic importance.

The committee appointed by the National Health Society to inquire into the presence of arsenic and other poisonous substances in wall-papers, pigments, and fabrics of general domestic use, held a meeting last week, when reports from representatives of the English Government abroad, obtained by the Foreign Office at the instance of the committee, were submitted, including communications from Rome, Paris, Dresden, the Hague, Darmstadt, etc., embodying statements as to local and national legislative restrictions on the manufacture and sale of poisonous colours. The draft Bill of the committee, intended to be submitted to the English Legislature, was further discussed.

UNIVERSITY OF LONDON.

The great festival day of the University (Presentation Day, May 9) was observed with great success. The graduates who had passed in the several faculties were presented, and their diplomas were delivered to them by the Chancellor

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Earl Granville. That august and most gracious personage persists in making a distinction between male and female graduates, for it is reported that he "rose to shake the hand of each lady presented for a degree, while he remained seated in receiving the men." In his address to the graduates and visitors, the Chancellor, after speaking of the great loss the University had sustained in the death of their Vice-Chancellor, Sir George Jessel, went on to say that that eminent judge, could he have been consulted on the subject, would have felt a real satisfaction in knowing "that he would be succeeded in the honoured post of Vice-Chancellor by one of such world-wide fame, knowledge of his profession, and singular power of conveying that knowledge to others, as Sir James Paget."

THE ROYAL COLLEGE OF SURGEONS.

At a meeting of the Council of the Royal College of Surgeons of England, held on Thursday, the 10th inst., Mr. Thomas Henry Huxley, F.R.S., who became a Member of the College in May, 1862, was admitted a Fellow, under Section 5 of the Charter of the 15th Victoria, relating to Members of twenty years' standing. Mr. John Tomes, F.R.S., whose diploma as Member of the College is dated March, 1859, was elected to the Fellowship at the same time with Mr. Huxley, but was unhappily prevented by ill-health from attending to be admitted. Dr. Robert Barnes, of Harley-street, who became a Member of the College in October, 1842, was elected to the honour of the Fellowship. The Jacksonian Prize of the College was presented to Mr. A. A. Bowlby, F.R.C.S., Curator of the Museum of St. Bartholomew's Hospital, for his essay on "Wounds and other Injuries of Nerves: their Symptoms, Pathology, and Treatment." The President reported the further progress of the Medical Act Amendment Bill, and the following resolution was adopted *nem. con.* by the Council:—"That the Medical Act Amendment Bill (1883), as modified and introduced into the House of Commons, meets with the general approval of this Council." Mr. Cadge gave notice of the following motion at the next meeting of the Council:—"That it is expedient that, at the election of Members of Council, the Fellows shall be allowed to vote either in person or by proxy."

MEDICAL STUDENTS ON THE MEDICAL BILL.

On Saturday, the 5th inst., the members of the Medical Union Society held a meeting, presided over by Mr. Henry Power, for the discussion of the Medical Bill. Dr. Glover, who had kindly consented to open the debate, pointed to the general consensus of opinion in favour of legislation for the profession, and then described, briefly, the existing organisation of the profession, the direction in which change is required, and the changes for which provision is made by the Bill. Mr. Power agreed with what Dr. Glover had said, and gave, from his experience as a visitor of examinations, some telling illustrations of the immense differences that exist, or have been met with, in the standards of different examining bodies. Mr. Wade approved generally of the provisions of the Bill, but did not think they would do much to improve the social position of the profession. At their last meeting the Society had agreed that they must look, for elevation of the profession in the future, not to elevation of the standard of professional examination, but to a higher standard of preliminary education. At the present time some eighty-four different preliminary examinations are accepted. These included boards in Scotland, Ireland, India, Ceylon, and other colonies. With such a large number of boards in remote quarters of the globe, uniformity of standard was impossible. And until they could alter this, and insure a good general education prior to entrance into the medical profession, the latter could not command the desired position or status. He then proposed the adoption of the following petition:—"To the Honourable the Commons of the United Kingdom in Parliament assembled: This petition of the Medical Union Society of London humbly sheweth that your petitioners are engaged in the study of medicine in the metropolis. Your petitioners beg to complain of great inconvenience and injustice in the present division of the authorities for licensing to practise the different parts of medicine. They complain that the diplomas now given are costly, that they are only half diplomas, and that those given in different divisions of the kingdom are of very unequal value. Your petitioners would therefore pray your honourable House to pass the Bill for amending the Medical Acts now before you, with one modification. Your petitioners pray you to enact that when a student shall have passed 'with credit' the new examination, to be established by the Divisional Board, under the double sanction of the Medical Council and the Privy Council, he shall be entitled to be registered as a Licentiate of the Medical Council in Medicine, Surgery, and Midwifery; or that, in lieu of right to register such title, he be exempted from the final examination of the corporations for their lowest diploma. And your petitioners will ever pray." Mr. Slater, of Guy's, seconded the proposition; several other gentlemen joined in the discussion, and in the end the petition was unanimously adopted.

UNIVERSITY OF CAMBRIDGE.

The Vice-Chancellor of the University of Cambridge has received the following letter from Professor Humphry:—

"Anatomical Museum, Cambridge, May 4, 1883.

"Dear Mr. Vice-Chancellor,—You were quite right in your statement in the Arts Schools the other day that I intended to resign the Professorship of Anatomy in any case; and I think it best to do so at once in order that there may be a sufficient period for the election of my successor during the present term. I therefore now tender you my resignation of the chair of Anatomy, which I have held by the favour of the University since 1866. Early in 1847 I was asked to assist my predecessor in his lectures. I have accordingly taught anatomy in the University for six-and-thirty years, and I have much pleasure in bearing testimony to the unvarying courtesy, good feeling, and gentlemanly bearing of the students during the whole of that time. My chief reason for resigning is that the increased and increasing number of students, added to a due prosecution of the study of the science, now require the whole time and attention of the Professor; and the income accruing to my successor, under the new statutes, will enable him thus exclusively to devote himself to the duties of the Professorship.—I remain, dear Mr. Vice-Chancellor, yours very truly, G. M. Humphry. I shall be happy to continue to superintend the department till my successor has been appointed."

THE CAUSATION OF HYDRAMNIOS.

In our number for February 3, 1883, we gave an abstract of a paper by Schatz, in which he drew attention to the co-existence of dropsy of the amnion and hypertrophy of the fœtal heart and kidneys, and elaborated a theory to explain the connexion of these different conditions. The subject was brought before the Gynæcological Section of a Congress of German medical men recently held at Eisenach, the proceedings of which are reported in the *Archiv für Gynäkologie*. Nieberding described two cases of hydramnios. In one (already published by him), the twin whose liquor amnii was in excess presented hypertrophy of the heart and kidneys, and obliteration of the ductus arteriosus, with dropsical accumulations in the serous cavities, and anasarca. Nieberding's theory is, that the premature obliteration of the ductus arteriosus altered the mechanical conditions of the

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circulation. More blood was sent into the lungs, the pressure in the right ventricle became increased, and hypertrophy of that structure consequently took place. Increase of pressure in the venous system was the next result, and the passage of an increased quantity of blood through the foramen ovale into the left side of the heart, leading to hypertrophy of the left ventricle, and increased tension in the arterial system. From the increase of pressure in the veins came anasarca of the fœtus; from that in the arteries, hypertrophy of the kidneys. In Nieberding's second case there was only one fœtus. Its heart was hypertrophied, and the ductus arteriosus partially obliterated, its lumen being considerably reduced; its bladder was greatly distended, but the urethra pervious. The placenta was dropsical, and on its fœtal surface presented numerous cysts, which, by dissection, were made out to be in the course of obliterated arteries. Nieberding's theory of hydramnios, therefore, is that the excess of liquor amnii is due to an excessive urinary secretion by the fœtus, consequent upon hypertrophy of the kidneys, this hypertrophy resulting from increase in the blood-pressure caused by the premature obliteration of the ductus arteriosus. Küstner described two cases of hydramnios occurring in one only of homologous twins. The dropsy of the amnion was associated with hypertrophy of the heart, ascites, and cirrhosis of the liver in the twin to which the dropsical amnion belonged. When he met with the first case he thought the liver disease was primary, and the other changes consequent upon it. He now, having met with another case, and studied the cases recorded by Schatz and Nieberding, interpreted the hepatic cirrhosis as a result of congestion, due to increase of the general blood-pressure.

SANITARY INSTITUTE OF GREAT BRITAIN.

At the annual general meeting held on May 7, a report was presented by the Council on the progress of the Institute, and on the work achieved at the congress and exhibition held at Newcastle in the autumn of 1882. The Chairman (Professor de Chaumont, F.R.S.) gave an address; and the following officers were elected for the ensuing year:—*President:* His Grace the Duke of Northumberland, P.C. *Trustees:* Sir John Lubbock, Bart., D.C.L., F.R.S., Thomas Salt, M.P., and Dr. B. W. Richardson, F.R.S.

IS LUPUS TUBERCULOSIS?

The results of some investigations recently made by Pagenstecher and Pfeiffer go to show that lupus ought to be regarded as a process of local tuberculosis. The outlines of the observations are published in the *Berliner Klinische Wochen.*, No. 19. The course of events which led to the opinion expressed was of the following kind:—Pagenstecher had a girl, aged twelve, under his care for a disease of the conjunctiva, which had all the appearances of lupus, and resisted all forms of treatment. In order to decide on the nature of the affection, some pus from the sac of the conjunctiva was inoculated into the anterior chamber of the eye of a rabbit. Five weeks later some grey nodules were seen in the iris. These went on to caseation in the course of two to three months, the whole of the ocular tissues apparently being involved. The result of this experiment was held to prove the tubercular nature of the original disease. Pagenstecher has since had under his care three cases of a similar affection of the conjunctiva, but all were associated with undoubted lupus of the nose. Three fresh inoculations were undertaken, and again in the eyes of rabbits, with a view to obtaining further light on the nature of the disease. The first animal exhibited nodular changes in the iris five weeks after inoculation; three weeks later an iridectomy was performed with a view to examination of the excised portion of the iris; the disease afterwards proceeded no further, and finally all traces of it dwindled away. The second rabbit died with nodular infiltration and swelling of the iris three months after inoculation. The third animal remained unaffected. Pfeiffer detected "tubercular" bacilli in the iris of the two cases of successful inoculation in the rabbits. Ehrlich's method of fuchsin staining was used. The microscopical structure of the diseased irides was quite in harmony with the tubercular view of their nature. The bacilli were regarded as pathognomonic of the tuberculosis, and hence the conclusion at which the authors arrived.

DR. W. B. CARPENTER, F.R.S., ON VACCINATION.

The apparently near prospect of a debate on the subject of vaccination in the House of Commons brought forth from Dr. Carpenter, a few days ago, a letter to Sir Lyon Playfair, M.P., in which it is shown that Mr. P. A. Taylor's own statistics afford the strongest evidence in favour of vaccination. Dr. Carpenter's first point is that the three legislative measures that have been enacted on the subject have each been followed by a marked reduction in the death-rate from small-pox, a reduction which was subsequently maintained. Next he refers to the extraordinary mortality amongst the unvaccinated during the epidemic of 1871, as compared with that amongst the vaccinated; and the statistics for 1881 bring out the same fact, for it appears that if, in this last-mentioned year, the vaccinated had died at the same rate as the unvaccinated, their mortality would have been more than ten times as great as it actually was. Another strong argument from the same statistics lies in the fact that of the deaths amongst the unvaccinated three-fourths occurred under the age of twenty, whilst amongst the vaccinated three-fourths occurred over the age of twenty. There is no other way of accounting for this fact than by allowing that vaccination affords some protection which may in time wear out. Dr. Carpenter also refers to the experience of the Franco-German War, and to that of several States in America, as affording the most conclusive evidence in favour of the efficacy of vaccination and revaccination. We trust that the sound common sense—with which, as a rule, Englishmen are supposed to be blessed—of the great majority of the members of the House of Commons will prevent them from allowing a handful of fanatics to upset an arrangement which has produced in the past, and will continue to produce, incalculable benefits to the nation.

SURGICAL STATISTICS.

The circumstances in which it is proper to submit patients to operations involving danger to life are obviously to be determined by comparison of the probable issue of the disease if left to itself, and the risk of the proposed operation. It therefore is most important to have accurate data upon which to estimate the relative chances of the two courses. It is generally agreed that in the case of operations the only way of correctly estimating the chance of recovery or death is to take a large number of similar cases, and from the results in them to estimate the chances of success or failure in any individual case. It follows as a matter of supreme importance that operation statistics should not only be correct, but should be published in such a uniform manner as to admit of comparison. If certain cases are included in one table, and excluded from another, we get numerical statements apparently contradictory, and which would be misunderstood when quoted, without laborious examination of the original publications themselves. A case in point just now presents itself to our notice. In a paper by Dr. H. P. C. Wilson, of Baltimore, published in the April number of the *American Journal of Obstetrics*, we find (page 392) statistics by Dr. Bantock quoted

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to the effect that this operator has performed (or had performed when Dr. Wilson wrote) hysterectomy twenty-six times, with seven deaths. In exhibiting some specimens to the Obstetrical Society of London on March 7 of this year (see *Medical Times and Gazette*, March 31, page 368), Dr. Bantock stated that he had performed twenty-two hysterectomies with two deaths. Now, these statements, if the words used be taken to mean the same thing in each, cannot both be correct. We have no doubt that there is an explanation of the apparent discrepancy; and we call attention to it as an illustration of the importance of compiling statistical records in a uniform form, so that comparison may be possible. Among the other lessons for which the profession is indebted to Sir Spencer Wells, is that of publishing his operation statistics in such a manner that their meaning was clear to all the world, and that their correctness was never called in question.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

At a meeting, held pursuant to the Charter, on Tuesday, May 1, the following were elected Examiners in the College for the ensuing year, viz.:—Examiners to examine candidates for Letters Testimonial and Fellowship—Edward A. Stoker, Edward S. O'Grady, Henry Gray Croly, William Thomson, Robert S. Swan, William Frazer, Benjamin G. M'Dowel, and Phins S. Abraham, Esqs. Examiner to examine candidates in Ophthalmic Surgery—Arthur H. Benson, Esq. Examiners to examine candidates in Midwifery—Henry Croly, William J. Smyly, and John J. Cranny, Esqs. Examiners to examine candidates in General Education—Henry J. Tweedy, Frank J. Davys, and Robert Morton, Esqs. At a meeting of the Council, held on Saturday, May 5, Dr. William Stoker was elected a member of Council in the room of Mr. H. G. Croly, appointed an examiner for the Letters Testimonial and Fellowship.

THE PARIS WEEKLY RETURN.

The number of deaths for the seventeenth week of 1883, terminating April 26, was 1330 (700 males and 630 females), and of these there were from typhoid fever 37, small-pox 12, measles 40, scarlatina 2, pertussis 16, diphtheria and croup 44, dysentery 2, erysipelas 6, and puerperal infections 5. There were also 60 deaths from tubercular and acute meningitis, 267 from phthisis, 32 from acute bronchitis, 138 from pneumonia, 73 from infantile athrepsia (24 of the infants having been wholly or partially suckled), and 29 violent deaths (21 males and 8 females). The number of deaths which is almost the same as that of the preceding week, is higher than the mean of the preceding four weeks, which is 1306. Deaths from epidemic diseases still continue numerous, and those from measles have increased from 31 to 40. The births for the week amount to 1233, viz., 631 males (477 legitimate and 154 illegitimate) and 602 females (442 legitimate and 160 illegitimate): 100 infants were either born dead or died within twenty-four hours, viz., 58 males (42 legitimate and 16 illegitimate) and 42 females (27 legitimate and 15 illegitimate).

EXPERIMENTAL FARM OF THE AMERICAN GOVERNMENT.

The *Philadelphia Medical News* of April 7 publishes the following statement:—"The Department of Agriculture has leased a piece of ground near the north-eastern boundary line of Washington, to be used as an experimental farm and hospital in connexion with investigations of diseases of animals. The grounds are being put in order, and buildings are erected thereon. Dr. D. E. Salmon, who has for a number of years been employed by the Department in the investigation of diseases of cattle, swine, and poultry, will arrive at Washington about May 1, to take charge of the work. He will bring with him a number of cattle and sheep, and the experiments will begin shortly afterwards. The Pasteur system of inoculation will be adopted, with such additions and qualifications as have been suggested by Dr. Salmon's own discoveries while engaged in investigations at his farms at Asheville, N.C. The investigations now to be made will be on a much larger scale than any heretofore attempted by the Department, and will be conducted with the view of ascertaining the origin, causes, and nature of the Texas cattle fever, pleuro-pneumonia, and hog and chicken cholera, together with the means of preventing and curing these diseases."

A MIDWIFE CHARGED WITH MANSLAUGHTER.

Last week a midwife named Goss was charged at the Hammersmith Police-court with having caused the death of Elizabeth Harmer. The case arose out of a coroner's inquest on the body of Mrs. Harmer, who died from pyæmia dating from her confinement, in which she had been attended by Mrs. Goss. Two medical practitioners swore to having warned Mrs. Goss not to attend any cases within a few days of the confinement of Mrs. Harmer, and the jury found the following verdict:—"That there had been on the part of Mrs. Goss wilful neglect and culpable negligence, and that, having been cautioned, she nevertheless, for the sake of money, continued at her business." It is only fair to Mrs. Goss to add that she denies that she had been warned by any doctor not to attend any more cases before Mrs. Harmer's confinement; and, whilst the matter is still *sub judice*, we must refrain from making any comment further than to note that the case is one of great importance.

THE ROYAL INFIRMARY, GLASGOW.

The report of the Special Committee of the Managers of the Glasgow Royal Infirmary, which was appointed on March 1 last, to consider and report upon the subject of the administration of anæsthetics, and other matters, was received and unanimously adopted at a meeting of managers, presided over by the Lord Provost, held on the 7th inst. The Committee "having carefully considered the remit made to them, and having put themselves in communication with forty of the principal hospitals throughout Great Britain and Ireland as to the practice prevailing in these hospitals—from upwards of twenty of which they received detailed replies—and having also had a meeting with a deputation of three members appointed at the request of the Committee to represent the views of the medical staff of the Infirmary, and with the late and present chairmen of the House Committee—beg leave to recommend the following as the regulations which ought, in their opinion, to be enacted. We cannot give at length all the recommendations of the Committee; but the following are the most important regarding the administration of anæsthetics:—"1. When a surgeon receives a new assistant he will instruct him practically in the manner of giving anæsthetics, and in the dangers to be guarded against in the administration thereof, as well as in the best method of combating these dangers when they arise; and the course of clinical instruction given by the surgeons shall include demonstrations on the practical administration of anæsthetics. 2. In appointing the assistants, the managers will consider it of importance that the candidates shall have received special instruction on the action of anæsthetics, or have a certificate showing that they have a proper knowledge of the subject. 3. When a surgeon is satisfied of his assistant's knowledge of the subjects mentioned in Rule 1, he shall grant to him a certificate to that effect, which the assistant shall present to the superintendent, who shall report the same to the next meeting of the

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Weekly Committee. 4. The assistants shall not be entitled to perform any operation under an anæsthetic in the absence of the visiting physician or surgeon, unless they are legally qualified, and unless they have previously obtained and presented a certificate as above provided, and then only in the presence of one of the dispensary staff, whom failing, the superintendent, and of one other assistant qualified as above provided." Recommendations 5 and 6 provide for cases of extreme urgency; and another provides that "all cases of administration of anæsthetics in the surgeon's absence must be entered forthwith in the operation book, and reported to him at his next visit." And, "In case of a death occurring while the patient is under an anæsthetic, whether in the presence or absence of the physician or surgeon, he shall make particular note of all the circumstances of the case in the ward journal or operation book, and shall report the same, through the superintendent, to the next meeting of the Weekly Committee."

MORTALITY OF THE CAPITALS OF EUROPE IN 1883.

THE *Union Médicale* furnishes the following statement of the mortality of the first quarter of 1883:—London, with its population of nearly four millions, presents the smallest mortality rate, this being 22·1 per 1000; but three epidemics—measles, scarlatina, and pertussis—have occasioned a number of deaths which is relatively considerable. It is at St. Petersburg that the rate of mortality is highest—40·6 per 1000; and there typhoid fever and diphtheria have prevailed with great intensity. Berlin has had a mortality of 24·3; and croup has caused during the three months 663 deaths in a population of 1,200,000. In Brussels the proportion of deaths was 25·7; in Paris (with a population of 2,239,928), 27·3; in Stockholm, 27·8; in Vienna, 31·1; and in Madrid, 36·4. In this last city the mortality is always very high. Measles alone caused 402 deaths in the three months—an enormous number in a town containing only 400,000 inhabitants.

TWO EXCEPTIONAL CASES OF TRACHEOTOMY.

DR. STEFFEN, of Stettin, communicated to the first part of the nineteenth volume of the *Jahrbuch für Kinderheilkunde*, two cases which are of considerable interest. The first case was that of a child, two years old, who was admitted into hospital on October 28 with what appeared to be scarlatinal nephritis. Two months later the general condition had greatly improved, and a small suppurating gland beneath the left jaw, which was punctured, soon healed up. About the middle of January the child had cough, with slight hoarseness; on the 23rd, quickened pulse and respiration, with normal temperature; on the 24th, symptoms of stenosis glottidis suddenly supervened, and were relieved by an emetic of sulphate of copper. In the evening of the same day a sudden accession of dyspnœa necessitated tracheotomy. This was performed, nothing beyond a little hæmorrhage calling for remark; "but when the tube was inserted as usual, it did not afford the desired relief, so that to those looking on it appeared as if the tube had not been placed in the trachea." The countenance rapidly became cyanosed, and more and more swollen, the dyspnœa increased, and the child died a few hours later. The autopsy showed the right lung collapsed and pressed against the spine except at the upper part of the upper lobe, where there was a little bronchitis and peribronchitis. The left lung was slightly œdematous. The pharynx and œsophagus were healthy. Croupous inflammation and exudation were found in the larynx as far as the first ring of the trachea. The incision was "through the upper tracheal rings." On either side of the trachea there was diffuse emphysema of the peritracheal and mediastinal connective tissue, which commenced opposite the lower margin of the wound, and extended downwards in increasing breadth and thickness as far as the tracheal bifurcation, but did not involve the lung itself. Dr. Steffen says that emphysema after tracheotomy can possibly be produced in two ways—either by rupture of pulmonary alveoli in the struggle for air (of which there was no evidence in this case), or it may proceed from a wound in the trachea; and he expresses the opinion that this was its origin in the above case. In discussing this subject, he does not mention the fact that air may be drawn into the mediastinum through the intermuscular sheaths of the cervical fascia, without any wound of the trachea at all. From the perusal of his paper we should have judged that the canula never got within the trachea, but was inserted into the intra-tracheal connective tissue—an accident which has occurred before now even to experienced operators. It is impossible, with the result of the autopsy before us, to think that relief would not have been afforded to the breathing, for a short time at all events, had the canula once been properly inserted; for there was no disease in the trachea below the first ring. It is to be regretted also that the trachea and larynx were not cleared out with a feather before any attempt was made to insert the tube. The second case also was one of a boy two years old, who was admitted March 11, with croupous laryngitis and diffused double-sided bronchitis. Tracheotomy had to be performed the same evening; the tube was changed on March 15, and on the 20th it was removed by Dr. Steffen, who then found that the tissues around the edge of the incision, almost down to the trachea, were infiltrated with diphtheritic exudation, and were even commencing to break down, so that they could be removed for the most part with forceps. About half an hour later, as the child did not appear to breathe quite comfortably, it was resolved to re-insert the tube; but this was hardly accomplished when a fit of suffocation supervened, again necessitating the removal of the tube. Three or four days later, pneumonia of the left lung became manifest, but resolution took place in about another week, and the child could be pronounced quite well again by the middle of April. Dr. Steffen, in some remarks as to the probable cause of this pneumonia, which confined itself to one side, is inclined to regard it as due to the detachment and sucking-in of a small bit of the sloughing tissue which was found about the wound when the tube was removed. The presence of bronchitis, too, at the time when this operation was performed, shows that this condition is not by any means a serious contra-indication to tracheotomy. The only remark we would make on this second case is that it teaches with much force the great importance of the most scrupulous cleanliness about a tracheal wound, even more than about other wounds. The question suggests itself whether greater attention to the wound in this case, and the daily removal and cleansing of the tube, might not have saved the child from a complication (pneumonia) which is fatal in the majority of the cases in which it happens.

ACADEMY OF MEDICINE OF BELGIUM.

THE following prizes are offered by this learned body:—1. A prize of 8000 fr. (the essays to be sent addressed to the Secretary of the Academy, Brussels, by December 31, 1883): "Elucidate by clinical facts and, if requisite, by experiments the Pathogeny and Therapeutics of Diseases of the Nervous Centres, and especially of Epilepsy." "Encouragements" of 500 fr. or 1000 fr. may also be decreed to those authors whose works, while not considered as entitling them to the prize, are deemed worthy of recompense. Moreover, besides this prize of 8000 fr., 25,000 fr. may be

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awarded to the author who has realised decided progress in the therapeutics of disease of the nervous system, such as, for example, the discovery of a remedy for epilepsy. 2. "The History of Hysterotomy and its Applications"; a prize of 800 fr.; essays to be delivered by February 1, 1884. It is desired that not only hysterotomy, but especially hysterectomy, should receive illustration. 3. A prize of 800 fr. (before February 1, 1884): A comparative investigation of Tuberculosis in all Domestic Animals under the quadruple relation of its Causes, Symptoms, Lesions, and Treatment. The relations which exist between Tuberculosis in Man and Cattle are to be brought out, and the Consequences the Consumption of the Flesh and Milk of Cattle affected with Tubercle may have on the Healthy Man. The conclusions must be based not only on known facts and experiments, but also on new researches. 4. Prize of 800 fr. (February 15, 1885): An investigation of the Influence of the Nervous System on the Urinary Secretion, especially based on personal researches. 5. Prize of 1500 fr. (April 1, 1886): Determine by new experiments and new applications the degree of utility attaching to Spectral Analysis in Legal Medicine and Medical Police.

The Medical Act Amendment Bill was read for the first time in the House of Commons on Wednesday last week, and was ordered for the second reading on Thursday this week. Considering the state of business in that House, and the fact that notices of amendment to the Bill have been put on the paper, it seems little likely that much, if any, progress will be made with the measure this week.

The Duchess of Albany has fixed Tuesday, July 10, for the ceremony of opening the new building for the Chelsea Hospital for Women in the Fulham-road, the foundation-stone of which was laid by the Princess of Wales three years since. The Duchess, who will be accompanied by the Duke of Albany, the Patron of the Hospital, has consented to receive purses containing contributions of ten guineas.

At the annual meeting of Convocation of the University of London, held on Tuesday, the 8th inst., it was agreed, on the proposition of Dr. M. Baines and Mr. Henry Morris, M.A., M.B.—"That in the constitution of any Medical Board for England under the Medical Bill now before Parliament, no arrangement will be considered satisfactory by Convocation which does not provide for the appointment on it by this University of at least two representative members."

At a congregation of the University of Cambridge, to be held on June 13, it is proposed to confer the honorary degree of LL.D. upon M. Louis Pasteur, Member of the French Academy, Director of the École Normale, Paris.

The Professorship of Anatomy in the University of Cambridge has become vacant by the resignation of Professor Humphry. Dr. Humphry will not, however, cease to be a Professor in the University. It is intended to establish a Professorship of Surgery, to which Dr. Humphry will be elected, and he has generously offered to discharge the duties without a stipend until the income of the University will permit the proper endowment of the chair.

An exhibition of sanitary domestic appliances, hygienic dress, and decoration will be held at Humphrey's Hall, Albert-gate (opposite Knightsbridge Barracks), from June 2 until June 16, under the auspices of the National Health Society.

The annual dinner of the officers of the Army Medical Department will take place on Friday, May 25, at the Inns of Court Hotel, Lincoln's-inn, at 7.30 p.m., under the presidency of the Director-General. Officers intending to dine are requested to send their names to Surgeon-Major W. G. Don, 6, Whitehall-yard, S.W., from whom dinner tickets can be obtained.

MEDICAL MATTERS IN PARLIAMENT.

House of Commons—Thursday, May 3.

Substitutes for Butter.—Mr. Moore inquired whether any steps had been taken by the Statistical Department of the Board of Trade, or the Board of Customs, to tabulate more accurately the different imports of butterine, oleo-margarine, and other butter substitutes.—In reply, Mr. Courtney said that the proposal to raise a separate heading to the trade returns of butterine, and also for lard and other imitation cheese, had been considered by the Statistical Inquiry Committee, who had recommended, not without doubt, that new headings should be raised for these articles. But as the officers of Customs have no means of verifying the importers' descriptions in such cases, it was advised that a note be added that there was no guarantee that the articles described as cheese and butter are not largely composed of mixtures. The Treasury were prepared to adopt the scheme as an experiment.

Dundrum Lunatic Asylum.—Mr. W. Corbet having put a question referring to a passage in the last Parliamentary Report on Irish Lunatic Asylums, Mr. Trevelyan said the statement quoted referred to a departmental inquiry held by order of the Government into a number of matters connected with the management of the Central Asylum, Dundrum. Together with other matters inquired into, there were charges and counter-charges between the resident physician and the late visiting physician—much more, however, of the former than of the latter. The resident physician's report was always inserted in the inspector's annual report presented to Parliament. That was not done in the case of the district asylums. The reports of departmental committees (such as that referred to) of inquiry were regarded as confidential; and he could not undertake to lay the report or the correspondence relating to it on the table of the House.

Alleged Ill-treatment in a Workhouse.—In reply to questions from Mr. O'Brien, Mr. Trevelyan said: An investigation was held at the Loughrea Workhouse, as stated, and it was proved that the charge against a nurse of having put her hand on the mouth of a dying man, as if to hasten his end, was wholly without trustworthy foundation. The assertion was made by a patient who is suffering from senile mental decay, and is full of delusions. As a matter of fact, he was not in the hospital at all at the time which he fixes for the alleged occurrence. As to the alleged exclusion of newspaper reporters during the examination in the hospital, it appeared that Dr. McCabe did not visit to take evidence, but to test the patient's mental capacity, and he thought it desirable this should not be done before strangers. If he had found the man capable of giving evidence he would have permitted the presence of reporters. The facts as to Dr. O'Donohoe's evidence about a strait-waistcoat on a sick man were as stated. It had been done by the master on his own responsibility; and, in consequence of this and other misconduct, he had been dismissed by the Local Government Board.

Friday, May 4.

The Contagious Diseases Acts.—In answer to a question from Lord R. Churchill, the Marquis of Hartington stated that in consequence of the resolution recently passed by the House of Commons in reference to these Acts, the Government propose as soon as possible to introduce a short Bill providing for the following main points, viz.:—1. To repeal all sections of the Acts of 1866 and 1869 which direct periodical or compulsory examination of women (including all police action). 2. That any woman voluntarily presenting herself at a certified hospital may, at her own request, be examined, and, if it be deemed necessary by the surgeon, may be admitted into such hospital and detained there in accordance with the provisions of the apresent Acts. 3. That in places under the Acts where no certified hospital exists,

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any woman may, at her own request, be examined by a duly appointed surgeon, and, if it be deemed necessary by him, may be admitted into a certified hospital and detained there under the provisions of the present Acts. 4. That anything in the present Acts not inconsistent with the above provisions should be retained. That was all the legislation that appeared to be actually necessary in the present session; but it would not exclude a consideration by the Government of the whole question, with a view either to legislation next session on the lines of the recommendations of the Royal Commission of 1871, or of the Bill of 1872, or possibly of the introduction of some further provisions into the Bill about to be presented in the House of Lords for the amendment of the law relating to the protection of young girls.—Lord R. Churchill further asked whether the Secretary of War still held the opinion, expressed by him in the recent debate, that the present Acts were necessary for the efficiency of the Army and Navy.—The Marquis of Hartington replied that he believed his speech had not been accurately reported; all he had said was that the Acts had tended to the efficiency of the Army.

Venereal Disease among our Troops in Egypt.—Mr. Warton asked whether, lately, at Cairo, in one battalion about 650 strong, seventy-five men were laid up at one time in consequence of venereal disease.—The Marquis of Hartington replied that on April 13 the soldiers of the force at Cairo under treatment for venereal disease amounted to 2·65 of the strength, which would give an average of only about seventeen for a battalion of 650 men. By a later return, received May 3, it appeared that of the whole force in Egypt about 3½ per cent. were in hospital for venereal disease.

Venereal Disease in the Garrison of Dublin.—In reply to Mr. Warton, the Marquis of Hartington said: In December last the military authorities in Ireland represented strongly the great prevalence of venereal disease among the garrison of Dublin, and urged that the provisions of the Contagious Diseases Acts should be extended to that city. It was not considered expedient to propose legislation for such an extension; but I have arranged with the Governors of the Westmoreland Lock (Government) Hospital to offer additional accommodation to diseased women.

Typhus Fever in Dublin.—Mr. Corbet inquired whether the Chief Secretary to the Lord Lieutenant of Ireland had any further information with regard to the outbreak of typhus in Jones's-court, Dublin.—Mr. Trevelyan replied that the matter had been inquired into as fully as possible. The reports of the medical inspector went to show that while it is to be regretted that the dispensary doctor, who was a newly appointed officer and not well acquainted with all the provisions of the Public Health Act, did not promptly report the nature of the deceased man's illness, so that steps might have been taken to prevent the holding of a wake, yet there was no reason to suppose he had been guilty of any wilful neglect of duty; and the weight of evidence went to show that the spread of the fever was not due to the wake, but to the concealment of the disease on the part of those families in which it first appeared.

Monday, May 7.

The Case of John Flanagan.—In reply to a question from Mr. W. Corbet, Mr. Trevelyan said: From the fuller information that I have now received, it appears that John Flanagan was not removed from the workhouse by his father, but was discharged by the master on his own application, in error, having been mistaken for a night lodger. When the master, on the day following the discharge, found out his mistake, he sent to John Flanagan's father, who refused to allow his son to return to the workhouse. There was nothing in the man's appearance to indicate insanity. Two months before the murder he was brought before the magistrates, charged with being a dangerous lunatic, but they declined to commit him. He was carefully examined by three magistrates, one of whom was surgeon to the county infirmary, and he was re-examined in their presence by the doctor who had declared him to be insane, and the three magistrates arrived at the conclusion that he was not a lunatic. On the case of the Scotch transfer warrant the lunatic was simply described as a pauper, his lunacy being referred to in a somewhat illegible endorsement in red ink, which the master of the workhouse had overlooked. The Local Government Board had censured the master for his negligence. If the hon. member desired to make any complaint as to the action of the Scotch authorities, it should be addressed to some one else. They were not under Mr. Trevelyan's control.

The Contagious Diseases Acts.—In reply to questions put by several members, the Marquis of Hartington said: The action which I stated the other day the Government propose to take is with the view, not of annulling the provisions of these Acts, but of retaining as much of these provisions as we can reasonably expect to receive the support of the House in retaining. The Lock hospitals will remain, and the power of detention of women who are found to be diseased will also remain in force. I also stated that we are considering whether it will be possible to adopt any of the recommendations of the Royal Commission of 1871, which, in their opinion, might be applied not only in those districts, but more generally with a prospect of improving the health of the troops, and of the population generally. And Sir William Harcourt stated that the Government felt bound to discontinue enforcing so much of the executive portion of the Acts as it was in their discretion to enforce or not to enforce. The aid of the metropolitan police in the administration of the Acts would therefore be withdrawn. As to the local police, the Executive Government had no power over them. The Secretary of State had a slight authority over the country police; but in local boroughs the autonomy with respect to the local police was absolute. Moreover, the Commons held the strings of the purse from which the metropolitan police were paid for their services; while the pay of the local police did not depend upon the estimates.

London and North-Western Railway (Additional Powers) Bill.—When the third reading of this Bill was moved, Mr. A. Balfour moved that it be recommitted, and that it should be an instruction to the Committee to modify the provisions of the Bill, so that the powers of purchase as regards the desired burial-ground in St. Pancras parish should apply only to such portions of the ground as might be necessary for enlarging the Euston Station and making a new street. The amendment was negatived by 173 to 157.

THE PUBLIC HEALTH, GLASGOW.

During the fortnight ending April 28, 1883, there were registered 679 deaths as compared with 646 in the preceding fortnight, an increase of 33, representing a death-rate of 34·2 in place of 33·2 per 1000. The death-rate in the first week of the fortnight was 34, and in the second week 35. The number of deaths below one year of age was 148 in place of 121, and of persons aged sixty years and upwards 73 in place of 100. The number of deaths from pulmonary diseases was 223 in place of 255, representing a death-rate of 11 in place of 13 per 1000 living, and constituting 33 in place of 39 per cent. of the total deaths. The number of deaths from fever was 6 in place of 8—viz., enteric fever 4, typhus fever 2. The mortality from measles was rapidly increasing, and it had spread over all parts of the city. The number of deaths from infectious diseases of children was 103 in place of 85—viz., 51 from measles, 37 from whooping-cough, and 15 from scarlet fever. The death-rate from measles was 2·6 per 1000, and from whooping-cough 1·9; so that these two diseases accounted for 4·5 of the death-rate. The average age of the fatal cases of measles was twenty-three months and a quarter, and of whooping-cough twenty-two months—figures which amply explain the fact that 49 per cent. of all the deaths registered were of children below five years of age. One case of small-pox was registered in the city, and also one removed from the Cathcart parish. The case registered in the city was found in the same close as the case reported last fortnight. In this case revaccination was resorted to, which had the effect of aborting the small-pox. The landward case was a sister of the previous case from the same locality.

Congestive Headache.—Dr. Rogers, of Honolulu, writing to the *New York Medical Record*, April 21, thinks that the value of ergot in this trouble is not appreciated. He gives it in large doses (one drachm of fluid extract), and would not be afraid to repeat it within an hour. He combines it generally with a full dose of bromide of potassium (forty grains or more), the combination being much more effectual than bromide alone.

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THE METROPOLITAN ASYLUMS BOARD HOSPITAL REPORTS.

Dr. JOHN MCCOMBIE, in his report for the year 1881, as Medical Superintendent of the Deptford Hospital, states that during that period 3185 acute cases of small-pox were admitted, 1578 were discharged recovered, 810 were transferred convalescent to Darenth, 27 to Fulham Hospital, and 552 died. The mortality was, therefore, at the rate of 17·3 per cent., and there remained under treatment, on December 31 last, 151 small-pox patients. Into the fever wards of the Hospital 146 patients were admitted during the year, 42 were discharged recovered, 26 were transferred to the Homerton Fever Hospital, and 25 died. On December 31 last there remained 97 patients under treatment on the fever side. Small-pox and fever were treated in the Deptford Hospital simultaneously from the beginning of the year till February 8 (when the pressure of the small-pox epidemic necessitated the fever wards being given up), and during the months of November and December, at which time there were 151 small-pox and 97 fever patients under treatment. These changes involved the thorough cleaning and disinfection of small-pox wards, furniture, and bedding for fever, and *vice versâ*. By the erection of temporary wooden wards, the accommodation at Deptford for small-pox cases was increased to 400 beds, but even then a large number of cases had to be refused admission in March, April, and the beginning of May, until the opening of the convalescent camp at Darenth somewhat relieved the pressure. When the camp at Darenth was decided on, it was arranged that all convalescents should in the first place be sent to Deptford from all the other hospitals, and be transferred from there on the following day. In this way 810 convalescents were sent on belonging to Deptford Hospital, and 1590 from the other Asylums Hospitals. The distance from Deptford to Darenth is eighteen miles, and the arrangements, superintended by Dr. McCombie, were as follows:—Three four-horse omnibuses were provided, to seat ten persons each inside. In addition to the driver, there was a commissionaire in charge of each vehicle, and an attendant, who rode inside with the patients. Stabling was erected adjoining the Hospital for the horses and vehicles, and all persons connected with the transfer of the patients lived in the Hospital. The patients had breakfast at half-past five, and started at six, reaching Darenth about nine. Only one stoppage was allowed, at a brook by the wayside to water the horses. The empty vehicles returned to Deptford in the course of the same afternoon. Dr. McCombie expresses an opinion that the accommodation provided at Darenth checked in a marked manner the spread of small-pox in London in the summer of 1881, since it enabled the hospitals of the Board to receive numbers of patients who would otherwise have had to be refused admittance. Of the total admissions at Deptford for small-pox, 2303 were vaccinated, of whom 175 died—a mortality of 7·6 per cent.; 351 were said to be vaccinated, but had no marks or evidence of vaccination, and of these 126 died—a mortality of 35·9 per cent.; 531 were unvaccinated, of whom 251 died—a mortality of 47·4 per cent. These results, Dr. McCombie observes, should be sufficiently conclusive of the advantages enjoyed by vaccinated compared with unvaccinated patients, and he adds—"Vaccination is so constantly assailed by a certain class of persons, that I wish, before closing my report, to express my firm belief in its value as a means of diminishing the severity of small-pox in a large—a very large—proportion of those who have the misfortune to be attacked. Were these persons to *see* small-pox as we see it, and not merely to *read* about it, I cannot believe they would be so indifferent to human suffering as to continue to oppose a means which, if it does not always prevent, yet in most cases robs a horrible and loathsome disease of most of its terrors."

In submitting the eleventh annual report of the Stockwell Small-pox Hospital for the year 1881, Mr. Francis R. Bernard, the Medical Superintendent, gives the number of patients admitted during the year as 999. Of these 972 were suffering from small-pox, and 27 from other diseases. Of these 864 were discharged, 178 died, and 68 remained under treatment on December 31 last. The percentage of mortality was 17·3, but if the deaths of patients (17 in number) who did not live thirty-six hours after admission are deducted, there will be a considerable decrease. Of these 17, 5 died within nine hours, 3 within eighteen hours, 3 within twenty-four hours, and 5 within thirty-six hours of being admitted. Mr. Bernard makes allusion to the fact that no less than forty patients during the year walked to the Hospital; or, in the case of children, were carried, including one brought in an open cart, one in a tram-car, one in an omnibus, and one in a perambulator. The great majority, he adds, stated that they had been advised to walk to the Hospital by the medical practitioner they had consulted. This, he remarks, is a most fertile source of infection, and measures should be taken to put a stop to it. Mr. Bernard also expresses his astonishment that parish authorities do not undertake an inspection of houses wherein small-pox cases have occurred. He is credibly informed, he observes, that the majority of houses in the neighbourhood of the Stockwell Hospital have no trap between the drains and the street sewer. It would be advisable, he thinks, that qualified surveyors should carefully inspect each house when finished, and before being occupied, and that where insanitary conditions are found to exist, these officers should withhold their certificates until such defects have been rectified. It also appears to him most desirable that there should be an entirely separate entrance at Stockwell for fever patients and visitors to the Fever Hospital, in order that these should not, as they do now, pass through the grounds of the Small-pox Hospital, and within a very few yards of the residential block. Small-pox patients, moreover, are still sent to Stockwell by the Westminster Union in ambulances used indifferently for both fever and small-pox patients. During the year under notice there were 3 deaths in five such admissions. Of the patients admitted during the year, 716 were vaccinated, with 47 deaths, a percentage mortality of 6·5; 86 were doubtfully vaccinated, with 38 deaths, a percentage mortality of 44·1; and 197 were unvaccinated, with 93 deaths, a percentage mortality of 40·2. The great value of vaccination, the report adds, is as fully borne out as by the experience gained in former years. Two infants were born during the year in the Hospital, were vaccinated immediately after birth, and were discharged, neither having taken small-pox.

FROM ABROAD.

PROFESSOR CORNIL ON TUBERCLE-BACILLI.

PROF. CORNIL terminated a paper which he had read at the Académie de Médecine, in his own and M. Babès' names, "On the Topography and Action of Bacilli in the Pathological Anatomy of Tuberculosis" (*Gaz. Hebd.*, May 4, and *Bulletin de l'Académie*, May 1), with the following conclusions:—

"The forty anatomical specimens which we have examined in relation to the search for bacilli may be divided into three categories—1. Those in which the considerable number of the bacilli of tuberculosis in all the tubercular products, granulations and infiltrations, completely explains the genesis of the lesions of chronic inflammation which constitute tuberculosis. The lesions are there evidently as much connected with the bacteria as the nodules of lepra, a disease in which the action of parasites is as well demonstrated as in *charbon*. The propagation of these micro-organisms by the bloodvessels and lymphatics is proved by their seat in the interior of and around these vessels. This category of facts is absolutely assimilable to the inoculation experiments by which Dr. Koch, by injecting hundreds of different animals with the bacteria of tuberculosis, that had been purified and isolated by many cultures, constantly reproduced tuberculosis.

"2. In the second series of facts, the bacilli characteristic of tuberculosis are few in number, but one or several of them constantly exist in the giant-cells—that is, in the midst of tubercular granulations. We must believe that here also the bacilli have formed the point of departure for the nodular inflammation, since they are placed at a centre. Here, too, the seat of election is around the small vessels. Sometimes, in place of bacilli, or by the side of them, we meet with grains which are coloured of the same colour by the same series of manipulations. These grains are not the elements which were seen at first by MM. Klebs and Toussaint. MM. Cornil and Babès have been able to assure

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themselves, by the examination of the tubercles inoculated by M. Toussaint's culture-liquid, that there existed characteristic bacilli in the inoculated tubercles.

"3. In a third series of observations relating to chronic tuberculosis, the bacilli, which are almost always in the migratory lymphatic cells, are no longer found except in the walls of caverns or of ulcerated bronchi. Generally, they are not seen in parts undergoing caseous degeneration. Still, they are to be met with around these caseous masses in the zone which contains the most recent granulations. Sometimes masses of them exist in some sort encysted in very old fibrous tubercles, surrounded by deposits of carbon. In explanation of cases of this kind in which the number of bacilli is far from affording an explanation of all the lesions observed at the autopsy, we may suppose that they have been eliminated or destroyed, but have nevertheless left behind them chronic inflammations of a sclerous nature or islets of caseous degeneration, all modifications of tissues which persist after their disappearance. In order to understand this disposal of bacilli in old tubercular products, we must bear this fact in mind: that they are transported by the migratory cells, and that a constant and considerable elimination of them takes place by means of the sputa from the bronchi and caverns, by catarrhs, by the surface of intestinal ulcers, and by the urine.

"However, all has not yet been said on this question of the bacilli of tuberculosis, which only dates back a year. New methods of colouring and research would suffice to extend our knowledge of the subject. Perhaps other conditions of these same bacteria, of which we as yet know nothing, will be discovered. But at the present time, while taking count of the numerous predisposing causes of phthisis, it cannot be denied, in face of the discoveries of Villemin and Koch, that parasitism is its essential cause."

The Paris Faculty of Medicine.

In his report for the scholar-year 1882-83 (*Gaz. des Hop.*, April 21), Prof. Beclard, the Dean of the Faculty, observes:—

"For several years past the number of students at the Paris Faculty has remained nearly stationary; but, as the enumeration has hitherto been made only in an approximative manner, we have now sought to render it more exact, considering as having ceased to belong to the Faculty any student who has not made any *acte de scolarité* since 1874—that is for eight years, a period which may be regarded as the *maximum* for studies for the ordinary student, but only as the *mean* duration of studies for those who compete at the *concours* for the posts of *externes* or *internes* of hospitals. Having examined all the certificates, and abstracting the names of 522 students who have quitted the Faculty during 1881-82 either because they have received the doctor's diploma or have renounced the study of medicine, we find that on October 16, 1882, the students pursuing their education were 4209 in number. I may add that among the students who have not performed any *acte de scolarité* during eight years, of whom there are several hundreds, all have not definitively abandoned medicine for other careers. From time to time a certain number of these irregulars demand permission to resume the course of their studies. What may also be mentioned, and which at first sight may seem singular, is that among these delayed students we meet with most of our best men, who, for work in physical or natural science, or in medicine itself, have temporarily left the regular courses, to which they return at a later period with a considerable 'scientific baggage.' Moreover, if we desire to arrive at the absolutely exact figure of our students, we must add to the 4209 pursuing their studies on October 16, 1882, all those who have taken out their first inscription at the commencement of the present year, the number of whom amounts to 388, and will certainly exceed 400 if we take into account the students who will be authorised by a special decision to take out inscriptions. The foreign students who come to Paris in order to follow our courses or to terminate their studies; the foreign practitioners who are desirous of adding to the title of doctor that of Doctor of Paris; and especially the foreign practitioners who seek to attend our courses, and especially those of practical anatomy—have increased during the last two years (that is, since the complete organisation of our practical teaching) in serious proportions. The number of women who have followed the courses the Faculty remains nearly stationary, and tends to decrease, for while it was fifty-two in 1880-81 it has been during 1881-82 only thirty-nine. The total number of examinations held during 1881-82 amounted to 6076. The number followed by successful results was 4426, that of rejections 1650—that is to say, the number of students rejected exceeded the fourth, but did not reach the third of those examined. It is nearly the same proportion as in the preceding year, but it must be observed that the number of subjects taught has gone on increasing for some years past. The mark "*passable*" is always predominant, while in the whole 6076 examinations there were only 255 "*très bien*" and 72 "*extrêmement bien.*" When these numerical results are more closely examined, it is impossible not to be struck with the relative frequency of the rejections and bad marks in the examinations on sciences applied to medicine (natural history, physics, and medical chemistry). We can only conclude from these results, which are more marked every year, that our students enter upon their medical studies with an insufficient scientific preparation, and that the diploma of *baccalauréat ès sciences restreint*, which is required for students in medicine as a preliminary guarantee, is in reality only an illusory guarantee."

REVIEWS.

A System of Surgery: Pathological, Diagnostic, Therapeutic, and Operative. By Samuel D. Gross, M.D., LL.D., D.C.L. Oxon., LL.D. Cantab., Emeritus Professor of Surgery in the Jefferson Medical College. Sixth Edition, in two volumes. Vol. I., pp. 1194; Vol. II., pp. 1174. London: Smith, Elder, and Co. 1882.

That five editions of this work have been exhausted in twenty-three years is convincing proof of its popularity. The present edition, like its predecessors, has been published in two large, closely printed, and profusely illustrated volumes. We learn from the preface that the author has had the assistance of Professor S. W. Gross, especially in reference to morbid growths, in collecting statistics, and in correcting for the press; that Drs. Cohen, Haslam, and Barnett have aided in the revision, respectively, of the chapters on the Respiratory Organs, the Eye, and the Ear; that Professor Edward Seguin has contributed the section on Cranio-Cerebral Topography, which forms a very valuable addition to the chapter on Injuries of the Head; and that Drs. Battey and Sayre have supplied matter relative to Oöphorectomy and the application of the plaster jacket in the treatment of Spinal Diseases. With all this assistance, however, the author's own share of the work must have been very great; and as we also learn from the preface that he graduated in medicine in 1828, we must congratulate him on having retained, after fifty-four years of professional life, sufficient energy to undertake and successfully execute the laborious task of preparing a new edition.

We are told on the title-page that the work has been thoroughly revised and greatly improved. The latter statement, though not usually made by an author about his own work, only anticipates the opinion which will be formed by all who read the book. Comparison with the fifth edition will show that the revision has been indeed thorough and minute. Everywhere, verbal alterations (for some of which the motive is not apparent), transposition of some paragraphs, suppression or modification of others (and this might have been done less sparingly, with advantage), and addition of new matter when rendered necessary by recent discoveries, attest the care that has been taken to make the work worthy of the author's reputation.

By the use of smaller type room has been gained for the additional matter without any considerable increase in the number of pages. The letter-press is very clear, the typographical errors are few, and many well-executed illustrations have been added to those which appeared in former editions. In short, no trouble or expense has been spared in the endeavour to produce a good work, and it forms a very handsome and useful addition to surgical literature.

Still, without wishing to adopt the Horatian maxim,

> "Reprendite, quod non
> Multa dies et multa litura coërcuit atque
> Præsectum decies non castigavit ad unguem,"

we must confess that, in our opinion, the work might have been better, and that there is much in it with which we cannot agree.

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There is so much of it, that the size of the book will probably deter the average medical student, at any rate in this country, from studying it. Indeed, the volumes are so ponderous, that an hour's perusal will leave the reader with aching arms and a keen appreciation of the humour of the cartoon in "Punch's Almanac" about the "édition de luxe." The busy practitioner, who may wish to refresh his knowledge, or learn the most recent improvement in the surgical treatment of any ailment, will not always find easily what he may want, and the arrangement of the index is not likely to afford him much assistance. The absence of references to the enormous quantity of past and contemporary literature from which the author quotes, will deprive the book of much of the value, which it would otherwise have had, for the lecturer on surgery.

The germ theory of the origin of disease does not find favour with Professor Gross, and, perhaps in consequence, he does not approve of Listerism. In the preface he pays a well-merited compliment to Mr. Lister, but his approbation seems to refer rather to the effect of Mr. Lister's teaching and example on the practice of other surgeons than to Listerism itself. This mode of treatment, however, has been of such benefit to surgery, both directly and indirectly, that we might reasonably expect to find a full and complete description of it in this work. But the reader will search in vain for it. In vol. i., page 135, he will find incidentally, with reference to the treatment of scrofulous abscesses, a very brief and not altogether accurate account of this method, concluding with the statement that the author "regards it as utterly useless." The paragraph, comprising about a dozen lines, might easily escape notice altogether, and we venture to assert that any surgeon who should, without further instruction than is here afforded to him, adopt this mode of treatment in any case, would probably find it useless, and that the failure would result from inadequate instruction, and not from any defect in the system itself. If the reader should continue his search, his diligence will be rewarded by discovering in the index, "Listerism, II., 918." But, on referring to the indicated page, his disappointment will be blended with amusement on reading (anent ovariotomy), "Listerism no longer enjoys the favour it once did in this operation,"—and nothing more. Surely, since the famous "Mr. Justice Best—his great mind," which proved to be that "Mr. Justice Best said that he had a great mind to commit the prisoner for prevarication," there has been no more comical instance of index-making than this. But we learn from the preface that Dr. R. J. Dunglison is responsible for the index.

Professor Gross is a strenuous advocate for the prolonged employment of taxis in cases of strangulated hernia, and believes that few cases require operative interference. Some eminent surgeons will agree with this opinion. But other equally eminent surgeons think that, when what appears to them a reasonable trial of taxis has failed, speedy operation will be best for the patient. That surgeon will probably have the best results who will act in each case as the condition of the patient and the circumstances of the case may suggest. But the high reputation of those surgeons whom our author quotes as opposed to his opinion on this subject ought to have prevented his unworthy allusion to the "annoyance of the knife's-man" upon the unexpected reduction of a hernia without operation. In the fifth edition it was "the ever-ready knife's-man"; in the present edition the adjective has been omitted. We hope that, if another edition should follow, the whole allusion may disappear. Professor Gross should credit his professional brethren with as much interest in the welfare of their patients as he himself can feel; and every surgeon must rejoice at being spared from the necessity of operation by the effectual release, through other means, of the patient from a dangerous condition.

Venesection to the extent of partial syncope is recommended as an auxiliary to the taxis. We had thought that the paragraph in reference to this in former editions was an overlooked survival of the surgical teaching of days when anæsthetics had not been discovered; but in the present edition the author has added: "And my conviction is that it should be regarded still as one of the most valuable auxiliaries of the taxis." We should gladly learn how the author's opinion has been strengthened in favour of this mode of treatment in the ten years which have elapsed since the publication of the fifth edition. But venesection seems to be favourably regarded by Professor Gross. For irreducible hernia we are directed to keep the patient on diet barely sufficient to sustain life, and to commence the treatment "with the abstraction of sixteen to twenty ounces of blood, to be repeated afterwards to one-half, one-third, or one-fourth of that extent every eight, twelve, or fifteen days, until the patient is so far drained of fluids as absolutely to forbid any further depletion." This is, however, for young and robust patients. In reducing dislocation of the hip also, "if the patient be unusually stout and plethoric, blood may be advantageously taken from the arm as a preliminary measure, although this will seldom be required." Again, in strangulated hernia, anodynes are regarded as holding a high rank among the adjuvants of the taxis. "A good rule, when the symptoms are urgent, is to administer from a third to half a grain of morphia hypodermically."

Those who are familiar with the out-patient practice of our large hospitals will read with some surprise that after tapping in hydrocele of the tunica vaginalis, "undue excitement is avoided by observing for a few days light diet and the recumbent posture. If this precaution be neglected, acute inflammation of the vaginal tunic may arise, followed by suppuration, abscess, or sloughing." Any such results in this country would, we think, cause the surgeon to entertain grave doubts as to the condition of the instrument which he had employed. For varicocele, we are told that "subcutaneous ligature is the only safe operation, and furnishes, in every respect, the best results." Such is certainly not our experience. Surgeons who have faith in antiseptic treatment, properly applied, will be surprised by the author's opinion "that any procedure in which the affected veins are denuded is fraught with danger, on account of its liability to be followed by phlebitis, erysipelas, and pyæmia." Almost the same words are used of excision of the diseased vessels in varix of the lower extremity, and the author expresses his conviction that no surgeon should ever expose his patient to such risks, and prefers what appears to us the much less satisfactory method of producing ulceration by caustics at intervals of three, four, or five inches over the enlarged and tortuous vessel. Excision of enlarged patellar bursæ is similarly condemned, and injection with iodine and the use of the seton recommended as preferable.

A thorough critical analysis of so long a work is impossible, and we have selected these few passages at random, and only in justification of our statement that there is much in it with which we cannot agree. The book reminds us of the lecture-theatre rather than the bedside; and while freely admitting the general excellence and great value of it, we think that if the author had given us only the fruits of his own long and varied experience as a practical surgeon, we should have had a shorter but probably more generally useful work.

CHLORAL HYDRATE AS A VESICANT.—Dr. Hughes, of St. Louis, having seen a note recommending chloral as a vesicating agent (*Medical Times and Gazette*, April 21, page 445), writes (*New York Medical Journal*, April 21) to state that he has found it so violent and excruciatingly painful in its action as to render it quite unfit for ordinary sensitiveness. It was employed in a case of neuralgia, and induced the greatest agony, which was somewhat abated by the application of wet towels. The neuralgia, indeed, was speedily relieved by the chloral, but the systemic shock was such as quite to preclude recurring to it in another attack. The hydrate could only be recommended when there arose difficulty in obtaining the action of ordinary counter-irritants.

REMOVAL OF THE SECUNDINES AFTER ABORTION.—The February number of the *American Journal of Obstetrics* gives great prominence to the advisability of immediate removal of the secundines after abortion, contrary to the teaching of many treatises on midwifery, and the practice of many of the older men in the profession. The most striking of the articles in our contemporary is that of Dr. Mundé, which is accompanied by a list of fifty-seven cases, in which the placenta was removed by the writer with only one death from septicæmia, which had developed before the operation. The symptoms calling for the removal were in eight cases exhausting hæmorrhage, and in five septicæmia. Yet of the total number, fifty-five made an uninterrupted recovery. The method of removal was in twenty-two manual, and in thirty-one instrumental (curette and forceps). Ergot was used in the remaining four cases.—*Boston Med. Jour.*

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PROVINCIAL CORRESPONDENCE.

GLASGOW.

May 6.

THE ROYAL INFIRMARY CONTROVERSY—NEWSPAPER CONTROVERSY BETWEEN TWO PROFESSORS—LETTERS TO A LAY JOURNAL FROM MEDICAL MEN ON THE SYSTEM OF MEDICAL TEACHING IN THE UNIVERSITY.

WE doctors are generally considered a canny sort of people, who live peaceably and keep free from squabbles and agitations. Lately, however, we seem to have broken loose and to have almost run riot with all sorts of excitements; and the worst feature of this state is, that subjects are discussed before an audience who are incompetent to judge of the merits of the questions raised. Some of our medical friends carry their disputes to the daily papers—a proceeding which is not calculated to raise us in the estimation of this commercial community.

The Royal Infirmary controversy is on the point of being closed, but not in a manner altogether satisfactory to the medical staff; the new regulations with regard to chloroform, etc., are virtually a concession to the chairman, Mr. William McEwen, and this gentleman has been asked to withdraw his resignation, which he has consented to do, and to return to the Board. His presence there hardly seems to augur well for the future peace of the institution, as, judging from the past, it is to be feared that he will not work harmoniously with the medical managers of the Board.

Another uncalled-for and regretable newspaper controversy, between an intra-mural and an extra-mural professor, has been carried on in the *Glasgow Herald*, which has been anything but edifying. It originated in a public meeting of the Medico-Chirurgical Society and members of the medical profession with reference to the Medical Bill now before Parliament; and the University Professor was chairman of the meeting. Some remarks the reverse of complimentary to the University arrangements, anent their appointment of assessors, etc., were made by one of the speakers; but, instead of answering these strictures on the spot, the chairman, to the surprise of his friends, rushed into public print. A paper duel was fought, both combatants retiring after firing some unprofessional shots at each other.

This week, again, a new correspondent has come forward, who, in a trenchant letter in the *Glasgow Herald*, writes against the system of medical teaching pursued at the University. He shows that every one of the professors has taken full advantage of his position of monopoly, and that the courses are practically doubled: whilst in 1862 the curriculum of study at the Glasgow University comprised thirteen classes at a cost of £46 4s., in 1883 the number of classes is twenty-six, which cost £90 6s. Owing to the development of medical science, some subjects may be legitimately extended over two sessions, but it is difficult to prove that botany, zoology, and the recently instituted Lectureship of Pathology require such multiplication. Of course these extra so-called "practical" classes, in contradistinction to the theoretical, are optional. It is urged, however, "that the students find, by sad experience, that, as the teachers are to be his examiners for his degree (the assessors being the nominees of the professors), the taking of the non-compulsory classes is an indispensable sop to the academic Cerberus." It is a pity that such questions are not left for the discussion in the medical press, societies, and associations, instead of agitating in daily papers. In to-day's *Herald* a letter is published by a graduate, in defence of the multiplication system, who indulges in personal reflections in regard to the antecedents of the would-be reformer, that he was not reared in a manse or in an episcopal palace. Knowing the nature of the combatants, we shall very likely have a long continuation of this sort of literature, which may be amusing to some parties, but cannot fail to prove prejudicial to the best interests of the profession.

TREATMENT OF VENEREAL WARTS.—Dr. Liebemann employs the following formula:—Salicylic acid, thirty grammes; extract of Indian hemp, ten grammes; and collodion, half an ounce—to be applied every other day. The remedy is, however, slow in operation, and may have to be used every day.—*Boston Medical Journal*, April 12.

GENERAL CORRESPONDENCE.

COLOUR-BLINDNESS.

LETTER FROM DR. JOY JEFFRIES.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your issue for December 23, page 754, you speak of the examination of pilots and seamen in the United States for colour-blindness, and credit the United States Navy with the successful report, etc. Such tests are, however, not made by the Navy Department, but by the Surgeons of the Marine Hospital Service under the Treasury Department. The Navy has its own special examination of recruits. The present laws, outside of the Navy, require only that *pilots* should be tested as to their chromatic sense, masters and mates and sailors not at all. This examination was properly put in the hands of the Marine Hospital Surgeons. Their success in detecting the colour-blind drew forth the most strenuous efforts on the part of the friends and employers of the defective to have the tests put in the hands of the local inspectors of steam-vessels at the various ports, etc. These officials would, of course, either not detect the colour-blind, or readily licence any found. Experience has shown this. The accompanying pamphlet will prove to you how hard I had to work before the Board of Supervising Inspectors at Washington to prevent the examinations from being made by others than those alone competent to carry them out, and who were provided with my manual (adopted by the Government), and the necessary worsteds for Holmgren's test, with which they were required to be familiar. They have done remarkably well, as the report you quote proves. The Committee and members of the British Ophthalmological Society have shown how extraordinarily inadequate and inefficient are the rules and their application as to defective vision among officers and sailors in England. The Parliamentary reports on this subject are simply silly. This surely should not occur in the land of Dalton, and when so many specialists have given recent attention to the subject of deficiency in the chromatic sense. It is true that they have to contend, as I do here, with "ignorance, prejudice, and pecuniary considerations."

The medical men of the Marine Hospital Service, under Surgeon-General Hamilton, have done so well in carrying out the examinations for colour-blindness, that I thought it was hardly fair that the Navy Department should get the credit. I am, &c., B. JOY JEFFRIES, M.D.

15, Cheshunt-street, Beacon-hill, Boston, Mass., U.S.A.

THE ROYAL RED CROSS.

LETTER FROM MR. C. FOSTER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Since the Queen, by Royal mandate, has been graciously pleased to institute the "Red Cross" as a fitting decoration for meritorious female tenders of our sick and wounded soldiers and sailors, might I humbly suggest, through the medium of your influential journal, that the disinterested and devoted Florence Nightingale be the first lady on whom so honourable a distinction is conferred.

I am, &c.,

Leeds, May 7. CLARENCE FOSTER.

THE VOLUNTEER MEDICAL SERVICE.

LETTER FROM DR. M. BAINES.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is suggested that the Volunteer Medical Service should be strengthened by the formation of a Volunteer Medical Department, and the consequent organisation of a Volunteer Hospital Corps. Such a proposition is now before the public, and bears the support of most of the Volunteer medical officers.

In addition to this distinct advance in the Volunteer equipment, I would suggest that the Government should organise a reserve of medical officers, as in the other branch of the Army, which officers would be available for home district and hospital work in case any foreign war compelled a large drain on the present Medical Department. Such a

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reserve would cost the Government nothing, would be popular amongst us, and would identify us more closely with the regular medical officers. That we should gladly avail ourselves of such commissions, the experience of the late Turco-Russian war sufficiently proves, if we remember that nearly all of us volunteered to relieve the Army Medical Department of their home duties on an appeal from Government when the pressure of imminent war threatened to withdraw the regular Army medical officers for foreign service.

I am, &c., M. Baines, M.D.,
Surg.-Major 1st Middlesex Engineer Volunteers.
Headquarters, 67, College-street, Chelsea, S.W.

PRELIMINARY TESTS.

Letter from Mr. M. D. Propert.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have lately perused some correspondence in different journals concerning the severity of the tests applied to young persons aspiring to become registered medical students, and I trust you will permit me, with a view to helping students to a proper judgment of the matter, to draw attention to the following facts, which can be readily verified by reference to official sources.

From the communications laid before the Medical Council during its last session by the College of Preceptors, it appears that the College of Preceptors, in the year ending March, 1883, examined 457 candidates, of whom 155, or 33·8 per cent., obtained certificates entitling them to be registered.

The Societies of Apothecaries, in the same year, examined 379 candidates, of whom 126, or 33·2 per cent., obtained certificates entitling them to be registered.

The University of Cambridge held special local examinations, for the benefit of medical students, in September last. There were nineteen candidates, all over age, and aiming at the junior standard only, but *none* satisfied the requirements of the Medical Council.

It is obviously the interest of medical students to inquire into, and compare the facts connected with all, or as many as possible, of the examinations to one of which they must submit. Such an inquiry will deter them from supposing that the uneducated may hope for success, and it will also convince them that for some years the process of closing the "back doors" to the medical profession has been going on.

I am, &c., M. D. Propert, B.A., LL.B.
Trinity Hall, Cambridge, May 9.

Operations for Stone at Canton.—Dr. Kerr reports (*Philad. Med. News*, April 7) that there were performed at the Medical Missionary Society's Hospital at Canton, in 1882, forty-six lithotomy operations, with two deaths, and twenty-three lithotrities, also with two deaths. Dr. Kerr has now, since his appointment to the Hospital in 1855, performed lithotomy 449 times, and lithotrity 168 times, making in all 617 stone operations. His late native assistant operated also in thirty-four cases, and Dr. Parker, his predecessor, in thirty-seven. Besides these cases there were many cases of removal of urethral calculi; and an almost incredible number of stones have been removed from beneath the prepuce, and constitute a collection unequalled in the world. Some of the calculi removed by lithotomy by Dr. Kerr were so large that they required to be broken prior to extraction. One removed from a man of forty-three weighed six ounces one drachm; another, from a man of twenty-eight, weighed five ounces, and measured three by two inches; and in a third case, two stones together weighed eight ounces. All these patients recovered. Dr. Whitney, of Foochow, writes to say that he has a class of five Chinese medical students; and Dr. Dudgeon, of Pekin, is publishing Kirkes' Physiology in the classical Chinese.

Slow Pulse.—Dr. Harris, of Brantford, Ontario, writes:—"In one of the numbers of the *Record* last summer I observed a reference to a remarkably slow pulse—thirty-six per minute. Last October, I saw a gentleman in perfect health with a pulse of thirty-one, and the same case I saw again last week, and found it thirty-three in a sitting posture. This man is sixty-eight years of age, and has always been perfectly healthy. He is a farmer residing in the vicinity of this city."—*New York Med. Record*, April 14.

REPORTS OF SOCIETIES.

THE CLINICAL SOCIETY OF LONDON.

Friday, April 13.

Andrew Clark, M.D., President, in the Chair.

A Case of Lepra Tuberculosa.

Dr. W. J. Tyson said that the patient, aged sixteen, was born in Ireland, when two months old went to India, and remained there until he was six, then returned to Ireland, and has not been abroad since. His family history gives no clue to his case. He was quite well until two years ago, when the present condition of face first began to show itself. Present condition: The boy is physically strong and fairly well made, height 4 ft. 8½ in., his hair is reddish and his eyes are blue. He does not seem dull mentally. The appearance of the face is characteristic of the disease, and has, as many have, a somewhat lion-like appearance; the skin is soft to the feel, thickened, and of a brownish-red colour; on his chin, and just underneath it, are about a dozen small elevations (tubercles), varying in size from a mustard-seed to a pea. On the trunk in front and behind there is a yellowish-brown mottling. The chest and abdomen are healthy. There is no albumen in the urine. Just below the right buttock there is a patch of flattened tubercles, and over the left olecranon a softish mass of the size of half a walnut. The hands are generally cold, and the skin here is thickened; around each wrist-joint there are a few tubercles; the skin over the feet is red, thickened, and scale-like in appearance. All the joints are sound. The voice is hoarse, but this has only appeared quite recently. There is no anæsthesia of skin. His diet does not seem to have been abnormal.

The President inquired whether the nervous system had been specially and systematically examined. To this Mr. Tyson replied that no impairment had been detected in any direction.

Dr. Southey regarded the case as one of a certain stage of tubercular leprosy which had been well described. He referred to the thickening of the tissues about the wrists, which is a very characteristic feature of leprosy. The fingers tend to become immobile, the sensation is impaired a great deal, and the digits may become so troublesome that the patients mutilate themselves, chopping off the affected fingers. He spoke of the insensibility which pervaded the cutaneous structures in the anæsthetic form, which never had the same aspect as the cases of tubercular leprosy. He thought that the case exhibited this evening would go on to albuminuria; the kidneys undergo a sort of granular degeneration, in which interstitial change the whole of the viscera participate.

Mr. Startin spoke of the early stage of the disease as of interest; he said Mr. Hutchinson had brought similar instances of the disease to the Society. The present case showed the thickening of the ulnar nerves and the ulceration of the lobes of the ears. He inquired whether any history of syphilis could be obtained. He mentioned the case of a man, aged forty-six, who contracted the disease apparently ten years before in India: this example would go very well in this respect with Mr. Tyson's case. He asked whether any thickening besides that of the ulnar nerve had been found. It was remarkable that no ulceration of the mucous membranes was present in this instance.

Dr. Southey said that frequent micturition of pale urine was a common antecedent of the albuminuria.

Dr. Duckworth referred to the interstitial changes found in the internal organs.

Dr. Tyson, in reply, said that the ulceration of the lobe of the ear could hardly be looked upon as essential, nor did he regard the thickening of the nerves as very marked. He thought he should not be able to give any further particulars anent the question of syphilis and other points of etiological interest, owing to the difficulty of communicating with the boy's near relations.

The President proposed that the case be submitted to a committee in order to investigate the case as to the bacillus; this was assented to, and Drs. Southey, Duckworth, Thin, and Tyson were nominated to serve on the committee.

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Removal of a Large Portion of the Upper Lip without Deforming the Face.

Mr. Barwell described the following case:—George S., aged sixty-one, much addicted to smoking short clay pipes, came under Mr. Barwell's care with that singularly rare disease, epithelioma of the upper lip. The growth was close to the corner of the mouth, but did not involve the commissure; and was so extensive that at least two-thirds of the lateral half of the lip would have to be removed in eradicating the disease. Such extensive excision must have disfigured the man very considerably unless means of prevention had been adopted. The following operation was devised and performed, November 4, 1882:—The base line of the triangle requiring removal was measured, and an equal line marked by a superficial incision extending from the corner of the mouth directly outward. The other sides of the triangle, also measured, were similarly traced from this line downward towards the ramus of the jaw. Thus was traced outside and below the mouth a triangular space exactly like that to be removed from the upper lip, but reversed. The first—the horizontal—incision was now deepened down to, but not into, the mucous membrane; then the two lateral limbs of the triangle were incised through all tissues into the mouth, and some bleeding vessels were twisted. The thick tissues of the flap were dissected from the mucous membrane, left hanging to the horizontal incision, to which, the extreme point being sacrificed, it was stitched, thus giving to that part a red border. The next step was the excision of the epithelioma along the lines already traced and measured. The edges of the lower, or what may be called the complementary triangle, were now brought together with twisted suture. In doing this it is to be noted that the horizontal base line of the complementary triangle was necessarily shifted inwards, and coming to lie above the lower lip, took the place of that part of the upper lip which had been removed with the cancer. The new red border, made by turning up the mucous membrane of the cheek, imitated the natural red of the lip. The edges of the wound in the upper lip were now brought together with hare-lip pins, and the new mucous edge sewn with horse-hair, both at the site where it joined the old and at the commissure of the mouth. When all was complete, no deformity was left. The man recovered rapidly; and when seen two months after operation his mouth was as nearly perfect in form as previous to operation, nor did its movements appear in any way irregular or constrained.

The President said that Mr. Barwell had thrown out an interesting suggestion with regard to the etiology of cancer. He (Dr. Clark) thought that the successful mutiny of growth over development was well illustrated by the appearance of epitheliomatous disease of the lower lip as the result of chronic irritation.

A Case of Tachetic Symmetrical Gangrene.

Dr. Southey narrated the history of this case. Frank N., aged nine (admitted into Matthew Ward, St. Bartholomew's Hospital, November 25, 1881), was much emaciated; his hair thin and falling off; abdomen empty and retracted; skin dry; and he was in a curious, excitable, semi-delirious mental state. He presented a gangrene of the tip of his right index finger; all his extremities felt cold; and he had insomnia. His pulse was 148, very feeble; respirations 32; temperature 99°. His heart beat with feeble impulse in normal situation. There was no increase of normal cardiac dulness, no cardiac murmur, no physical signs of lung disease. Neither liver nor spleen transcended their normal limits. His appetite was bad; he had had no sickness; bowels acted once daily; tongue clear and moist; micturition gave no pain; urine scanty, not abnormal, chiefly passed with his stools. Course and progress: After a few days the thumb and second finger of the same (right) hand were similarly involved, became first red and throbbed, then livid, and finally gangrened. On December 5, exactly similar spots occurred respectively on the pinna of the right ear, on the extremity of his nose, and on the tip of the middle finger of his right hand. A little later, subcutaneous mottlings (*ecchymoses*) appeared all over his trunk and limbs, and developed into a raised rash, like urticaria tuberosa or erythema tuberculatum. The spots first itched, then became painful and tender, but gradually subsided, leaving only some pigmentation to mark their sites. Finally, all the fingers and thumb of the right hand gangrened and slowly separated, and the thumb, index, and little finger of the left hand. He passed into a condition of most extreme prostration, with broncho-pneumonia of both lungs, and only very slowly and gradually recovered from it. In January, 1882, a new and interesting clinical feature was manifested, namely, intermittent true hæmaturia, bloody urine being passed alternately with normal-coloured, non-albuminous urine. Some days distinct blood cells were passed with the urine; on others, blood colouring matter without blood cells; on others, albumen with blood enough to give the blood reaction only. Oxalate crystals were present in great abundance when the hæmaturia was abundant, and *vice versâ*. No tube casts were ever noticed. All symptoms of urinary disorder disappeared in July, 1882, when the child was discharged well, but with the loss of his fingers. He has been seen several times since. The author next cited some parallel examples of this malady, which he referred to vaso-motor disturbance.

The President inquired whether there was any history of rheumatic gout. He had seen such local gangrenes in connexion with the latter disease.

Dr. Barlow had never seen so severe an example as Dr. Southey's case. The essential point in the disease is the vaso-motor disturbance. He described three cases. A man aged thirty-five, a supposed sufferer from rheumatism, had pains in the lower limbs, accompanied by "black-bluish-red" patches. The attacks of this affection were peculiarly liable to occur during the winter months, as Raynaud had described. An ecchymosis was found on one trochanter major, and another on one toe. Two girls, each aged three years and a half, also suffered similarly, almost invariably, in the winter, though rarely they had attacks in summer, which were then always to be connected with a sudden change in temperature. The appearance in one case was most alarming, one limb looking black from three inches above the ankle to the toes. The foot remained in that condition for three hours, and then got well. A bluish-red patch was also seen on one olecranon. The other girl was of the same age. In this instance the same condition of local asphyxia was observed, and it was noted that with several attacks she had violent stomach-ache, and in one instance, after an attack, there was found to be a dark-coloured urine, in which no blood-discs were found; the colouring matter was hæmatin. Oxalates were also present. This black urine only occurred once after each attack. The alliances of the disease with paroxysmal hæmatinuria are marked. The sleepiness which precedes both affections is noteworthy. Dr. Barlow had never seen a sweating stage in paroxysmal hæmatinuria. In one case of paroxysmal hæmatinuria the finger-ends were said to become blue at times. The value of cold applications was quite remarkable in the power of removing the state of local asphyxia in one instance. The mother stated that the child had a great liking for being washed with almost boiling water, but Dr. Barlow enjoined the gradual substitution of cold for hot water, with friction afterwards. Raynaud recommended the constant current applied along the course of the spine. The case of the man mentioned previously was certainly benefited by the use of the constant current. Dr. Barlow had not been able to find any history of rheumatism or gout in his own cases. He referred to some cases described by Mr. Hutchinson as destructive "end-joint arthritis" associated with Raynaud's disease. Mention was also made of a symmetrical contraction of joints of both hands, not like Dupuytren's, but the result of a chronic fibrosis of the ligaments. This patient had singularly cold extremities; both tips of fingers and toes, as well as the end of the nose, turned of a blue-black colour.

The President requested Dr. Barlow to send an abstract of his cases with remarks that they might be incorporated in the Society's *Transactions*.

Mr. Harrison Cripps thought that the term blood disease was a vague one. He wished to know what was the specific nature of the blood affection in these cases. For his own part, he considered there was great analogy with ordinary frost-bites; if the extremities be exposed for sufficient length of time to a sufficient degree of cold, especially in young people of feeble circulations, this gave rise to chilblains. The affection was largely due to feeble condition of the heart. He instanced the case of a young woman liable to chilblains and suffering from "dead hands" who got married and became less well fed; after the birth of a child, sym-

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metrical gangrene of various parts of the body appeared, and no doubt it was the impaired state of general health which led to this. He regarded cold as a dangerous application in cases of gangrene, and preferred to trust with Brodie to warmth and opium in small and divided doses.

Dr. BARLOW submitted that he had not advised cold in cases of gangrene, but in the local asphyxial condition of which he had spoken. Raynaud had found by ophthalmoscopic examination that spasm of the arterioles of the fundus oculi occurred in such cases, thus giving a clue to the nature of the affection.

Dr. MAHOMED had seen two cases of the disease. In one instance there was the characteristic hæmatinuria, but he could not agree with Dr. Barlow that this disease and paroxysmal hæmoglobinuria were closely related. He remarked that the skin condition had some resemblance to factitious urticaria. He mentioned the case of a woman who had had the disease for about eight years; the fingers were blue, with black tips. This condition varied much with the state of the weather. He dissented from Dr. Barlow, as he (Dr. Mahomed) considered there was a hot stage. The temperature had been noted in cases of intermittent hæmatinuria to be raised. It was explained, however, that Dr. Barlow only denied the sweating, and not the hot stage.

Mr. SYMONDS had seen one of the cases referred to by Dr. Mahomed. The man was now able to do a good day's work. At the Evelina Hospital, Mr. Symonds had a child with peculiarly cold hands, who had lost a finger on one hand, and was losing a finger on the other. In another patient the combination of purpura, albuminuria, and symmetrical gangrene was observed.

Dr. SOUTHEY, in reply, said that he ought perhaps to have spoken of a general blood disorder. Raynaud had conjectured that there was a centre in the upper part of the spinal cord which regulated the vaso-motor system through the influence of the sympathetic. The tendency of the disease to pass on to gangrene is small. A few further illustrations were also given of the main features of Raynaud's disease.

ON A CASE OF SUBCUTANEOUS NODULES OCCURRING IN A PATIENT THE SUBJECT OF SYPHILIS, AND WITH VERY INDEFINITE CONNEXION WITH RHEUMATISM.

Dr. STEPHEN MACKENZIE brought forward this case, which was taken as read, with the author's consent. The patient is a married woman, aged forty, who had never had any important illness till three years ago, when she apparently had syphilis. She came under care for a tertiary syphilide, and during examination it was discovered that she had several subcutaneous nodules. In all, eight have been detected, which vary in size from a hemp-seed to a split-pea. The skin over them is natural, and they are all movable. They cause no pain except when pressure is made on them. Two are situated along the posterior border of the ulna, and the remainder, with the exception of one of the gluteal subcutaneous tissue, beneath the skin of the thumbs and fingers. The first she noticed about two years ago, and it has increased in size. None that she has observed have disappeared. As regards rheumatism, the only symptoms which could be in any way construed as due to this disease were some pains in the legs eight years previously, for which she used a liniment. She has never had chorea. There is no evidence of heart disease, nor of arthritis, present or past. The physical characters of the subcutaneous nodules are exactly those of the nodules described by Drs. Barlow and Warner in connexion with rheumatism and allied affections. The interest in the case lies in the very indefinite, if at all existing, connexion between the nodules and rheumatism. The patient had not suffered from any distinct rheumatic symptoms, nor is there any family tendency to that affection. The association of the nodules with the syphiloderm may be fortuitous. The duration of one of the nodules is greater than in any of the series of cases recorded by Drs. Barlow and Warner. The longest time they noticed nodules to persist without diminution was five months.

CASE OF RHEUMATISMAL, CUTANEOUS, SUBCUTANEOUS, AND PERIOSTEAL NODULES.

Dr. DYCE DUCKWORTH'S notes of the following case were taken as read:—M. F., aged thirty-eight, a married woman with one child, came under Mr. Langton's care at St. Bartholomew's Hospital, in December, 1882, for the treatment of multiple fibrous nodules on the arms and legs. She was active and robust, with fresh, rather florid complexion, and fair hair. Teeth nearly all decayed and lost. The history was that "a lump" first came on the right elbow in September, 1879, another on the right knee soon followed, and others have appeared on the limbs from time to time. They were found in the several positions hereafter mentioned. Right ulna: A large tumour (size of a penny), freely movable, not adherent to the periosteum. Below this, two others, much smaller, adherent to the periosteum. None over the radius. One firmly attached to the anterior ligament of the wrist; one in the palm of the hand; and one on the third phalanx of the little finger. Left ulna: One four inches below the olecranon, small, slightly movable, not adherent to the skin. None on the radius. On the palm of the hand six small nodules, adherent to the skin. Right leg: One over the lower angle of the patella, movable, not attached to the bone, about the size of a penny. Another, two inches below the patella, much firmer, freely movable, and adherent to the skin. Numerous small ones on the crest of the tibia, to within five inches of the ankle, firmly adherent to the periosteum. Several over the upper part of the fibula, firmly adherent to the periosteum. No nodules found on the scalp, scapulæ, spinous processes of vertebræ, or feet. The tumours were very painful, and ached more in cold weather. There was no personal history of rheumatism or of chorea in this patient. Her mother, however, was rheumatic, and a sister had had three or four attacks of rheumatic fever. Examination of the heart revealed nothing worthy of note: there was doubtful roughness of the first sound of the apex. Iodide of potassium was given, and during the past three months there has been a gradual reduction in the size of the nodules, and some of them have become softer. Having regard to the clinical features of this case, and to the family rheumatic predisposition, Dr. Duckworth ventured to call these nodules rheumatic in their nature, and he believed that further study of these cases showed that there are several types or varieties of them. This case, as well as that one exhibited by him at the beginning of this session to the Society, illustrated a form met with in adults in which the nodules are very persistent, and are also attached to the skin and periosteum. Amongst the first cases brought forward by Drs. Barlow and Warner, the nodules were found to be commonest in children and young persons, to be subcutaneous, not to have any periosteal attachment, and not to last more than a few weeks or months. In this instance the nodules have lasted for two years and six months, and in the other for one year and six months.

The following living specimens were shown:—

Dr. TYSON—Tubercular Leprosy.

Mr. CLUTTON—Spondylitis Deformans.

Dr. BARLOW—Tubercular Ulceration of Soft Palate.

Dr. CROCKER—Recent Multiple Nodes in Congenital Syphilis.

Dr. SOUTHEY—Erythema Gangrænosum.

The meeting then adjourned.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 24.

JOHN MARSHALL, F.R.S., President, in the Chair.

THE PRESIDENT announced that the Council had selected the names of eight gentlemen for the Honorary Fellowship of the Society, to fill up the vacancies on the list—four home and four foreign Fellows: for the former, Dr. Carpenter, Professor Parker, Dr. Frankland, Professor Allen Thomson; for the latter, Professors Bigelow, Du-Bois Raymond, Charcot, and M. Pasteur. Their nominations were ordered to be suspended as usual. Two papers were then read. The first, by Dr. Kidd, dealt with congenital syphilitic lesions of the throat. By common consent this lesion is comparatively rare, and the cases were interesting if on this account alone. The second paper, by Dr. Samuel West, was one of extreme interest: its first part treated of a successful case of free incision into, and drainage of, the pericardium for purulent effusion; its second part related to the historical details of the operation, its statistics, and mode of performance. We briefly alluded to this in our last week's issue.

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Two Cases of Congenital Syphilis of the Larynx. By Percy Kidd, M.A., M.D.

The ages of the patients here described were fifteen and eighteen at the time of observation, but symptoms developed at the ages of fourteen and thirteen respectively. In the first case, when laryngitis seemed to have appeared a few months previously, great improvement followed the administration of iodide of potassium. On the contrary, in the second case, where the laryngeal disease was of five years' standing, there was webbing of the vocal cords and polypoid excrescences in the larynx, and here no benefit could be expected from internal remedies. *Case* 1.—A boy, aged fifteen. Family history indefinite. Mother said to be subject to "rashes." There was a history of cough and shortness of breath for nine months. Three months previously the boy's breathing had become stridulous, and shortly afterwards some dead bone came away from his palate. For three days his breath had been very short, and he had lost his voice. Present state: Patient is small for his age, speaks in a hoarse whisper; upper incisor teeth distinctly pegged; cornea clear. No cutaneous eruption or scarring. Chest small; superficial veins distended; supra-clavicular spaces drawn in during inspiration. Very slight dulness at both apices, and weak bronchial breathing. Breath sounds generally feeble. Marked scarring of soft and hard palate; scars whitish; surrounding tissue dull red. Larynx: mucous membrane throughout of a dull red colour. Vocal cords red and thickened. Ventricular bands and ary-epiglottic folds swollen, partially hiding vocal cords. Movements of vocal cords diminished greatly; abduction and adduction very imperfect; considerable stenosis of the glottis from swelling of parts and fixation of vocal cords. Rapid improvement under iodide of potassium and inhalations of benzoin. Recovery with slight degree of chronic laryngitis and partial fixation of left vocal cord. *Case* 2.—A girl, aged eighteen. Family history negative. Onset of symptoms, sore-throat and hoarseness, at the age of thirteen. The patient attributes the throat affection to some medicine she was given while an in-patient at the French Hospital in Leicester-square, soon after her symptoms developed. Reasons are given for doubting this. This patient has been hoarse for five years. Present state: Chest shows no sign of disease. Lateral incisor teeth somewhat pegged. Palate, pharynx, and left tonsil marked with whitish scars. Larynx: Epiglottis thickened and bent backwards towards the larynx; margin irregular and jagged as if partially eaten away; mucous membrane of epiglottis pale; no present ulceration. Vocal cords adherent to one another at their anterior extremities by a web of a reddish-grey colour. On the left cord at its posterior third is a small conical outgrowth. The posterior part of the right ventricular band is occupied by a roundish red swelling, which projects downwards and hides part of the corresponding vocal cord. The left ventricular band at its anterior end is thickened. Vocal cords are pinkish, and move freely. Eyes: Slight divergent squint. A high degree of myopia is present. Right eye shows a large patch of choroiditis in the position of the yellow spot. Fundus of left eye healthy. (This patient was exhibited.)

Dr. Felix Semon said that, from Dr. Kidd's description, and from personal examination of the second case, he had no doubt as to the syphilitic nature of both cases. There was no other deep ulcerative disease of the larynx which could produce such lesions, and could heal with such an amount of destruction. Much more difficult was it to say whether the cases were instances of congenital or of acquired disease. He had himself seen cases of very severe laryngeal lesions in very young subjects who confessed to having acquired the affection, and he instanced this by quoting the case of a boy aged seventeen, the subject of most severe pharyngeal, laryngeal, and œsophageal syphilis, who was now under his care at St. Thomas's Hospital, and who admitted having contracted the disease when fifteen years old. In Dr. Kidd's cases, however, he saw no reason for doubting the congenital nature of the disease, the outbreak occurring at the time of puberty, when, even under ordinary circumstances, an exacerbation of the congenital mischief usually took place. Previous manifestations in other parts might perhaps have been overlooked or mistaken. Concerning Dr. John Mackenzie's statements as to the great frequency of laryngeal lesions in congenital syphilis, he did not think that Dr. Mackenzie had quite made out his case No doubt he had shown that such lesions were more frequent than had hitherto been taught, but even if the number of cases on record was now seventy, instead of ten to twenty, what a very minute number was this in proportion to the great frequency of congenital syphilis! Nor ought it to be forgotten that it is only the deep and destructive lesions which are considered so rare. That a simple laryngeal catarrh was a frequent concomitant of that disease, was generally admitted. It was a very interesting fact that there appeared to exist a certain family disposition towards the localisation of the congenital disease in the larynx. Already in 1880 he (Dr. Semon) had shown two larynges of two brothers aged five and three-quarters and three and a-half, to the Pathological Society, both of whom had died within one fortnight from each other, from the same complication of congenital syphilis of the larynx—viz., from acute œdema of the larynx. Within the last year he had had four cases of congenital syphilis of the larynx under his care in St. Thomas's Hospital. Again, the cases had occurred in pairs—that was to say, two of the little patients had been brothers, while the other two were brother and sister. It was difficult to resist the conclusion that in these cases, besides the transmission of the syphilitic poison, a certain specific vulnerability or delicacy of the larynx must have been inherited, which prompted the localisation of the manifestations. Similar observations were sometimes made in phthisis, several members of the same family dying with distinct predominance of the laryngeal over the pulmonary symptoms. Finally, concerning the formation of a web between the vocal cords, this was not an excessively rare occurrence. In 1878 twenty-one cases had been collected by Professor Sommerbrodt, of Breslau, and their number had since considerably increased, Dr. Semon having himself seen six cases of that kind. Generally it was very difficult to get rid of these webs, and unless either respiratory difficulties urgently demanded their removal, or the patient insisted on an operation for the improvement of vocal troubles, it was perhaps best to leave them alone. The most advisable form of operation seemed to be galvano-caustic division of the web, with subsequent introduction of hollow bougies in order to prevent re-coalescence of the divided parts.

Mr. R. W. Parker agreed that laryngeal disease was rare in connexion with congenital syphilis, especially the ulcerative form, although destructive ulceration was not uncommon in the pharynx. He had paid much attention to cases of laryngeal obstruction during the past ten or twelve years, but had only met with a few cases in association with congenital syphilis. These had been in young infants, and the disease had appeared to him to resemble in its characters what we describe as mucous tubercle, a papillary condition of the mucous membrane. These cases generally yielded to mercurial inunction, but sometimes they were fatal.

The President thought we ought to separate these lesions one from the other. Those alluded to by the last speaker were much earlier in their appearance, and yielded, as had been said, to mercury; but the other variety required iodide of potassium. He thought their comparatively late appearance might be connected in some way with the rapid development which was taking place in the growth of the larynx at this period of life.

Dr. Kidd replied: It was difficult to think that the syphilis had been acquired, for in that case it must have been acquired between eleven and twelve years of age. There were the characteristic teeth in both cases, and in one there was also choroido-retinitis. He had not thought it well to advise surgical treatment for the "web," there being no physical signs.

I. A Case of Purulent Pericarditis treated by Paracentesis and by Free Incisions, with Recovery. II. The Statistics of Paracentesis Pericardii, with Remarks. By Samuel West, M.D. Oxon.

I. *A Case of Purulent Pericarditis treated by Paracentesis and by Free Incisions, with Recovery.*—A boy, aged sixteen, came under treatment with a large pericardial effusion. The symptoms became so urgent that paracentesis was performed. Pus was obtained. Three days later paracentesis was again performed, and subsequently the pericardium was laid freely open, evacuated, washed out, and a drainage-tube inserted. The temperature never rose, and the boy recovered completely in five weeks, the only feature

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of interest being an attack of general urticaria, which came on about a week after the operation, and lasted three or four days. In support of the diagnosis a case is referred to in which what was supposed to be a mediastinal cyst was frequently punctured, but it proved to be, on post-mortem examination, a case of chronic pericardial effusion. The points of clinical interest discussed are:—1. The absence of any special signs to indicate the nature of the effusion. 2. The operation and the place selected for puncture. 3. The amount of the fluid evacuated. 4. A peculiar epigastric prominence, noticed before paracentesis, which disappeared after operation. 5. The attack of urticaria. 6. The pulsus paradoxus. A short account is then given of the only other recorded case of incision of the pericardium for purulent pericarditis by Professor Rosenstein, of Leiden, which also recovered.

II. *The Statistics of Paracentesis Pericardii, with Remarks.*—A complete list of the recorded cases up to date is given in a tabular form, with the addition of several cases hitherto unpublished. The history of the operation is briefly referred to. The cases are discussed under the headings of—Sex. Age. Cause—rheumatic fever; scorbutus; phthisis and pleurisy; miscellaneous; purulent pericarditis. Length of illness before operation. The effect of the operation. The nature of the fluid. The quantity of the fluid. The number of punctures. The modes of operation. The place of puncture. The following conclusions are drawn:—1. Paracentesis pericardii is not only justifiable, but an operation which may be safely undertaken with ordinary precautions, for only one case is recorded in which the operation was in itself fatal, and with this exception all the patients were greatly relieved by the removal even of small amounts of fluid, and many recovered completely, who would probably have died had the operation not been performed. 2. The most suitable place for puncture is, in ordinary cases, in the fifth left intercostal space, one inch from the edge of the sternum; but if the pleura be adherent, the puncture may be made safely much further out, and even in the sixth space. 3. The instrument employed should be a trocar and canula, with or without aspiration. 4. The operation may be performed with advantage, not only in the pericardial effusions of rheumatic or primary origin, but also in those which occur in the later stages of general dropsy, if it should appear that the fluid in the pericardium is adding to the difficulties under which the heart is placed. 5. Purulent pericarditis is best treated on general principles, like empyema. 6. The pericardial sac may be safely opened and drained. 7. This treatment, moreover, appears to be the only one which offers the slightest hope of recovery. 8. The results do not seem to be as unfavourable as those of empyema, for the walls of the cavity are better able to contract rapidly, and thus permit of the obliteration of the cavity.

Mr. Hulke congratulated the author on his success. He thought, however, that it would be better to cut down deliberately on the pericardium rather than to plunge in a bistoury. He mentioned a case in which he was operating: a trocar was plunged in, when, to his dismay, a gush of blood too truly proved that he had penetrated the right side of the heart. Fortunately no sort of harm followed—rather the contrary. When death took place at a subsequent period the pericardium was found universally adherent, and the heart very much dilated.

Dr. Green thought it unusual not to have pericardial friction, and he was rather surprised that cardiac dulness had not extended much higher up. He thought all such operations should be preceded by exploratory punctures. Death resulted as much from disease of the muscular structure of the heart itself as from the pericardial effusion.

Dr. Routh thought the presence of pus quite sufficient to account for the absence of friction râle.

Dr. Southey was not quite clear as to the etiology of this case, and thought we were hardly in a position to exclude injury—weeks might sometimes elapse before the effusion came on. He inquired as to the auscultatory sounds in the left chest. An absence of bronchial breathing would strengthen the idea of a mediastinal abscess as against pericardial disease. He agreed as to the greater safety of cutting down deliberately on to the pericardium. It was Kussmaul who first described the pulsus paradoxus.

The President said the older methods of operating, either by trephining the sternum or by removing pieces of rib, appeared to be dying out. The elastic swelling at the epigastrium suggested to his mind the possibility of this having been a mediastinal abscess, and this was strengthened by the rapid recovery which had taken place, and which he thought could hardly have been expected had this really been a pericardial abscess, for the constant motion of the heart, he thought, must necessarily have delayed healing.

Dr. West, in reply, stated that he quite agreed with Mr. Hulke in the necessity for great care in performing paracentesis pericardii. In his own case he used a small trocar and canula of a size suitable for the double purpose of an exploratory puncture and paracentesis, and it was only after the existence of a large cavity was beyond doubt that the trocar was removed and the canula thrust in up to its hilt. A preliminary dissection Dr. West thought unnecessary, for, with care, no harm could be done with a small trocar. It was not a simple puncture of the heart that was dangerous, but a laceration, as in the fatal case referred to in the paper. This the numerous instances of wounds of the heart by needles, etc., clearly demonstrated; and recently a series of cases has been recorded from America, in which the right ventricle had been intentionally tapped to relieve the distension in cases of engorged right ventricle. The great difficulty is not one of operation, but of diagnosis, for where the presence of effusion is certain, the heart is in little danger of injury. It is in cases of extreme dilatation of the heart that the risk of mistaken diagnosis arises. Dr. Green urged as difficulties in the way of accepting the diagnosis in this case, first, the absence of pericardial friction, and second, the fact that the cardiac dulness did not rise much above the level of the third rib on the left side Dr. West pointed out that he had already referred in his paper to the fact that many cases of purulent pericarditis were recorded in which pericardial friction was absent throughout, and that it was stated by some writers that this absence of friction was the rule. It is impossible that with such a large effusion as was present in this case a friction could have been produced. The difficulty arose only after the effusion had been removed, for it might have been expected that a friction would have developed then. The absence of friction, however, was insufficient to outweigh the concurrent testimony of so many other facts. To the second objection, that the dulness ought, in a case of pericardial effusion, to have reached higher, *e.g.*, up to the second rib, Dr. West attached no importance, for he had seen several cases of undoubted pericardial effusion in which the dulness was exactly as in the present case. Dr. Green had stated that death in cases of pericardial effusion was due to the affection of the muscular tissue of the heart. There was no doubt that in many, if not most, cases of severe pericarditis the muscular substance was also affected, but the cases recorded showed clearly that the chief danger in pericardial effusion was a purely mechanical one, for relief was immediate and constant as soon as this mechanical interference was removed by paracentesis, and in many cases recovery was rapid after removal of the fluid. Dr. West agreed with Dr. Southey in his belief that the case was not rheumatic in origin, but he thought there was no evidence to show that the origin of the pericardial effusion was a mediastinal abscess. The paradox pulse is not by any means pathognomonic of pericardial effusion. The cases which Kussmaul recorded he attributed to an affection of the mediastinum, which he characterised as mediastinitis fibrosa. But many cases have been recorded in which the paradox pulse was noticed in other affections; for instance, pericardial effusion, and left pleuritic effusion. Rosenbach has shown in some recent experiments that compression of the inferior vena cava produced the typical pulsus paradoxus, so that it could arise as the consequence not only of obstructed exit to the blood from the heart, but also of incomplete filling. That in this case there must have been very considerable pressure upon the inferior cava is clear from the epigastric depression which developed, and which was due clearly to the bagging of the pericardium in this position. Dr. Southey had mentioned other cases of puncture of the heart in paracentesis, and referred to a case of Bouchut's, but though in this case the heart was twice wounded, it is expressly stated in the record that no evil results followed from the wounding. The absence of endocarditis and delirium Dr. West regarded as additional evidence of the effusion not being of rheumatic origin. The President thought the epigastric depression referred to was evidence in favour of mediastinal rather than pericardial

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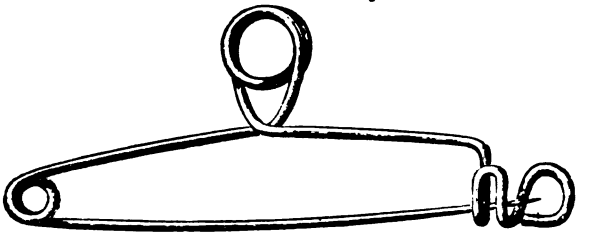
effusion, but this phenomenon has been recently described in a clear case of pericardial effusion under the care of Dr. Clifford Allbutt, recorded in the *Lancet* a few weeks ago. The rapidity of the contraction of the cavity Dr. West regarded not as evidence against, but strongly in favour of, pericardial effusion. Had the pus been in the mediastinum it would have formed a more diffuse abscess, while, limited as it was by the resistent pericardium, the sac rapidly contracted as soon as it was allowed to do so by the evacuation of the fluid. The same extreme rapidity of cure is recorded in the case of Professor Rosenstein's referred to. Dr. West wished to state, in conclusion, that the patient had for the last six weeks been performing exactly the same work as before his illness.

NEW INVENTIONS AND IMPROVEMENTS.

NEW SURGICAL PIN.

By John Ward Cousins, M.D. Lond., F.R.C.S.,
Surgeon to the Royal Portsmouth Hospital.

I beg to introduce to the notice of the profession a new bandage and dressing pin, with the hope that it may prove a useful though humble addition to the common necessaries of every-day practice. During the last few years safety-pins have been largely used in many hospitals, and some surgeons and nurses carry a supply with them for every emergency. The safety-pin, however, is by no means a perfect contrivance for surgical purposes, for, in its application, it is often troublesome to fasten and unfasten, and it is very liable to slip into the folds of a bandage, and thus to cause delay in its removal. The surgical pin which is represented in the engraving is especially adapted for surgical work, and possesses qualities which will be appreciated by surgeons, accoucheurs, and nurses. It is handy in introduction, safe



in position, and is capable of instantaneous removal. This simple contrivance is in the form of a spring-pin, which is converted into a novel instrument by the addition of a special shield and a short handle. It is manufactured in stout pin-wire, and, midway between the spring and the shield, a convenient handle is produced by giving the metal a loose double twist. The handle is the special feature—it gives complete control over the pin, assists in directing the point, and renders both its introduction and withdrawal easy and instantaneous. When in position, by the aid of the handle, the point can be instantly protected, and then, by raising the shield with the handle, the pin is at once unfastened, and can be readily removed. In this way ease and rapidity of application are secured; and these qualities render the new surgical pin far more handy than any other kind of bandage and dressing-holder. For hospital work it will be found a valuable little innovation, and it is also well adapted for surgeons and dressers on the field in all the appliances of immediate surgery. It is manufactured by Messrs. Kirby, Beard, and Co., of London and Birmingham, in several convenient sizes. The largest pins are especially suitable for chest and abdominal rollers, and they will prove also an excellent substitute for the tapes which are fixed to the ends of the india-rubber bandages, now so universally employed in practice.

Lady-Doctors of the Paris Faculty in 1881-82.—The number of women who, in 1881-82, followed the courses of lectures at the Faculty of Medicine in the quality of regularly registered medical students, having first produced their certificates of *baccalaureat ès lettres* and *baccalaureat ès sciences* (or, in the case of foreigners, equivalent certificates), was 39, composed of the following nationalities:—French, 10; English, 11; Americans, 5; Russians, 9; Hungarian, 1; Polish, 1; Roumanian, 1; and Indian, 1.

MEDICAL NEWS.

University of Edinburgh.—The following is a complete list of those students who have passed the Second Professional Examination for the M.B. and C.M. degrees of the University of Edinburgh, viz.:—

Charles Aitken, M. S. P. Aganoor, M. S. Altounian, Samuel Arnold, E. H. Bannister, J. B. Batten, D. G. Bennett, Wm. Bird, Robert Blair, Frederick Bond, J. E. Bottomley, C. K. Bourne, Paul Bowes (with distinction), T. M. Buncle, P. B. Bury, J. M. Cadell, Edward Carmichael (with distinction), W. R. Carter, R. L. Clark, J. G. Cossins, R. S. Coulthard, A. S. Cumming, Richard Davidson, T. W. Dewar, W. O. Dow, H. J. Dring, T. G. Evans, H. S. Fairbank, W. C. Faulkner, J. E. A. Ferguson, William Flett, W. G. Galletly, D. J. Galloway, A. R. Gray, F. G. Greenberry, C. D. G. Hailes, P. B. Handyside, E. B. Hector, J. R. Henderson, R. S. Hubbersty, B. E. Iastrzebski, Thomas Johnstone, J. E. H. Kelso, G. H. Kenyon, D. O. Kerr, William Laing, W. S. Lang (with distinction), T. A. Leishman, G. S. P. Loubser, W. W. R. Love, R. H. Lucy (with distinction), C. M. Macalister, W. G. M'Fee, H. J. Mackay, F. W. Mackenzie, N. J. M'Kie, W. R. M'Kinnel, Murray MacLaren, W. H. M'Lean, James M'Leod, John M'Myn, G. D. Malan, Angus Matheson, Alexander Menzies (with distinction), Duncan Menzies, Gustave Michel, David Milligan, Robert Mitchell, A. E. Morison, Daniel Mowat, W. J. Munro, Frederick Murray, J. T. Nesbit, John Noble, F. B. O'Flaherty, James Paterson, R. J. Paton, F. A. Pockley (with distinction), J. M. S. Preston, A. W. G. Price, C. A. Renny, F. G. Retief, John Rigg, John Robertson, A. H. Robinson, F. H. Simmons, William Sneddon, A. C. Stark, J. S. Stephen, H. F. D. Stephens, G. H. H. Symonds, J. C. Taylor, William Taylor, George Thomson, H. A. Thomson (with distinction), T. J. Thyne, C. G. Traill, G. A. Tullis, J. W. O. Underhill, Edmund Walker, N. H. Walker, N. P. Walker, David Wallace, T. A. Watson, S. F. Wernich (with distinction), Algernon Westlake, Claude Wilson (with distinction), J. T. Wilson, J. E. Wolphagen, A. J. Wood.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 7th inst., and when eligible will be admitted to the pass examination, viz.:—

Barlow, Charles, student of the Liverpool School.
Coombe, Russell, B.A. Cantab., of the Cambridge School.
Cox, G. Rix, of the Dublin School.
Greene, H. B. Blodwell, of the Belfast School.
Hill, W. James, of the Bristol School.
Holderness, J. Courtley, of the Glasgow School.
Kendall, Arthur S., of the New York School.
M'Donald, W. Hector, of the Trinity School, Toronto.
Middleton, A. Hancock, of the Dublin School.
Moore, W. Glover, of the Liverpool School.
Moxon, Alfred, of the Birmingham School.
Nattress, William, of the Trinity School, Toronto.
Nisbet, W. Blake, of the Edinburgh School.
Roalfe-Cox, W. J., of St. Thomas's Hospital.
Sidebotham, E. John, of the Cambridge School.
Symes, W. Langford, of the Dublin School.

Twelve candidates having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months. The following gentlemen passed on the 8th inst., viz.:—

Butler, F. C. Geneste, student of St. Bartholomew's Hospital.
Collingwood, G. Trevor, of the London Hospital.
Dewsnap, W. Frederick, of St. George's Hospital.
Gardner, F. Gower, of the Birmingham School.
Hall, G. Capel, of the Birmingham School.
Honey, T. Edward, of St. Mary's Hospital.
Hubbard, D. Lovett, of Guy's Hospital.
Joly, A. Maurice, of University College Hospital.
Leman, T. Curtis, of the Bristol School.
Matthews, William, of the Liverpool School.
Pearson, H. Laird, of the Liverpool School.
Reddall, O. Henry, of University College Hospital.
Schnehage, Caleb, of the Leeds School.
Sheen, W. Mortimer, of Guy's Hospital.
Taylor, J. Francis, of the London Hospital.
Wallis, C. George, of Guy's Hospital.
Watts, H. J. Manning, of St. Bartholomew's Hospital.
Williams, E. Lloyd, of the Middlesex Hospital.

Ten candidates were referred for three months. The following gentlemen passed on the 9th inst., viz.:—

Anderson, W. M. Abbot, student of University College Hospital.
Barton, E. Alfred, of University College Hospital.
Bidwell, Lawrence, of Guy's Hospital.
Bolton, F. Robinson, of Guy's Hospital.
Cox, A. Locke, of St. Bartholomew's Hospital.
Cross, R. George, of St. Bartholomew's Hospital.
Fox, S. C. Gundry, of Westminster Hospital.
Gould, H. John, of the Middlesex Hospital.
Grose, J. Sobey, of Guy's Hospital.
Harries, J. Frail, of King's College Hospital.
Hodge, S. Rupert, of the London Hospital.
Hounsell, F. C. Wright, B.A. Cantab., of St. Thomas's Hospital.
Lindridge, L. Owen, of the London Hospital.
Pollard, Charles, of Guy's Hospital.
Pugh, J. Williamson, of the London Hospital.
Reece, R. James, of St. Bartholomew's Hospital.
Thompson, E. Atherden, of Westminster Hospital.
Whyte, Alexander, of St. George's Hospital.

Primary Examinations.—Immediately after the last oral

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examination in Anatomy and Physiology for the diploma of Membership of the Royal College of Surgeons, another written examination for the same took place on the 4th inst., when 169 candidates presented themselves, against 167 at the corresponding period last year. The following were the questions in Anatomy submitted on this occasion, when the candidates were required to answer four, and not more than that number, out of the six questions, from one to three o'clock, viz.:—1. Describe the dissection required to expose the posterior surface of the popliteus muscle. 2. Give the differential characters of a typical cervical, dorsal, and lumbar vertebra. 3. Give the relations of the flexor tendons in the hand. Describe the arrangements of the synovial sheaths in the palm and the fingers. 4. Describe the origin, course, and distribution of the arteries supplying the cerebrum. 5. Describe the duodenum and its relations. 6. Describe the bony walls of the tympanum. The following were the questions on Physiology, of which four must be answered, from four to six o'clock, viz.:—1. Describe the structure and mode of action of heart-muscle, and compare it in these respects with skeletal muscle. 2. Describe the digestion of starch. By what tests may the successive changes in it during digestion be detected? 3. Explain the term "arterial blood-pressure." How may it be demonstrated, and by what conditions is it modified? 4. Describe the action of the oblique muscles of the eye. What is their nerve-supply? 5. What qualities can be distinguished by the sense of taste? Describe the taste-buds. By what channels are taste-impulses conveyed? 6. Describe the manner in which ossification occurs in membrane; enumerate the bones formed entirely in membrane. In what way does this method of ossification contribute to the formation of other bones?

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 3:—

Coyle, Edward, 56, Bain-street, Glasgow.
Huxsey, Reginald Lee, 186, Spa-road, S.E.
Roberts, Edward, North-parade, Aberystwith.
Roosmale-Cocq, Fredk. O. Y., 46, Parkhurst-road, Tufnell-park.
Shorthouse, Wm. Stanley Neville, Croydon.
Taylor, Alfred Everley, Claughton, Scarborough.
Tibbles, John Thomas, Melton Mowbray.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Waters, Avery Clough, London Hospital.
Willan, Leonard James, London Hospital.

APPOINTMENTS.

DONKIN, H. B., M.D., F.R.C.P.—Physician to the Westminster Hospital, *vice* Dr. Fincham, who has been appointed Consulting Physician.

SMITH, E. NOBLE, F.R.C.S.—Orthopædic Surgeon to the British Home for Incurables.

BIRTHS.

BARR.—On May 2, at 1, St. Domingo-grove, Liverpool, the wife of James Barr, M.D., of a son.

BOLTON.—On April 28, at Kustendjie, Roumania, the wife of A. Irwin Bolton, M.B., A.B. T.C.D., of a daughter.

COOKE.—On April 29, at 59, Warrior-square, St. Leonards-on-Sea, the wife of John Cooke, M.B., of a daughter.

LANGDON.—On April 26, at Gibraltar, the wife of Surgeon J. Sydney Langdon, A.M.D., of a daughter.

RAYNER.—On May 7, at Tiviot Dale, Stockport, the wife of Edwin Rayner, M.D., of a daughter.

ROBERTS.—On May 5, at Dragonfield, Uxbridge, the wife of Charles Roberts, M.R.C.S., of a daughter.

SMITH.—On April 5, at 3, London-street, Calcutta, the wife of Dr. David B. Smith, Deputy Surgeon-General (retired) Indian Medical Service, of a daughter.

STAMPER.—On May 3, at Pembroke Dock, the wife of J. Fenton Stamper, M.D., of a daughter.

MARRIAGES.

BERNAYS—BOYS.—On May 5, at Selly Oak, Worcestershire, Adolphus Vaughan Bernays, B.A., M.B., M.R.C.S., to Emily, only daughter of the late Charles Boys, Esq., of the Inland Revenue Department, Somerset House.

DRAKE—CATTLIN.—On April 28, at Diss, Norfolk, Edwin, youngest son of the late Henry Drake, of Suffolk, to Eliza, youngest daughter of W. A. N. Cattlin, F.R.C.S., of Brighton, Sussex.

INGOLDBY—STEARNS.—On May 3, at Paddington, John Alfred Percy Ingoldby, younger son of Fredk. Ingoldby, F.R.C.S., of Lee, Kent, to Gertrude Annie, second daughter of Joseph Phillips Stearns, of Westbourne-street, Hyde-park, etc.

WOOLLERTON—COLLET.—On April 26, at Bloomsbury, Edwin Goodburn Woollerton, L.R.C.P., of Wendover, to Elizabeth Helen, fourth daughter of R. S. Collet, Esq., late of The Hall, Wendover.

DEATHS.

ABERCROMBIE, LOUISA, wife of John Abercrombie, M.D., at 13, Suffolk-square, Cheltenham, on May 3, aged 68.

BARTON, EDITHA HELEN, wife of Alfred Bowyer Barton, M.D., F.R.C.S., of Myskyns, Ticehurst, in London, on May 7, aged 41.

JONES, T. W., M.D., at Billox, Enfield Highway, on May 5, in his 76th year.

RENTON, ALEXANDER ADAM, M.D., F.R.C.P., late Surgeon-Major Madras Army, younger son of Robt. Renton, M.D., at 15, Rothesay-place, Edinburgh, on May 3.

ROPER, GILES SYMONES, M.R.C.S., late of 389, City-road, London, at Chartreuse, Richmond, Surrey, on May 3, aged 67.

SMITH, GEORGE PYEMONT, M.D., late of Mount Stead, near Leeds, at Bisley Rectory, on May 5, aged 67.

YATES, WALTER, F.F.P.S., late of Nottingham, at Tregew, Falmouth, on April 29.

VACANCIES.

BUCKINGHAMSHIRE GENERAL INFIRMARY, AYLESBURY.—Resident Surgeon, etc. (*For particulars see Advertisement.*)

COVENTRY AND WARWICKSHIRE HOSPITAL, COVENTRY.—House-Surgeon. Salary £100 per annum, with an allowance of £5 per annum in lieu of ale with board. Lodging and attendance. Candidates must be possessed of both medical and surgical qualifications. Applications, stating when prepared to enter upon their duties if appointed, with testimonials, to be sent, under cover, to the Secretary, on or before May 16.

GLASGOW ROYAL INFIRMARY.—Physician. (*For particulars see Advertisement.*)

GLASGOW ROYAL INFIRMARY MEDICAL SCHOOL.—Teachership of Physiology. (*For particulars see Advertisement.*)

GLASGOW ROYAL INFIRMARY MEDICAL SCHOOL.—Teachership of Chemistry. (*For particulars see Advertisement.*)

HOSPITAL FOR DISEASES OF THE THROAT, GOLDEN-SQUARE.—Resident Medical Officer. Salary to commence at £50 per annum, with board and lodging. Candidates must be registered practitioners. Applications, with testimonials, to be sent to the Chairman of the Committee on or before May 20.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. (*For particulars see Advertisement.*)

POPLAR HOSPITAL FOR ACCIDENTS, BLACKWALL, E.—House-Surgeon. Salary £100 per annum, with board, etc. Candidates must possess qualifications in medicine and surgery. Also an Assistant House-Surgeon. Candidates must be qualified. Applications, with testimonials (not more than three), to be sent to the Secretary on or before May 12.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Basford Union.—The office of Medical Officer for the Gotham District is vacant by the death of Mr. Charles Carruthers: area 4598; population 1405; salary £15 per annum. The office of Medical Officer for the Kirkby District is vacant by the death of Mr. William Terry: area 7966; population 6822; salary £28 per annum.

Burton-upon-Trent Union.—Mr. Daniel H. Bastable has resigned the Lullington and Rosliston Districts. Lullington District: area 2907; population 620; salary £10 per annum. Rosliston District: area 3519; population 678; salary £10 per annum.

Chertsey Union.—Dr. John Macdonald has resigned the Walton District: area 6859; population 5581; salary £75 per annum.

Crickhowell Union.—Mr. N. E. Atkin has resigned the Crickhowell District: area 33,798; population 4831; salary £35 per annum.

Shardlow Union.—The office of Medical Officer for the Castle Donington District is vacant by the death of Mr. William Massey: area 5243; population 3068; salary £28 per annum. The office of Medical Officer for the Keyworth District is vacant by the death of Mr. Charles Carruthers: area 8470; population 3095; salary £32 per annum.

APPOINTMENTS.

Ashbourne Union.—Philip R. Littleton, M.R.C.S. Eng., to the Ashbourne District.

Islington Parish.—John A. Gray, M.R.C.S. Eng., B.M. Lond., as Resident Assistant Medical Officer and Dispenser at the Workhouse and Infirmary.

Oswestry Incorporation.—George J. Morgan, M.R.C.S. Eng., L.K.&Q.C.P.I., to the Fifth District.

St. Austell Union.—Arthur P. Davis, M.R.C.S. Eng., to the Powey District.

Uppingham Union.—George D. Mackintosh, L.K.&Q.C.P.I., to the Hallaton District.

Wokingham Union.—Charles C. Hicks, M.D. St. And., M.R.C.S. Eng., L.S.A., to the Workhouse.

LECTURES ON BOTANY AT CHELSEA GARDEN.—A course of botanical lectures and demonstrations was commenced on Saturday afternoon last, at the garden of the Apothecaries' Society, at Chelsea, and was numerously attended, the lecture-room being completely filled. The lecturer was Mr. J. G. Baker, F.R.S., F.L.S., of the Kew Gardens, who gave as an introduction to the subject a general view of the organs comprising a perfect plant—as, the root, the stem, the leaves, the flowers, and the fruit. After the lecture the audience were conducted through the garden, where the living specimens were explained and described in connexion with the discourse previously given. The lectures will be delivered on successive Saturdays during the summer months, and the admission is free.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, May 5, 1883.

BIRTHS.

Births of Boys, 1283; Girls, 1262; Total, 2545.
Corrected weekly average in the 10 years 1873-82, 2794·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	792	712	1504
Weekly average of the ten years 1873-82, corrected to increased population ...	828·2	768·0	1596·2
Deaths of people aged 80 and upwards ...	...	...	58

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	4	4	1	3	1	2	.	2
North ...	905947	1	11	3	3	3	...	1	...	5
Central ...	262388	...	6	2	2	1	...	...	...	1
East	692738	...	15	6	3	5	...	3	...	6
South	1265927	1	19	7	7	12	2	3	...	3
Total	3816483	2	55	22	16	24	3	9	...	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·592 in.
Mean temperature	46·2°
Highest point of thermometer	61·4°
Lowest point of thermometer	30·3°
Mean dew-point temperature	39·3°
General direction of wind	N. & N.E.
Whole amount of rain in the week	0·27 in.

BIRTHS and DEATHS Registered and METEOROLOGY during th Week ending Saturday, May 5, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending May 5.	Deaths Registered during the week ending May 5.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	Rain Fall. In Centimetres.
London	3955814	2545	1504	19·8	61·4	30·3	46·2	7·89	0·27	0·69
Brighton	111262	68	33	15·5	62·8	34·0	46·0	7·78	0·18	0·46
Portsmouth ...	131478	84	40	15·9	...	...	...	...	...	...
Norwich	89612	53	38	22·1	...	...	...	...	...	...
Plymouth	74977	36	27	18·8	57·2	36·7	47·0	8·33	0·13	0·33
Bristol	212779	128	84	20·6	60·0	31·3	44·7	7·06	0·45	1·14
Wolverhampton .	77557	52	33	22·2	60·9	26·8	42·8	6·00	0·36	0·91
Birmingham ...	414846	281	168	21·1	...	...	...	...	...	...
Leicester	129483	99	46	18·5	...	...	...	...	...	...
Nottingham ...	199349	147	91	23·8	59·8	33·0	44·2	6·78	1·31	3·33
Derby	85574	62	26	15·9	...	...	...	...	...	...
Birkenhead ...	88700	52	35	20·6	...	...	...	...	...	...
Liverpool	566758	380	282	26·0	60·1	34·4	44·2	6·78	0·19	0·48
Bolton	107862	73	47	22·7	56·7	30·9	41·3	5·17	0·47	1·19
Manchester ...	339252	207	189	29·1	...	...	...	...	...	...
Salford	190465	123	79	21·6	...	...	...	...	...	...
Oldham	119071	64	57	25·0	...	...	...	...	...	...
Blackburn	108460	73	49	23·6	...	...	...	...	...	...
Preston	98564	74	45	23·8	...	...	...	...	...	...
Huddersfield ...	84701	41	39	24·0	...	...	...	...	...	...
Halifax	75591	42	26	17·9	...	...	...	...	...	...
Bradford	204807	128	60	15·3	53·6	33·0	41·8	5·45	0·53	1·35
Leeds	321611	227	155	25·1	56·0	34·0	42·9	6·06	1·96	4·98
Sheffield	295497	186	165	29·1	55·0	34·0	41·7	5·39	0·84	2·13
Hull	176296	127	105	31·1	54·0	32·0	40·5	4·72	0·72	1·83
Sunderland ...	121117	76	59	25·4	55·0	35·0	43·0	6·11	0·16	0·41
Newcastle	149464	110	64	22·3	...	...	...	...	...	..
Cardiff	90033	57	34	19·7	...	...	...	...	...	...
For 28 towns ...	8620975	5595	3580	21·7	62·8	26·8	43·6	6·45	0·58	1·47
Edinburgh	235946	166	74	16·4	55·2	36·8	44·7	7·06	0·11	0·28
Glasgow	515589	439	310	31·4	58·0	36·0	45·2	7·33	0·86	2·18
Dublin	349385	210	228	34·0	55·2	35·1	45·0	7·22	0·08	0·20

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·59 in. The lowest reading was 29·26 in. at the beginning of the week, and the highest 29·73 in. on Wednesday morning.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

"A Case for General Sympathy."

Mr. Henry C. Burdett, 39, Gloucester-road, Regent's-park, N.W., desires us to acknowledge the receipt of the following subscriptions towards the "Hereford Fund" in response to his letter which appeared in the *Medical Times and Gazette* of April 21, in addition to the amount already acknowledged (£342 14s. 6d.):—

	£	s.	d.
Dr. Travers	1	1	0
J. E. Meredith, Esq. ...	2	2	0
C. Crawford, Esq.	1	1	0
C. Elliott, Esq.	2	0	0
E. H. Addenbrooke, Esq.	1	1	0
George Kell, Esq.	2	0	0
Dr. Bull	1	1	0
Joseph Williams, Esq. ...	0	10	6
"B."	1	1	0
Dr. Bisset Hawkins	1	0	0
C. M. Elliott, Esq.	5	5	0
Dr. Philpots	2	0	0
R. B. Holland, Esq.... ...	2	2	0
N. Davies Colley, Esq. ...	1	1	0
Miss E. Parrott	1	16	0
Sur.-Major N.V. Churchill	1	0	0
Thomas Smith, Esq.... ...	3	3	0
Dr. W. W. Stainthorpe ...	0	15	6
T. F. Fernandes	1	0	0

Medicus.—You had better not adopt a title to which you have no legal right.

Dr. Thompson, R.N.—Sir Spencer Wells was formerly a surgeon in the Royal Navy. Professor Huxley, F.R.S., who was admitted a Fellow of the College of Surgeons yesterday, was also in the Navy; he succeeded the late Mr. F. T. Buckland as an Inspector of Fisheries, with a salary of £700.

Medical Etiquette.—Remind him of Dr. Johnson's opinion that "the physician's part lies hid in domestic privacy and silent duties, and silent excellences are soon forgotten."

Health of London.—For the week ending the 28th ult. the annual rate of mortality from all causes, which had declined from 28·3 to 23·2 in the four preceding weeks, further fell to 21·6. One fatal case only of small-pox was recorded in the whole metropolis, the corrected average weekly number being twenty-nine.

The Liverpool University College.—The Court of Governors has just unanimously resolved to obtain immediate incorporation with the Victoria University.

The Oldest Member.—We can name several considerably your senior. The paragraph in the *Times* has since been corrected respecting medical baronets. Sir Everard Home, Bart., was *Master* of the old Corporation of Surgeons in 1813, and President of the College again in 1821; Sir David Dundas, Bart., was Master of the old Corporation; Sir Astley Paston Cooper, Bart., was President of the College twice, viz., in 1827 and 1836; Sir Benjamin Collins Brodie, Bart., in 1844; Sir William Fergusson, Bart., in 1870; Sir James Paget, Bart., in 1875; and now Sir T. Spencer Wells, Bart. There have been several knights on the Council, as Sir Charles Blicke, twice Master of the Corporation, in 1803 and 1810; Sir James Earle also filled the chair twice, viz., in 1807 and 1817; Sir William Blizard in 1814 and 1822; Sir Anthony Carlisle in 1828 and 1837; and Sir Erasmus Wilson in 1881.

A Generous Gift.—An additional storey to the south wing of the Oldham Infirmary has been opened. It is the gift of Mr. William Richardson, and has cost upwards of £9000.

Water-Supply Bills.—Of the two competing schemes in Parliament for the supply of water to a large part of Flintshire, which have been before a Committee of the House of Lords—one the Flintshire Gas and Water Bill, and the other the Hawarden and District Water Bill,—the Committee has passed the scheme of the latter, and thrown out that of the Flintshire Company. —The Select Committee of the House of Commons has unanimously resolved that the preamble of the Southwark and Vauxhall Water Company's Bill had not been proved. The Bill sought to obtain Parliamentary sanction for the supply of water in Wimbledon, Putney, Barnes, Mortlake, Roehampton, Sheen, East Sheen, Kew, Petersham, Ham, and Richmond.

Hours of Labour in London Shops.—A meeting, numerously attended by traders and assistants, has been held at Battersea. It was asserted that 5000 young men and women break down every year through the excessive strain imposed on them in shops, and that the average hours of employment of two-thirds of the London shop assistants are from twelve to fifteen hours daily. When it is considered that the shops are open and busy from eight o'clock in the morning till ten or eleven at night, this statement will meet with a ready acceptance.

Anti-Vaccination, Halifax.—The following resolution, passed by the Halifax Anti-Vaccination League, has been forwarded to the Board of Guardians:—"That a protest be sent to the Board of Guardians against the issue of distress warrants upon persons who have conscientious objections to have their children vaccinated." A guardian has given notice of his intention to move at the next meeting of the Board—"That all general directions heretofore given to the vaccination officer be rescinded, and that, in future, he only proceed under the special directions of the Board or Vaccination Committee."

F.R.C.S. Exam.—Write to the Honorary Secretary of the Fellows' Festival, Mr. F. Woodhouse Braine, F.R.C.S., 56, Maddox-street, W., who will no doubt be glad to accede to your request.

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Thomas Guy.—No, you are not quite correct; it was not "handsome Tom Blundell," as he used to be called, who died so rich, but his namesake Dr. James Blundell, who died January 15, 1878, aged eighty-seven, his personalty being sworn under £350,000.

Illegally Selling a Poisonous Drug, Paris.—A druggist in Paris has been condemned to a week's imprisonment and 2000 francs damages for repeated sales of morphine to a lady, amounting in seventeen months to 693 grammes. His customer at first presented the medical prescription, without which no poisonous drug can legally be supplied, and on her second purchase produced the same prescription, but after this she went constantly to the shop without producing any prescription, and she is now in a lunatic asylum. The husband then took legal proceedings, and has recovered damages.

The Catapult Nuisance.—The Birmingham magistrates have made an example of one of the perpetrators of this nuisance. A youth, who amused himself by shooting stones along one of the high roads, was pursued and captured by a gentleman who witnessed the offence, and the delinquent was brought up at the police-court and fined 20s. This will, it may be hoped, act as a salutary caution to others who practise the dangerous amusement.

Manchester Royal Infirmary.—The Board of Management have resolved—"That the Committee of Management of the Hospital for Consumption and Diseases of the Throat having expressed a wish for the sympathy and support of the Board in aid of the establishment of a hospital for consumption, at Bowden or elsewhere, containing much larger accommodation than at present exists, so as to enable them to more effectually afford relief to sufferers from that disease, this Board desires to record its sympathy with, and approval of, the step about to be taken by the Committee of the Hospital for Consumption towards providing in the neighbourhood of Manchester increased accommodation for the large number of patients suffering from consumption."

Public Park, Dover.—The ground which has just been presented to the town comprises some twenty acres, and is most eligibly situate for the purposes of a public park. The land is Government property, but has been granted to the lessees at a nominal rent, and adapted as a recreation ground by private donations for that purpose.

Proposed Increase of Salary.—The Visiting Committee of the St. George's, Hanover-square, Board of Guardians recommend, it is said, that the salary of the Medical Superintendent be increased by £50 per annum. The infirmary, it was stated, was the largest in the metropolis, and the doctor gave the whole of his time to the work. Notice of motion on the question has been given.

A Dangerous Practice.—A sad instance of the peril of the not uncommon practice of walking along by the side of a moving railway train, talking to a friend in the train, was inquired into by the coroner at St. Bartholomew's Hospital a few days since. The deceased was the son of a wine merchant residing at Lower Edmonton. He was talking to some one at the station of the Great Eastern Railway, who was in a carriage that had just started, walking along with his hand on the door of the carriage. When the train reached a certain speed he took his hand from the door, but at the same time made a false step, and fell between the platform and the carriage. His hand and arm were so badly injured that amputation became necessary, and he died from exhaustion. No blame was attached to the railway company.

Disinfecting Chamber, Chelsea.—The Committee of Works of the Chelsea Vestry having recommended that a suitable apparatus and special hand-truck should be provided, and that tenders be invited for the construction of the building and alterations to existing sheds at the Alpha-place depôt, the Vestry has adopted the recommendation.

The Work of the Asylums Board.—Dr. Iliff, one of the members of the Metropolitan Asylums Board, attended the last meeting of St. Saviour's Board of Guardians, and said the reconstruction of the Asylums Board had the effect of this union being represented on all the committees of importance to the district. He had communicated with the President of the Local Government Board regarding what appeared to him to be a flaw in the work of the Asylums Board, and that was the pauper and non-pauper question. He urged it upon Sir Charles Dilke very strongly, because if they were to take sites and build convalescent hospitals it ought to be settled. In reply to Dr. Waring he said no distinction was made with patients sent to the asylums hospitals, and all were treated alike.

COMMUNICATIONS have been received from—

The Secretary of the Royal College of Surgeons, Edinburgh; The Secretary of the National Health Society, London; Dr. J. H. Fraser, Birmingham; The Secretary of the Chelsea Hospital for Women, London; Mr. Shirley Murphy, London; Mr. Noble Smith, London; The Registrar of the Apothecaries' Hall, London; The Secretary of the Westminster Hospital, London; Mr. McCarthy, London; Dr. B. J. Jeffries, Boston, Mass., U.S.A.; The Secretary of the Local Government Board, London; Mr. C. Foster, Leeds; The Registrar of the University, Cambridge; The Secretary of the Devonshire Hospital, Buxton; The Secretary of the Royal Institution, London; Dr. Leslie Phillips, Birmingham; Dr. A. T. Thomson, Glasgow; The Secretary of the Sanitary Institute, London; The Registrar-General for Scotland, Edinburgh; The President of the Pharmaceutical Society of London, London; Dr. L. Jones, London; Mr. Hadley, Sanitary Assurance Association, London; Dr. Propert, Cambridge; Mr. H. C. Burdett, London; Dr. Matthew Baines, London; Surgeon-Major W. G. Don, London; The Secretary of the Parkes Museum of Hygiene, London; The Honorary Secretary of the Pathological Society, London.

BOOKS, ETC., RECEIVED—

Report on the Health of the Borough of Birmingham for the Quarter ending March 31, 1888—Sanitary Contrasts of the Crimean War, by Surgeon-General Longmore, C.B.—Personal Care of Health, by D. J. Leech, M.D., F.R.C.P.—The Opium Habit, by E. H. M. Sell, A.M., M.D.—Vegetable Alkaloids, by Matthew Hay, M.D.—A Guide to Therapeutics, by Robert Farquharson, M.P., M.D., F.R.C.P.—Proceedings of the Society for Psychical Research, April, 1888—Colour-Blindness, by B. Joy Jeffries, M.D., Boston, U.S.A.—On the Occurrence of the Bacillus Tuberculosis in Tuberculous Lesions, by T. Mitchell Prudden, M.D.—The Mineral Waters of Europe, by C. R. C. Tichborne, LL.D., etc., and Prosser James, M.D., M.R.C.P.—Medical Essays, by Oliver Wendell Holmes—Rapid Neuropathic Degeneracy, by C. H. Hughes, M.D., St. Louis—The Therapeutic Value of Cephalic and Spinal Electrisations, by C. H. Hughes, M.D., St. Louis—The Rights of the Insane, by C. H. Hughes, M.D., St. Louis—Elements of Histology, by E. Klein, M.D., F.R.S.—Materia Medica, by Isambard Owen, M.D.—Annual Report of the County and City of Worcester Pauper Lunatic Asylum—Materia Medica, by T. Lauder Brunton, M.D., D.Sc., F.R.C.P., F.R.S.—Curvatures and Disease of the Spine, by Bernard E. Brodhurst, F.R.C.S.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Medicas—Le Progrès Médical—Birmingham Medical Review—National Anti-Compulsory Vaccination Reporter—Halifax Courier, May 5—Analyst—Denver Medical Times—Kensington News, May 5—Australasian Medical Gazette—Popular Science News and Boston Journal of Chemistry—Journal of Cutaneous and Venereal Diseases—Nottingham Daily Guardian, May 8—Nottingham and Midland Counties Daily Express, May 8—Practitioner—New York Medical Journal—Bendigo Evening News, March 17.

APPOINTMENTS FOR THE WEEK.

May 12. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Mr. A. Geikie, "On Geographical Evolution."

14. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

15. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

Royal College of Surgeons of England, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

Pathological Society, 8½ p.m. Mr. Morgan—Multiple Growths in the Bladder. Dr. Curnow—1. Hydatid Cyst in Lung; 2. Ulcerated Intestines. Dr. Percy Kidd—Disseminated Growths in Liver. Dr. Norman Moore—1. Larynx from a Case of Scarlatina; 2. Larynx from a Case of Measles. Dr. Cavafy—Acute Atrophy of Liver. Dr. Savage and Dr. Hale White—Specimen of Vacuolation of Brain. Mr. Swinford Edwards—1. Parts after Cystotomy; 2. Comminuted Fracture of Tibia. Dr. Abercrombie—Bones from a Case of Late Rickets. Mr. Horsley (for Mr. Heath)—Hypertrophy of Neck and Condyle of Jaw. Dr. Thin (for Dr. Hills, of Demerara)—Bacilli of Leprosy. Mr. Eve—Hernia of Intestine through Posterior Layer of Peritoneum (recent). Mr. Sutton—Remarkable Case of Parasites (card). Mr. Churchill—Multiple Exostoses (living).

16. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

17. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Prof. Tyndall, "Count Rumford."

18. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Royal Institution (Council Meeting, 3 p.m.), 9 p.m. Prof. Tarar, "On Domestic Industry in the Villages of Russia."

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ORIGINAL LECTURES.

CLINICAL LECTURES
ON EMPYEMA IN CHILDREN AND ITS TREATMENT.

By JAMES F. GOODHART, M.D., F.R.C.P.,
Assistant-Physician to Guy's Hospital, and Physician to the Evelina Hospital for Children.

LECTURE II.

TIME cut me short in my last lecture(a) on the subject of Empyema when I had but completed the few hints on diagnosis which I thought might prove useful. I laid stress upon pallor, emaciation, fever of a capricious turn, sweating, and diarrhœa as general symptoms worth observation; and that of physical signs you were to take no one as distinctive, but to pay attention to comparative differences between the two sides, both in percussion and auscultation; that tympanitic resonance at the apex is a valuable indication, although not invariably due to pleuritic effusion; and that it, going with bronchial breathing at the apex, and soft and vesicular breathing elsewhere on the same side, and exaggerated breathing on the other side, are the chief points to put you on your guard. I concluded by saying that with all your care there are still cases of no infrequent occurrence in which it is impossible to come to any certain conclusion, and it is necessary to explore. It may not be unnecessary to repeat what I said on this head—that if the operation is requisite to determine your treatment, you need not be afraid of exploring by some one of the varied instruments in use. Probably the operation but seldom does any harm, and it will generally suffice to clear up the doubt upon the nature of the case. Examine the chest carefully beforehand, and pass in the needle wherever you think there may be fluid, whether this be at the base, in the intermediate parts above, or actually at the apex. Do not be afraid of wounding the lung. There is no evidence to show that a small wound, such as a needle would make if it entered the lung accidentally, would do any harm. On the contrary, we know that the lung when lacerated internally by fractured ribs heals very readily. Of course, there is no necessity to be rash, and take no heed whether the lung is wounded or not. All I mean is, that the fear of wounding the lung need never deter you from exploring if you think it would be better for the patient to do so. I have certainly several times gone into the lung in cases where, with all the signs of fluid, the actual condition turned out to be only one of thickened pleura. But I never saw any harm result.

Well, then also I would say, do not let any absurd fear of so-called "dry tapping" influence you. It used to be considered a sort of shame to a man if a chest were tapped and nothing came out; but remember that it is hardly possible to distinguish in some cases between fluid in the chest and a quantity of thick gelatinous or caseous lymph. Confessedly in doubt, you explore to settle the question, and you are as much prepared to find nothing come as to find fluid.

Then again, I fear I must still further perplex you by saying that you must not certainly conclude there is no fluid because none comes out. The only warrantable inference is that you cannot get it out if it be there; and this leads me to speak next of the condition of things, or rather the varied conditions of things, which may be found inside the pleural cavity, which interfere with the action of your means of diagnosis. I have already alluded in my last lecture to the inflammatory product—how it may be serum, or pus, or some fluid intermediate; or thick lymph; or pasty matter. Thus the varied character of the inflammation will be one of your difficulties; but not only so, the combinations and arrangement of the various products within the cavity are also a source of trouble. I will not go very much into this subject, as I have other opportunities of dilating upon the pathological aspects of empyema; but to make the subject to a certain extent complete, I must just remind you of a few conditions which are all-important in reference to treatment.

(a) *Medical Times and Gazette*, January 6, 1883.

Now, in the first place, the chest may be full of fluid pus from top to bottom, and the pleura only thinly covered by a layer of pus-like lymph. Under these circumstances, it is plain that you can, if you like, tap the chest and draw off all the fluid without any difficulty, so far as the fluid is concerned in forming obstacles. But this is by no means always the case. The serous membranes are liable, as I told you, to run to seed, and the entire surface may be covered over with a thick layer of lymph; and what may happen then? You pass in the needle, and the lymph is so thick that the point never gets beyond it; or it pushes the lymph in front of it, and the cavity is not tapped; or the needle becomes plugged in its passage through the layer, and no fluid comes out. Sometimes too you will have to deal with an empyema of very long standing, and in which the lymph has become organised; and only those who have had to do with such a layer will believe how tough a coating it becomes under such circumstances. It is usually described as very like cartilage, but it is a long way tougher than ordinary cartilage; it is more like the toughest fibro-cartilage or the tendo Achillis; and you will readily understand that it would not be very difficult to fail in drawing fluid from a cavity lined by such a material.

Then all the signs of fluid may exist, and the greater part of the chest may be closed by this thick lymph of which I have spoken, and the pus may only occupy a very small part indeed. In such a case it would be possible to tap repeatedly, and never to draw off anything. A case somewhat like this was under my care in "John" Ward two years ago. The lining to the cavity was not, it is true, altogether lymph; it was a very tough fibroid form of cancer, but practically the conditions were much the same as are found occasionally with lymph. The chest of this man was tapped repeatedly, and hardly anything came away—both at the Victoria-park Hospital and here—and yet after death, which took place from the cancer, more than a pint of fluid was found in the pleural cavity.

Lastly, the lymph in the chest may have formed adhesions in various parts, and the pus may be contained not in one cavity, but in several—a loculated empyema,—and further, though the cavities may not be in all cases completely separated from each other, there may be long sinuous passages from one part of the pleura to another, which may render it very difficult to drain the cavity completely. I need not point out how any such condition as this must add to the difficulties of the case. However, there is a reverse to this picture, and this lymph, which bothers one in every conceivable way when making a diagnosis or treating a case by operation, is yet the means which nature adopts for curing the case, either with or without our help or hindrance. And this is how it is brought about: the lung is first of all compressed by fluid, and as the fluid becomes absorbed or is removed, unless the lung expands the chest retracts; and it generally happens that on both sides there are mutual *rapprochements*; the lung expands a little, and the chest flattens, and between the two the cavity is much reduced in size. The remainder is obliterated by the growth of granulations and the formation of lymph that we have talked about; and, if all goes well, the pleura is completely obliterated. Other changes may subsequently go on in the lung, but these may be considered as sequelæ occurring slowly in the course of years: with the empyema itself you will have done.

With reference to a decision as to what mode of treatment you will adopt, I would say, first of all, make out always, if you can, whether you are dealing with a general empyema or a localised one. This is, I think, a by no means unimportant point, and for this reason: a generalised empyema, I believe, rarely points externally spontaneously; a localised empyema does so not infrequently. Both, and perhaps equally so, tend to point by opening into the lung—a mode of termination which may generally be seen in some one or more stages if a patient dies in the course of an empyema, and if we then examine the surface of the affected lung. But the localised empyema alone has any great tendency to open externally. The reason of this I take to be, that so long as the fluid occupies the entire cavity, so long the pressure of it is evenly diffused over the whole surface of the thorax, and there is but little, under such circumstances, to direct the pus in any particular direction or to weaken the chest-wall. On the lung side it is different. Various parts of the lung are subject to very unequal inspiratory pressure when compressed. The parts, too, near

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the surface are inflamed and softened, and, becoming emphysematous, a small pneumothorax is produced. Or, again, the inflammatory products make their way into the lung from the pleura, and so lead to superficial erosions, etc. When an empyema becomes localised, however, then the pressure tells very manifestly on a small part of the chest-wall, and there is generally very complete consolidation of the lung beneath by pressure, which makes it more resisting; the wall of the thorax yields, and when it yields the pus has gained the mastery; the spot becomes the point of least resistance, and slowly the fluid makes its way to the surface. An empyema usually points in the fifth space below the nipple, sometimes above it, occasionally through the diaphragm, very rarely behind.

As a preliminary, also, to treatment, it is well to remember another element which will have to be reckoned with. This is the inequality of atmospheric pressure within and without the sac. You are, to a certain extent, dealing with a cask, and nothing will run from the tap till a vent-peg is introduced. The conditions in the two cases are not the same, because the cask has unyielding walls, and the thorax not only has walls upon which compression can be brought to bear from without, but also the lung inside it will, under some circumstances, expand and force out some of the fluid. A verification of all this you may often see. Nothing is running, we will say, by the aperture, and has not for some time; the child gives a cough, and out comes a full stream.

I hope you will see from these remarks that now we come to treatment we have a very complicated question to decide. Some people argue that an empyema is only pus in the chest, and, like pus elsewhere, the sooner it is out the better. How shall we let it out? You will have found out by this time that pus in the chest may or may not be associated with urgent symptoms: it may or may not be associated with symptoms which, though not urgent, are yet proving harmful to the general nutrition of the child: it may or may not be proving harmful to the lung beneath it; and between these possibilities you have to walk warily. Not only so, but when you have decided that something must be done, you now know that it does not follow that to tap the chest is to be able to drain it; and if this can be done, the empyema may continue to discharge week by week and month by month, till the lung is completely spoiled, and the child dies of lardaceous disease of the viscera. It is a question how far we have mended matters by tapping in such a case as this, and the knowledge of this possibility must always induce caution; and I think you will now be prepared for the advice I may give you, although it might otherwise seem to be wanting in brilliancy and boldness.

I will assume that you are assured, by having explored or otherwise, that the nature of the fluid is purulent. How are you going to treat it? First, it may be left alone. Secondly, the pus may be removed in one of several ways: (*a*) by aspiration, of which, having already said so much, I need say no more; (*b*) by simple tapping, using the simple trochar and canula, drawing off as much fluid as may be necessary, or as much as is possible; (*c*) after tapping, an india-rubber tube may be inserted in the chest, and the chest drained by siphon action; (*d*) we may adopt the very old plan of making two openings in the chest, one above and one below, and passing a drainage-tube in at one and out at the other; (*e*) a free incision may be made. Now, I am not going to discuss exhaustively the relative merits of these various measures; each of them has its advocates, and I daresay all are useful in their way. I shall content myself by telling you what seems to me to be the safest line of action, and it will necessarily depend upon certain circumstances.

First: Examine the chest carefully with the view to determine if there be any indication of spontaneous pointing; if there be, wait for this to occur, or open the cavity at that spot, according as urgent symptoms are absent or present.

Secondly: If there be any evidence that the pus is localised, and practically in any case where it is not in excessive quantity, in the absence of indications of urgency, it is well to attempt the removal of the fluid by aspiration. When this has been accomplished, wait for some days, and watch the temperature and other symptoms. Weigh the child from time to time, and ascertain its gain or loss. Cases are on record in which one or two tappings have cured the disease. Moreover, it is by no means necessary for cure that any large quantity of fluid need be withdrawn. Symptoms subside sometimes after the removal of so small a quantity as one or two drachms. If pus fails to come in one spot, try at another—try even below the clavicle. I have succeeded in removing pus by a puncture in the second interspace when none had come from other parts. In hospital practice it is but seldom that cases apply before the third or fourth week, and often not till much later. But, both for acute and chronic cases, aspiration may be attempted once or twice—in acute cases because, though a little time is lost, yet some cases, and I think we must say a gradually increasing number, of recovery are recorded; and in chronic cases for the additional reason that a few days' delay can hardly make matters much worse than they were before. Here it is that the opening remarks upon the nature of the fluids in the chest find their application and their value. From the fact that cases have recovered after the removal of quite small collections of fluid, it almost follows either that pus is capable of disposal in some way by absorption, or that fluids which have the appearance of pus are not all necessarily the effete material they are considered to be; and that we cannot conclude absolutely from the appearance of the fluid.

Thirdly: If the entire cavity is full of pus, there is very little use in trying aspiration; and it is the greatest mistake possible to aspirate, as is sometimes done, time after time, in such cases (perhaps five or six times), a large quantity of pus being removed each time. To do this is to take the surest means of converting the entire sac into a chronic abscess, and to invite a permanent fistula and collapse of the lung.

The treatment of all such cases and of all others of purulent effusion in the chest, where aspiration has either failed, or for other reasons is deemed inadvisable, is by permanent drainage; and all my latest experience has gone to convince me that this is best insured by making a free incision in the seventh or eighth space below the angle of the scapula, and keeping the opening patent by as large an india-rubber drainage-tube as can be inserted—the operation and after-treatment being conducted upon the strictest antiseptic principles. I am inclined to insist less strongly than formerly on the position of the opening; it may be made wherever there is indication of most pus, even if this should appear to be high up in the chest. But incision is a formidable operation, and it will not be always advisable in delicate or exhausted children; and when not, there is no better plan than tapping with as large a trochar as possible, and running one end of a long drainage-tube through the cannula, and draining the chest by siphon action into some antiseptic fluid. This plan has conspicuous advantages: the operation is easy of performance; it is not a very painful one; it is convenient if the chest require washing out; and if all goes well the chest is kept sweet. But empyema in children is very liable to be accompanied by large flakes of lymph in the cavity, and the tube becomes blocked and has to be removed, and incision is to be preferred as giving a freer exit to such material.

Next, one or two points with reference to the operation of incision. If the chest is very full indeed, the operation may be followed by severe suffocative dyspnœa. Taking away a quantity of fluid somewhat suddenly must of necessity disturb the intra-thoracic circulation, which has in many cases become accommodated to the abnormal state, and a risk is run thereby of the occurrence of a sudden œdema of the sound lung, which has not so very rarely proved rapidly fatal. Therefore, in cases of extreme effusion, it may be advisable to make a preliminary aspiration before draining the chest thoroughly; or, if incision be decided upon, to allow the pus to drain away slowly for the first few hours. Its rate of exit can easily be regulated—for the ribs are so close together, in any case, that the difficulty lies in obtaining a sufficiently free outlet by whatever means may be adopted.

During the operation great care should be exercised to insure that the opening between the ribs is as free as possible; and both then and for the first day or two during the dressings every facility should be afforded for the escape of the masses of fibrinous coagulum so commonly present. This is best done by opening the aperture by forceps, while the drainage-tube is withdrawn, and extracting anything that may be within reach. And, except in this way, I would interfere with the chest-cavity as little as possible; and all washing out, though unfortunately it must be resorted to occasionally if the cavity becomes foul, is to be deprecated.

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I say this for two reasons; because my experience of washing out the chest is much the same as I have seen of that of others with the bladder. When you wash out the chest for disinfection purposes it is very seldom that the object is accomplished. Do all you can to prevent decomposition setting in; when once it has done so, do all you can to favour the exit of matters from the chest, but depend least of all upon washing out. It often does but little good, and may lead to (2) sudden death. A number of cases have of late years been placed on record in which a sudden comatose state culminating in death has come to patients while having their chest washed out. The cause of such a calamity is in much obscurity—by some it is considered to be embolic, by others to be due to some reflex nerve-storm due to interference with the pneumogastric; but the facts are quite certain, and they must be the mainsprings of our action or inaction. Next, I would say, do away with all but the shortest drainage-tube as soon as possible. Inefficient drainage is, no doubt, the cause of many a bad result, but I believe it is equally true that many a case is intractable from the too prolonged use of drainage-tubes. After the pus has been removed, the auscultatory signs show conclusively in most cases that the compressed lung soon begins to do a considerable amount of work. Vesicular breathing may often be heard to within a very short distance of the aperture in the chest-walls; add to this some ascent of the diaphragm and some falling-in of the chest-wall, which is generally quite a noticeable feature of such cases, and it is obvious that the cavity is much reduced in size. A probe or a considerable length of drainage-tube can no doubt be inserted, but that proves nothing as to the existence of any considerable cavity. They make a passage for themselves in the recent condition of the part. The plan I adopt is as follows:—A free incision is made between the ribs, large enough linearly to allow of the passage of the finger into the cavity, should the space between the ribs allow of it. This is free enough to allow of the introduction of a good-sized drainage-tube and something over, and thus, to all intents, a double opening into the chest is secured. After removing some of the pus and any masses of lymph that may be within reach, some four or five inches of a freely perforated stout india-rubber drainage-tube is then passed into the chest, and secured in position, and the usual antiseptic protectives, as advised by Professor Lister, are placed over all. The dressings should be removed twice in the first twenty-four hours, and once daily for the first few days afterwards, and the drainage-tube in the chest is to be daily shortened, so that at the end of five or six days only an inch or an inch and a half remains. This is length enough for keeping the external aperture patent, and the internal parts are no longer interfered with. If the discharge remains very slight, the tube is removed altogether, the temperature being watched closely: so that, if after its removal any evening rise occurs, it may be at once re-inserted. It not unfrequently happens that with early removal such as this it becomes necessary to re-insert the tube for a time, but this I regard as a less evil than its prolonged use—indeed, no additional evil at all, if the temperature be taken as a guide. This will give sufficiently early notice to prevent any accumulation. Next, a word as to Listerism—it should always be adopted in the first two or three weeks. Practically it is continued at the Evelina Hospital till the child leaves, and that may not be for many weeks; but I believe that its continued application is sometimes harmful in keeping small cavities open. Therefore, when there is but a small cavity remaining, in my opinion it is better to send the child to the purest possible air, and apply nothing but a little marine wool, which should be frequently changed.

I do not think it is advisable to keep such cases too long in bed; a week or ten days after the empyema has been opened, let them sit up, and even sit out in the open air if possible.

Last, and most important of all—unfortunately for hospital patients, a treatment that cannot often be utilised—comes *Margate air*. Any seaside air is beneficial, but, weather and season permitting, I do not believe there is any corner of England so quickly restorative to children with empyema as that in which Margate and Broadstairs are situated; and, personally, I set much more store by a change of this kind after the first three or four weeks have passed than in any continuation of antiseptic dressings.

This is, I believe, in short, the best that can be done for such cases. But we must bear in mind that the conditions are such as to present obstacles in many cases to successful treatment, and empyema must therefore always be liable to prove disappointing. If we have to deal with an abscess in most other parts the pus can be entirely evacuated, and the walls of the cavity can be adapted to each other and kept in position. In the chest it is not so; we are dependent upon contraction of the chest-wall, ascent of the diaphragm, granulation from the pleura, and expansion of the lung; and it is hardly to be expected that such repair should present no difficulties: we should the rather expect that the cavity is more likely to be diminished in some directions, obliterated in some, and so cut up irregularly as to render complete drainage a matter of great difficulty; and so it too frequently is.

THE LUMLEIAN LECTURES
ON
URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

By ALFRED B. GARROD, M.D., F.R.S., F.R.C.P., etc.,
Consulting Physician to King's College Hospital.

Lecture II., Part II.

Let us now study more closely these two forms of renal calculus, and let us begin with the more simple kind. I will select one which is very minute indeed, a mere point of matter; this, when placed in a small cell under the microscope, presented an appearance which is exhibited in the enlarged drawing on the screen.

It is seen to be irregular on its surface, as if composed of a number of little beads or grains aggregated together. Let us now watch the result of putting into the cell a few drops of a solution of carbonate of lithium. After a few minutes, the superficial beads became more or less transparent, and exhibited, in many instances, the appearance of small cells which had been denuded of their contents. The little calculus soon has a translucent ring around it, which becomes broader and broader as the action of the carbonate of lithium spreads, the opacity of the calculus remaining in the centre only. Under the continued action of the lithia-salt, this last remnant of opacity also disappears, and the whole calculus is reduced to a translucent substance, which has the appearance of being made up of a great number of little vesicles. If polarised light be employed, this is seen to contain matter having a crystalline structure; but the still further continued action of the alkaline fluid ultimately removes this too, and the calculus is then seen as a mass apparently made up of colloid matter in a more or less membranous shape.

In these experiments, as well as in those made on the spheroidal cells of the urinary excretion of the lower animals, I have always employed a solution of carbonate of lithium, which has the advantage of not injuring the membranous structure of the substance; whereas Dr. Carter, in his examination of calculi, appears to have used the solution of potash of the Pharmacopœia—a preparation which tends to destroy that structure, and to mask, to a great extent, the character of the changes that occur. In the drawing on the screen are depicted the various appearances exhibited by one of the very minute seed-calculi during the progress of its solution by the lithium-carbonate.

Before proceeding to the examination of the more complex renal calculi, I wish again to draw your attention to the spherules from the excretion of the serpent and the bird, that you may see how *they* behave under like circumstances. Of course, the largest of these is very much smaller than the minutest calculus that we can make use of; but this fact in no way interferes with the observation of such spherules.

Let us first imagine that we put a particle of the white excretion on a microscopic slide, in a drop of alcohol, which does not alter the spherules; and, after covering it with a thin glass disc, examine it carefully. Then the appearance depicted on the screen is seen; some spherules being large, some smaller, and some smaller still, till at length a size is reached which seems to be the smallest that they are

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capable of assuming. Next, let us place a moistened finger upon the thin upper glass, and rub it upon the powder for a few seconds, using a fair pressure; then, on re-examination under the microscope, the whole of the spherules have disappeared, and in their place are seen innumerable irregularly-rounded particles of a pretty uniform size.

If, instead of using pressure, we allow the alcohol on the slide to evaporate, and introduce a drop of a solution of carbonate of lithium, and then watch what follows, we shall see that the outlying spherules in the field are usually the first to be acted upon, and exhibit the following appearances: After a few minutes, some of the spherules show a transparent line around them, which, on close examination, is seen to be composed of transparent beads; this ring grows larger and larger, so that in a short time no opacity remains, save in the centre of the spherule. As time goes on, with renewed application of the alkaline solution, the dark central mass gets smaller and smaller, and at last altogether disappears, our original spherule being changed into a round membranous mass, without definite structure, containing crystalline matter which powerfully polarises light, which matter also in turn gives way under long-continued action of the lithia solution.

If we compare this description of what I may call the "dissolving view" presented to us by the changes in the normal spherule of the bird or reptile, with that before given of those which occur in the small or rudimentary calculus, we cannot help being struck by their close resemblance; in fact, whatever differences there may be, seem to be little more than differences of degree. Surely this must make us reflect on the possibility of there being a close relationship between the two, and may fairly suggest to us the question whether the rudimentary uric calculi found in man may not be merely aggregations of spherules—the product of the original cell-formation of the uric acid. In the case of the bird and reptile, we are sure that the spherule cannot have been deposited from uric acid previously dissolved in the urine, seeing that there is no such fluid to dissolve it; and it may be that, in the case of man also, the individual components of these calculi are simply the original cell-formations of uric acid, which have become somewhat altered in chemical composition, and rendered less soluble. If this be true, and if we can show that these rudimentary calculi are not produced by the precipitation of uric acid from the urine, we must at once remove them from that class of deposits which are called sand or gravel, seeing that these latter, whatever their size, have an altogether different structure. It is to the spherular grains and the more complex structures that I shall confine the name of renal calculi.

Dr. Prout, in his description of an uric acid calculus, speaks of the centre of uric calculi as non-crystalline in character.

In several renal calculi which I have examined, I have found some spherular bodies—masses of irregular shape, resembling much the partially broken-up pyramids, into which the spherules of the excretion from reptiles and birds frequently split when carefully rubbed and only partially disintegrated. I have also found crystals of oxalate of calcium, many of them octahedral in shape. From these examinations, I have formed the opinion that the appearances in the nucleus may arise from a slow alteration taking place in the first-formed or spherular urates, by the action of the fluid urine upon them, causing the gradual decomposition of the original ammonia salt, and an increase of its insolubility, leading, also, to the subsequent production of oxalate of calcium, which, we know, is often the result of the action of a ferment on uric acid.

I may here state that I have often found that the excretion of reptiles and birds, when acted on for a long time by weak solutions of carbonate of lithium, leave a residue consisting of the organic or colloid matter, mixed with crystals of oxalate and carbonate of calcium, and that these are often in the spherical form.

If, instead of a very small and rudimentary calculus consisting merely of an aggregation of grains, we take one of a larger size and more complex structure—one, for example, one-eighth or one-sixth of an inch in diameter—we find that, around this granular central nucleus, layers are arranged in concentric order: that is, the calculus becomes laminated, the number of layers depending greatly on the length of time during which it has been exposed to the action of the urine. These layers vary much in thickness, and also in colour, and probably are most of them originally composed of some urate rather than of uric acid itself. The subsequent action of an acid urine on a deposited layer of an urate would oftenly slowly reduce the urates into a state of free uric acid. In examining renal calculi which have this laminate arrangement, I have frequently found the central nucleus almost devoid of colour, and very different in this respect from the surrounding layers, which are generally of a pale or dark fawn colour. What is the cause of this peculiarity of the nucleus? The only explanation which at all satisfies my mind is, that the nucleus-granules have never been in a state of solution since they were formed in the kidney-cells, and therefore have never become recrystallised with the colouring matter of the urine—in fact, that they are in a condition very much like that of the renal spherules of the lower animals. The colour of the layers is not at all difficult to explain; for whenever uric acid or urates are deposited from solution they invariably take with them the colouring matter of such solution, which becomes intimately united with the crystalloid, giving it an altered shape. Thus it appears to me that we have a rational explanation, both of the pale appearance or absence of colour in the nucleus and of the colour of the different layers which surround it.

I have now given my ideas on the subject of the formation of uric renal calculi, but I would wish them to be looked upon as such only—not as demonstrated facts. My object will be accomplished if they cause pathologists to reconsider their preconceived views, and if they become a starting-point for new investigations. It must, I think, be confessed that up to the present time the explanations of the origin of calculi have been either on the one hand most erroneous, or on the other most unsatisfactory.

Influence of Diet.—There can be little doubt that the occurrence of gravel and calculus is largely influenced by the diet; but on this subject I feel sure that the opinions frequently held are not altogether correct, and require to be reconsidered. As we shall find in our next lecture that a gouty diathesis is so potent in the production of the diseases under review, it will be quite safe, in so far as the discussion of food is concerned, to assume that what tends to produce gout tends also to develope calculus, and that the diet which is of avail in the treatment of the one disease is equally so in the management of the other. It will be desirable to turn our attention to the principal groups of aliments, and ascertain what influence they have, not only upon the formation of uric acid, but also upon its condition with respect to solubility.

1. *Sugar.*—Much has been said about sugar as an article of diet in uric acid affections; and, of what has been said, much is certainly devoid of foundation. Nothing is more common than for a patient to tell one that he always avoids sugar, and looks upon it as a poison to the system, and a principle to be altogether shunned.

How do the facts stand with regard to sugar?

There are three kinds, which are commonly met with in different articles of food: (*a*) *Cane-sugar*, which, although it is most commonly seen and most largely cultivated as a separate article of diet, is yet much less common than (*b*) *Glucose*, or grape-sugar, which so extensively pervades the vegetable kingdom; and (*c*) *Lactose*, or milk-sugar, is a third kind, which gives the slight sweetness to the milk of different animals. These three forms of sugar are very closely allied to each other, both in physical properties and in chemical constitution. Cane-sugar, when warmed with a trace of mineral acid, is resolved into glucose, and undergoes the same change when taken into the stomach. Grape-sugar is also closely allied to starch; and the latter, under the influence of many chemical agents, and when taken into the alimentary canal, passes through the stage of dextrine into that of glucose. Both cane- and grape-sugar are prone to undergo the alcoholic fermentation, and to be resolved, chiefly into carbonic acid and alcohol. Milk-sugar, or lactose, undergoes the alcoholic fermentation only indirectly, and much less quickly than glucose; still, milk does ferment with yeast. On the other hand, lactose is apt to undergo another change, and to be directly converted into lactic acid, with the production of some butyric acid. Besides these three, there are some other sugars existing in small quantities in the animal body; but these need not occupy our time.

The most common of the non-nitrogenised principles contained in food is starch, seeing that it forms 70 per cent. of wheaten flour; and almost the whole of many of the simple

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amylaceous articles of food, as rice, maize, arrowroot, tapioca, sago, etc.; also of the potato, turnip, carrot, and so on, when these latter are dried. It can be shown that, when taken into the alimentary canal, starch is soon changed into glucose-sugar by the action of the saliva and pancreatic juices; and, when cane-sugar is taken, the same change ensues—so that, however carefully sugar is avoided as an article of food, it is still abundantly formed in the canal when amylaceous matters are eaten; and the result is the same whether a pound of starch in any of its dietetic forms, or a pound of cane-sugar, be taken, glucose-sugar being formed in both instances.

There is a very popular idea that sugar causes what is termed acidity, and hence it is scrupulously avoided by many. Is this true? Between two and three years ago I was much struck at seeing an American surgeon of great repute, putting lump after lump of white sugar into his tea, and I asked him why he did so. He told me that, in the States, it is a common habit to take sugar thus as a preventative of heartburn, and that he took it for that purpose. His answer made a strong impression on my mind, and since then I have often questioned dyspeptic patients as to their experience on this point. At first nearly all exclaim, "Of course sugar causes acidity," but as yet I have failed to find anyone who could assure me, from personal experience, that the eating of lumps of ordinary white sugar produces more so-called acidity than taking any other article of diet. Many of us probably know that the eating of a dry biscuit is often followed by the same symptoms in a severe degree. It must be borne in mind that I do not for a moment include sweetened fruits, and such-like substances in the same category as simple sugar. One can hardly believe that the eating of a lump of cane-sugar would seriously add to the glucose which is daily produced in the alimentary canal of an individual living on an ordinary mixed diet. Let us see what has been found experimentally with regard to the influence of sugar on the production of uric acid. Böcker says that the effect, in man, is to lessen the quantity of that principle; and Bischoff and Voit have proved that, in dogs, starch produces the same effect on the urinary excretion as sugar, so I think we may say that there is no increase in the uric acid when sugar is taken. When, however, sugar is given to an animal along with a fixed amount of nitrogenised food, it causes a marked diminution of the eliminated nitrogen and, at the same time, a great augmentation of the weight of the animal; so that there is no doubt as to the influence of sugar and amylaceous matters in fattening; they act, in fact, by preserving the protein compounds from undergoing such rapid metabolism as otherwise would take place.

Although the uric acid is not increased, but rather diminished by sugar, may not the taking of sugar cause that principle in the urine to assume a less soluble form? May it not develope a greater amount of free acid in the urine? Dr. W. Roberts asserts that the acidity is not increased either by cane sugar or by honey, which chiefly consists of glucose, and I know of no observations which indicate that the urine is rendered more acid by the taking of this extensively diffused article of food. The same negative result, as to the acidity of the urine, has been observed in the case of fresh fruits—nay more, Wöhler has found that cherries, apples, and strawberries either diminish the acidity or even cause alkalinity, through the conversion of the vegetable salts which they contain into the carbonates of the same bases. As we proceed we shall meet with other proofs that sugar does not necessarily influence the production of the diseases under consideration.

I must devote a few minutes to the discussion of a most important subject, viz., the influence of different alcoholic beverages on the production of uric gravel and renal calculi. We must remember that all such beverages contain alcohol united with different proportions of water; some little more than this; others, however, contain sugar, together with colouring and so-called extractive matters, also salts of potash and lime, united with vegetable or mineral acids. Many wines also contain a certain amount of some free organic acid. It is necessary to investigate the influence of the most important of the constituents of these beverages upon the urinary secretion; and first let us take alcohol itself.

1. *Alcohol.*—According to the experiments of Böcker and Hammond, the uric acid appeared to be slightly increased in quantity by the taking of alcohol; and even this is matter of doubt, and, on the whole, its influence on the production of that principle may be regarded as inconsiderable, nor is there any reason to suppose that it sensibly affects the acidity of the urine.

2. *Distilled Spirits.*—In the various distilled spirits, as brandy, rum, gin, and whisky, there are found very small quantities of different ethers and essential oils, which doubtless modify to some extent the action of the alcohol on the different functions, but cause no essential alteration in the constitution of the urine.

3. *Wines.*—The various kinds of wines, although they possess one character in common, viz., the presence of œnanthic ether, still differ from each other in many important particulars, so that, to ascertain their properties and their influence upon the production of calculus and gout, we must group them into at least two classes.

In the first division we have the natural light wines, in which the alcohol is small in quantity, not more than 10 per cent., and in which the fermentation has been allowed to proceed till the whole of the sugar has become destroyed. These wines are rich also in acid tartrates, and in racemates.

In the second division we may place the Peninsular wines of Spain and Portugal, the wines of Sicily and Madeira, and champagne and the other sparkling wines. These all contain a considerable quantity of sugar, owing to the arrest of fermentation which has been induced by the addition of distilled spirit, for it must be remembered that the process of fermentation is stopped when 12 per cent. of alcohol is developed. In this class of wines there is a marked absence of the vegetable salts, which become insoluble on the addition of the spirit, forming the well-known crust deposited on wine-casks, which is known in commerce under the name of argol.

Besides these two divisions, there are many wines which are more or less of an intermediate character; some, in their properties, approaching to our first, others to our second group.

In each class of wines we also find some which are white and some which are red, the difference depending on the presence or absence of the colouring matter derived from the inner surface of the grape-coat. In many of the inferior wines there also exists much free acid, arising from the setting-in of the acetic fermentation.

The question now arises, have we any facts with regard to the special effects of different wines in the diseases which we are now considering? I think we have many, and much information which we can use to guide us in the prevention of such diseases. With regard to gout, our knowledge under this head is considerable, and this may serve as a pretty accurate guide in the case of calculus, seeing how close is the connexion between that disease and gout, though I must not for a moment be supposed to say that all the causes which lead to the one form of disease must necessarily produce the other.

It may, as I believe, be confidently asserted, with respect to gout, that, with an absence of alcohol in any shape, coupled with an absence of hereditary predisposition derived from alcohol-drinking ancestors, the disease would be practically unknown; and that Noah, in planting his vineyard and drinking the wine thereof, laid the foundations of much misery for his descendants.

It is most essential to separate the different kinds of alcoholic beverages from each other in estimating their tendency to produce disease. Thus, alcohol in the form of distilled spirits, although, when taken in excess, it causes serious mischief, injuring the liver, kidneys, heart, and other organs, still has little or no power of producing the uric acid diathesis, or at any rate, the gouty development of it. In spirit-drinking countries, or among spirit-drinking families, gout is unknown. Look at Scotland and its whisky-drinking classes—and they are said not to be too sparing in their potations—the disease is practically absent; hardly ever seen in the hospitals. Look at Poland, where they drink a kind of arrack; the same holds good. A physician from Warsaw, to whom I was once showing some cases of gout in my hospital wards, said that he was peculiarly interested in them, as it was the first time he had ever seen examples of this disease; and, in connexion with this, I may mention that not only does spirit by itself fail to cause gout, but the combination of spirit and sugar is harmless in that direction for toddy, I am told, is usually a sweet beverage.

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When, however, we investigate the influence of wines, we shall find a different result. Drinkers of the common light wines, such as the red Bordeaux and the Rhine wines, suffer but little; while, among the same nations, those who indulge freely in beer, as do the inhabitants of Berlin and Munich, for example, are by no means free from evil results to their health.

Experience shows, with respect to the influence of the different kinds of wines, that the natural light wines, in which the alcohol is small in amount, while there is an almost complete absence of unfermented matter, which contain also a considerable quantity of acid vegetable salts, are little liable either to produce gout, or to lead to the formation of calculus or gravel.

On the other hand, the Peninsular wines and those which resemble them, which are stronger in alcohol, contain much unfermented matter, and are almost devoid of the vegetable salts, have great gout-producing power, and, at the same time, lead readily to a condition of urine favourable to the production of gravel and calculus.

4. *Malt Liquors: Ale, Beer, Stout, and Porter.*—We come, lastly, to the malt liquors—ale, beer, stout, and porter. In the manufacture of all of these, the fermentation is arrested at a particular period, so as to leave what is called a "body"; in that they are but partially fermented; they resemble, therefore, the Peninsular wines. Now, from my own experience, and I believe it is also the experience of all who have attended to the subject, I can confidently assert that these beverages have a great tendency to produce the uric acid diathesis. Compare the hospitals of Edinburgh and Glasgow with those of London. In the former, gout is scarcely known; in the latter the disease is common, the difference, as I believe, being chiefly due to the different beverages drunk by the working classes of the two countries; it is, in fact, the difference between whisky and malt liquors.

It has been shown, therefore, that alcohol in the form of distilled spirit, although it is capable of producing the greatest mischief, does not cause calculus or gout, and that the lighter and more fully fermented wines are comparatively free from such power for harm; while, on the other hand, the imperfectly fermented wines, such as port, sherry, Madeira, Marsala, and champagne, as well as all malt liquors, are most prone to induce the different forms of disease which are the manifestations of the uric acid diathesis. It is now necessary that we should at least endeavour to ascertain what principle or principles, present in some of these alcoholic beverages, absent from others, lead to the development of this diathesis, or aggravate it when it is already manifested owing to hereditary or other causes.

It cannot be the alcohol alone. This, I believe, can be fully and satisfactorily proved, seeing that large groups of people whose custom it is to drink freely of distilled spirits are yet free: instances are to hand in Scotland, Sweden and Norway, and Poland. It cannot be the sugar alone; for, although the partially fermented wines and malt liquors contain sugar, yet sugar added to distilled spirit does not appear to produce the uric acid diathesis. It cannot be the acidity alone; for the wines which are most harmless are quite as acid, or even more so, than malt liquors and the Peninsular wines, and many people who strongly object to the least acidity in wines will, nevertheless, often take lemon-juice to an extravagant extent.

If, then, neither the alcohol, nor the sugar, nor the acidity, by itself, is the cause of certain beverages proving so injurious, is it a combination of any of these that does the harm? We already know that the combination of alcohol with sugar, and that of alcohol with acid salts, are innocuous as far as the uric acid diathesis is concerned. What, then, is there left for us to fall back upon in explanation of the peculiar properties which some of these beverages possess, while others are devoid of them. The only conclusion that I can arrive at, with my present knowledge—and it is the result of much thought during many years—is that it is something which is a result of imperfect fermentation; and you will find that it is those beverages in which fermentation has commenced, and has been allowed to proceed to a certain extent and has then been checked, which of a certainty cause gout, and probably lead also to the production of gravel and calculus. If I am asked to state more exactly what this principle is, I cannot do so; it may be an influence only, a condition of matter, a ferment. At present it is a mystery to me.

In connexion with this subject, however, I must return for a moment to that of sugar, which I told you had, as I thought, been regarded askance without due cause.

I would say that I do not, for a moment, classify with sugar either sweetened fruits or vegetables; for I am quite sure that such articles of diet will frequently produce heartburn and other dyspeptic annoyances in individuals who are not in the least inconvenienced by sugar itself. I cannot help thinking that these contain a *something* which is not simple sugar, but a substance which is the result of the long contact of the sugar with the fruit or vegetable juices—a kind of semi-fermented matter; in fact, that same something which exists in the stronger wines and the various malt liquors. Of this I feel confident, that in many cases where sugar, whether by itself, or in tea, coffee, and light puddings, does not disagree, and where fresh fruit, although sweet, produces no discomfort, the combination of sugar with these juices, if time has been given for them to act upon each other, will often cause well-marked dyspeptic symptoms.

But it may be said: If so, a ripe orange cannot be a good thing to eat, as it contains both sugar and acid juice, and these substances have been in contact with each other for a long time. I answer: Not necessarily so. So long as the orange exists as a fruit, with its botanical structure intact, so long there may be no change taking place between the different constituents. We have a striking analogy to this in the case of the bitter almond. When whole, this seed contains the crystalline amygdaline and an albuminous ferment. Separate one of these from the other, and each, by itself, is innocuous; crush and moisten the almond, prussic acid is immediately formed, and the union of the two principles is the production of a deadly poison.

FORMIDATE OF MERCURY.—This new preparation, discovered by Prof. Oscar Liebreich (*Medical Times and Gazette*, January 6, page 15), and strongly recommended by him as a good material for hypodermic injections in a 1 per cent. solution, has been tried at the Rochus Hospital, Buda-Pesth, and has by no means answered the expectations held out. First of all, it is excessively painful in its employment, and few patients can be induced to go on with it, and great local irritation is produced by the injection. Moreover, in no respect does it possess any advantage as an anti-syphilitic over other means already in use.—*Petersburg Med. Woch.*, April 28.

TUBERCULOSIS IN RELATION TO VACCINATION.—Dr. Warlomont (*Presse Méd. Belge*, April 1), after giving a succinct account of the results of Koch's researches, observes that the bacilli of tubercle may be transmitted either by the inoculation of the tubercle itself or of blood of a tuberculous subject; and that it would be puerile to disregard the importance of these conclusions in relation to vaccination, whether with human or animal virus. Fortunately we have not so much to regard the matter theoretically as experimentally. And a fact of immense importance has been acquired by experience, which is the impossibility of inoculating tuberculosis by mere *superficial* insertion of the bacillus, for if an animal is to be rendered tuberculous the bacillus must be carried deep into the tissues; and this is why infection is never produced at autopsies of tubercular subjects; and no instance has been known of the conveyance of tubercle by vaccination. The disease when inoculated in experiment spreads slowly and gradually from the point of insertion. Among the millions who have been vaccinated during more than eighty years, not a single one has presented at the point of vaccination any resemblance of tubercle. And even supposing the possibility of conveying tuberculosis by the injection of blood be confirmed, all danger may be avoided by taking care not to inject blood with the virus.

SUBGINGIVAL INJECTION OF CHLOROFORM IN TOOTHACHE.—Dr. Guillot states, in the *Progrès Médical* for March 24, that he has very successfully pursued the practice, introduced by Dr. Dop, of Toulouse, of injecting chloroform into the gingival submucous tissue in toothache, which proves far more effectual than the injection of morphia. He fills a Pravaz syringe about half full, and introduces the canula parallel to the body of the jaw, carrying it to a depth of about two centimetres and a half, so that it almost disappears amidst the tissue. No inflammation or ulceration has ever followed the injection.

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ORIGINAL COMMUNICATIONS.

A REMARKABLE CASE OF NERVOUS DISEASE.

By J. HOSACK-FRASER, M.B. Edin.,
Late Resident Physician in the Edinburgh Royal Infirmary.

The following case, which has recently come under my notice, is a very remarkable one, and I think that it will be interesting to your readers if I give a full report of it:—

J. B., aged thirty-three, a draper, married, was seen by me for the first time about the end of November, 1882.

His Complaints at that time were headache, paresis of both lower extremities, and occasional violent trembling of his whole body, accompanied by aphonia and deafness.

History of Previous Health.—From infancy to the age of seventeen he enjoyed excellent health, and cannot remember having had any illness of consequence. About sixteen years ago, without any apparent cause, he lost his voice quite suddenly. The aphonia continued without any improvement for twelve months, when he made a sudden and unexpected recovery. From that time up to the date of the present illness he appears to have enjoyed the best of health, and led a very active life.

History of the Present Illness.—About two years and a half ago a hernia appeared in the right inguinal region, and, having consulted a surgeon, he was advised by that gentleman to wear a truss, which was obtained and applied on the evening of the same day. Unfortunately this truss was too tight and occasioned him pain, which was accompanied by mental excitement, restlessness, and sleeplessness, but, notwithstanding this, he continued to wear it for some days. About a week later he became depressed in spirits and complained of debility and sleeplessness. He consulted a physician, who advised him to seek change of air and scene; and, with that view, he proceeded to the Isle of Man, where he remained a week, returning home worse than when he left. A few days after his return he experienced a feeling of oppression (as if some weight was bearing him to the earth), which was relieved on his going into the open air. He further complained of partial loss of power in his lower extremities, headache, nocturnal delirium, and severe diarrhœa. The diarrhœa was arrested in a few days, but the other symptoms persisted. For nine months he had almost constant occipital headache, and could not even sit up in bed without becoming excited and emotional, and suffering from violent trembling of his body. He never had delusions or hallucinations at this time or at any previous or subsequent period. From that time up to the present he has been subject to violent trembling, aphonia, and deafness. For some months during the year 1881 he invariably lost his voice for some hours if he became excited.

Family History is good, and there is nothing of importance to note in connexion with it.

Habits and Social Condition.—He has always been a temperate man, and his home is a very comfortable one. Previous to his present illness he led an active life. He has never had syphilis.

His condition at the time of examination was as follows:—

Sensory Functions.—He complains of numbness and burning sensations in both lower extremities. Tactile sensibility and sensibility to pain are diminished in his lower extremities. When he is pricked with a pin he first feels that he has been touched with something, and a few seconds elapse before he experiences a painful sensation. Thermal and muscular sensibility are normal; electric sensibility is greatly diminished.

Special Senses.—There is well-marked lateral and vertical nystagmus. The pupils are normal in size, equal, and mobile to light and accommodation. Colour-perception is normal, and his sight is good. His eyes have been carefully examined with the ophthalmoscope, and found to be free from morbid change. He suffers from occasional deafness in his right ear, which comes on suddenly and disappears suddenly. Otoscopic examination reveals nothing abnormal. Taste and smell are normal.

Motor Functions.—The organic, the cutaneous, and the tendon reflexes are all perfectly normal.

Voluntary Motion.—There is marked loss of power in both lower extremities, but the paresis is more marked on the right side. All the movements of the lower extremities are imperfectly performed, and his power of resistance to passive movement of them is feeble. He cannot walk more than one hundred yards at a time, and that is often sufficient to exhaust him. When he is excited his body trembles violently, his speech becomes tremulous, and if he is standing he falls on the floor when he is not supported. This condition of trembling sometimes lasts for many hours, and after it has subsided he feels exhausted and prostrate for several days, and sometimes weeks. He can move his limbs steadily and without the slightest tendency to tremulousness, and he says that if it were possible for him to go through life without being exposed to sources of excitement he would enjoy perfect immunity from such attacks. He has often freedom from these trembling attacks for weeks. The movements of his limbs are therefore not accompanied with the slightest tremulousness unless he is excited. He walks supporting himself with two sticks, and if anyone attempts to lead him an attack of trembling is certain to come on, and he will fall if not supported by some one. Faradic excitability is greatly diminished in both lower extremities.

His *Co-ordination* is perfectly normal. He can stand steadily with closed eyes when both feet are placed together.

The Vaso-motor and Nutritive Functions are perfectly normal. There is no atrophy of any of his muscles.

The Cerebral and Mental Functions.—His intelligence is good; he has never suffered from delusions or hallucinations; he is very excitable and emotional, and occasionally he suffers from sleeplessness; his consciousness has never been affected; his memory has been impaired, but is good at present; his spine has been carefully examined, and there is no pain or tenderness.

Remarks by Dr. Fraser.—From a study of the facts of this case I have come to the conclusion that it does not belong to any of the nosological varieties of nervous diseases, and I am supported in this opinion by Dr. Hughlings-Jackson, who made a very careful examination of this patient some time ago. I believe there is sufficient evidence to show that if this disease occurred in a female it would be termed hysteria. My reasons for that opinion are as follows:—

1. *His mental state.* He belongs to the neurotic temperament, and is very excitable, emotional, and morbidly sensitive.

2. *The exciting cause and variableness of his symptoms.* The attacks of trembling, aphonia, and deafness are induced by mental excitement only. The suddenness with which the aphonia and deafness come on, disappear, and recur, strongly points to the hysterical character of his disease.

3. *The mode of onset.* The disease commenced with mental perturbation, which still occurs at intervals, and seldom fails to excite trembling, aphonia, and deafness.

4. *The absence of trophic changes of a retrogressive character.* His body is much better nourished now than it was previous to his illness.

5. *The effect of electricity.* When a weak current was applied to his lower limbs for a few minutes it was followed by a state of profound exhaustion, which lasted for some weeks. A current of the same strength was applied to the limbs of one of the patient's children, a boy of five years, and it was followed by an invigorating result. Various remedies have been used, but they have all signally failed.

TRANSFUSION IN GAS POISONING.—Dr. Garrigues, writing in the *Boston Med. Jour.*, March 29, refers to a case in which he some time since successfully performed venesection and transfusion for partial asphyxia by illuminating gas. This case, which he regards as the best piece of work he ever did in the exercise of his profession, was performed by means of an apparatus which he constructed, and described in the *American Journal of Obstetrics*, 1878, page 734. When he reported the case in the *New York Journal of Medicine*, March 3, 1883, he was under the impression that transfusion had not been used before for such cases; but he has since found, in "Ziemssen's Cyclopædia" and elsewhere, that several successful cases are on record. Still, the remedy is little known and less practised, and Dr. Garrigues is of opinion that it should be resorted to in all serious cases.

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TWO INTERESTING DISLOCATIONS.

By A. W. MAYO ROBSON, F.R.C.S. Eng.,
Assistant-Surgeon Leeds General Infirmary, and Lecturer on Pathology Leeds School of Medicine.

THE two following cases, which have occurred in my private practice, seem to me to present several points of interest worth recording—the first on account of its infrequent occurrence, and the second because of such a cause not having been mentioned before.

Case 1.—Dislocation of the Sternal End of the Clavicle Upwards.

I was sent for to see W. M., aged fifteen, a strong, muscular boy, the messenger saying that he had put his shoulder out.

The history I got was that in a scrimmage at football he fell undermost, several heavy boys coming down on his chest. He immediately felt great pain at the left shoulder, and found the left arm powerless.

On having the upper part of the body bared, the points that most particularly struck my attention were great flattening of the upper part of the chest on the left side, and depression of the left shoulder.

I then found a marked prominence above the upper end of the sternum, in front of the trachea; an absence of the natural projection of the sternal end of the clavicle; a distinct cavity in place of the natural sterno-clavicular articulation; an arching inwards of the tendon of the sterno-mastoid; a diminution of the distance between the left shoulder-tip and the middle line, "as compared with that of the right side," of about an inch; pain on movement, and absence of crepitus. The position which he assumed as being the easiest, was stooping forward and to the left side, supporting the arm with the opposite hand, or on his knee.

My diagnosis was dislocation of the sternal end of the clavicle upwards. As the epiphysis of the clavicle does not form till the eighteenth or twentieth year, it could not be separation of the epiphysis from the shaft; and since there was no crepitus, an absence of fracture might be predicted; but the positive signs were so evident that very little or no difficulty could be experienced in the diagnosis.

Reduction was easily effected by drawing the shoulders backwards and raising the arm. To retain the bone in position I fastened a handkerchief round each shoulder, and looped them together tightly behind; put a pad in the axilla; pressed the elbow inwards, with a bandage carried round the chest enclosing the arm; and supported the arm in a sling; after which proceeding the symmetrical appearance of the chest returned.

I gave as the prognosis that there would be slight deformity, but no impairment of function. There was a great tendency for the sternal end to slip upwards, as the boy, being usually very active, always contrived to romp about and somewhat loosen the bandages as soon as his attendant's back was turned.

I removed the appliances at the end of three weeks, and applied a figure-of-eight bandage across the back, to be worn for a fortnight longer.

At the month's end there was no pain and good movement in the arm, but the sternal end of the clavicle still remained about half an inch above its usual position.

Malgaigne quotes four similar cases, and Hamilton two (one by Dr. Rochester and another of his own). Malgaigne says that a perfect retention is impossible, but that the slight displacement does not seriously impair the functions of the arm.

Case 2.—Dislocation of the Jaw during an Attack of Hysteria.

On being called to a woman aged thirty, who was said to be in a fit, I found her in an hysterical attack, alternately laughing and crying, tossing herself about in a purposeless manner, working her jaws violently, and turning her eyes up under the upper lid. She was apparently unconscious, but became perfectly sane when she was sharply spoken to, or when the face was dashed with cold water. Whilst I was watching her in the above symptoms, the jaw suddenly became fixed widely open, and the face distorted. She screamed violently, apparently in great fear, muttering unintelligibly all the while. I thought at first that the symptoms were assumed, but on careful examination discovered that the jaw was dislocated on the left side. I replaced it in the usual manner, and put on a four-tailed bandage. She was at once put to bed apparently quite recovered, but soon had a return of the hysteria with working of the jaw, dislocation being, however, prevented by the bandage which had been previously applied.

I ascertained that she had never had dislocation of the jaw on any previous occasion, and that on the day of the hysterical attack she had had a love engagement of a year's duration broken off.

My reason for describing this case is that I find no mention made of any similar one in Hamilton's book on Fractures and Dislocation, or in Erichsen's Surgery, although they do mention that dislocation of the jaw has been known to occur during an attack of epilepsy.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

A CASE OF ACUTE INTESTINAL OBSTRUCTION—DOUBLE STRANGULATION BY PERITONITIC BANDS, ONE OF WHICH WAS DIVIDED DURING LIFE.

(Under the care of Dr. SIDNEY COUPLAND.)

HENRY A., sixty-five, goldbeater, married, was admitted into Founder Ward on March 18, 1882. He was a well-nourished, venerable-looking man, with a flowing grey beard and marked arcus senilis, and had never to his knowledge been ill before in his life. He had, at any rate, never before been confined to bed for sickness, and was very positive in his assertion that until the present attack he had never experienced any trouble with his bowels nor had any abdominal pain. He had had six children, of whom only one survived, all the rest dying on reaching maturity—one of typhoid fever, another from "consumption," a third from "rheumatism." He lived comfortably, and was of regular and sober habits." On Sunday morning, March 12, after returning from church, he was seized with a griping pain in the belly, at times very severe, thought to be a bad attack of colic, for which, however, no indiscretion in diet could be assigned. He was at once seen by Dr. Cree, of Upper Holloway, under whose care he continued until the 18th, and by whose advice he then sought admission to the hospital. In spite of treatment the pain did not abate, but rather increased, whilst at the same time the bowels, hitherto regular, became obstinately confined. Vomiting, which set in early and persisted, was excited by taking food, occurring almost immediately upon swallowing it. Since the 15th the vomited matters had altered in character, becoming yellowish and offensive, obviously regurgitated from the intestine. Cough was frequently excited by the act of vomiting—a fact which proved to be of considerable moment. Besides other measures, he had been treated with large enemata, but no evacuation followed these, except at first. He became worn and exhausted, so that on his admission, on the seventh day of his illness, his features were pinched, expression anxious, extremities cold, pulse feeble and small. The pain was described as constant and griping; it was referred chiefly to the epigastric and upper umbilical regions. There was not much tenderness, even at the seat of pain. The usual sites of external hernia were examined with negative result. The abdomen was symmetrical in outline; it was full, but not unduly distended nor tense. On the contrary, the walls were soft, and manipulation was well borne. The flanks were not flattened. No tumour could be felt, and the slightly increased resistance met with above the umbilicus was attributed to muscular contraction. There was no visibility of intestinal coils during peristalsis. On percussion, the note was less tympanitic over the colon than usual, and it was generally of a higher pitch than normal, confirming the fact suggested by the want of undue distension—that there was no great amount of flatus in the bowels. The area of stomach resonance was large, extending upwards in the left axilla to a level with the nipple, and completely obscuring the splenic area. Liver dulness normal. As regards the thoracic organs, the cardiac sounds were feeble, and coarse

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rhonchus was audible over the front of the chest, but, owing to the patient's prostration, no examination was made of the lungs posteriorly. It was obvious that he was suffering from acute intestinal obstruction, and after a consultation with Dr. Cayley, Messrs. Hulke and Lawson, it was agreed that no time should be lost in resorting to operative interference, *i.e.*, exploration of the abdomen to detect the seat of the obstruction and relieve it if possible; the completeness of the constipation (not even flatus passing), the occurrence of fæcal vomiting, and the general condition of the patient determining this decision. It was also surmised, from the history of the case and the conditions above stated, that the obstruction was probably in the small intestine, which was further confirmed by the fact that air injected into the lower bowel penetrated to the cæcum, as ascertained on auscultation over this region during the process. At 8 p.m. ether was administered, and Mr. Lawson performed the following operation:—An incision was made through the abdominal wall in the middle line for three to four inches downwards from the umbilicus. The peritoneum proved to be unusually thick. When the peritoneal cavity was opened, some coils of collapsed gut, reddened but smooth, presented. Mr. Lawson then proceeded to explore the bowel by withdrawing a small portion, and replacing this before proceeding to draw out the next segment. In this way the bowel was followed first upwards towards the epigastrium, and then downwards and to the left. The gut was observed to become more congested, and after as much as from two to three feet had been thus examined a point was reached where a firm constricting band passed over the bowel to the mesentery. The band had a glistening appearance, was fibro-fatty in nature, and appeared to be flattened out, its width being about half an inch. Compression forceps were placed on the band above and below, and it was divided between them; the cut ends, immediately retracting, were twisted, and the forceps removed. On the distal side of the band the bowel appeared distended; at the seat of constriction it was of a purplish colour, and was marked by a deep sulcus. A few inches more of the gut were examined, but a second constricting band was not found. The wound was then closed by interrupted silk sutures, and covered with boracic lint. Antiseptic precautions were observed, but the spray was not used. During the operation the patient had some stercoraceous vomiting at intervals, followed by coughing. At its close he was much collapsed, and coughed frequently in an abortive manner. Under warmth, stimulation, and free doses of opium (half a grain of extract every two hours) he rallied. Nutrient suppositories were given, and in the night he was allowed a little milk and jelly beef-tea by the mouth, which he retained.

The following morning he felt comfortable, and was quite free from pain; had slept a little, and dozed frequently. Pupils contracted. Extremities warm; lips of good colour; tongue dry and red. The bowels had not been opened, nor had any flatus passed. The abdomen was very resonant, but not extremely distended. Pulse 84, much improved in volume; respirations 30; temperature 96·4°; urine high-coloured, specific gravity 1020, faintly acid, no albumen, giving a deep purple reaction with hydrochloric acid (indican reaction). At 8.30 p.m. the following note was made:—"Since 12.45 has been taking half a grain of extract of opium every four hours instead of every two hours, so that altogether since 9.45 p.m. yesterday he has taken five grains and a half. He has been sleeping heavily, but is easily aroused. Skin moist. Temperature 96·8°; pulse 96, soft, less full; respirations 44. There has been no passage of flatus or fæces, no sickness or nausea. He has passed nineteen ounces of urine during the last twelve hours." The stimulant was increased, but he rather rapidly became more prostrate, and at 4 a.m. on the 20th, after a slight attack of fæcal vomiting, he died—thirty-two hours after the operation.

Post-mortem Examination (abridged from Dr. Fowler's report).—The edges of the abdominal wound, four inches and a quarter long, were partially adherent by plastic exudation. The coils of intestine lying beneath the incision were blood-stained. There was a thin red line of injection along the adjacent parts of each coil of small intestine (commencing peritonitis). The intestines were distended for about eight feet of the ileum, thence onwards they were partially collapsed, with the exception of a loop which was constricted by a band. The peritoneal cavity contained an ounce and a half of fluid blood. The liver was firmly attached to the abdominal wall by old fibrous adhesions, and similar bands of adhesion passed between the great omentum and the parietal peritoneum on the left side. On separating the coils of bowel a blackened portion of ileum was seen lying in the left iliac fossa. This was sharply marked off from the next segment by a line of greenish, necrotic-looking tissue, showing where it had been tightly nipped by a band. This band had been divided during life; it was a thin cord that passed from the parietal peritoneum to the mesentery. One of its divided ends was so retracted as to be hardly visible, the other was about an inch in length. About four inches lower down another cord was found crossing the bowel, constricting it and the mesentery; it formed a long loop, and proved to be the prolonged right lower extremity of the great omentum, which had become adherent to the parietal peritoneum on the left side. The cord-like structure had made quite a groove on the mesentery over which it passed, whilst the included loop of intestine was dark and purplish. The rest of the intestine was empty and collapsed. There were old pleuritic adhesions on both sides, most on the left. The lungs were emphysematous; the lower lobes were deeply engorged and obviously in an early stage of hypostatic pneumonia. In the left lower lobe towards the lateral and central parts were several sharply defined patches of lobular hepatisation, some of them being situated at the base and parallel to the diaphragm. Heart flabby. Spleen very soft and pale. Liver slightly fatty and cirrhotic.

Remarks.—The entire absence of any previous history of abdominal trouble seemed to point to the fact that not only were the symptoms acute in their onset, but that the lesion determining the obstruction was of equally brief duration. The actual state proved to be otherwise: there was a long-standing condition which must have been a source of peril for the greater part of his life. It is important to remember this—that acute symptoms do not exclude the presence of a long-standing lesion. The question as to the locality of the obstruction was answered with tolerable accuracy—to be in the small, and not the large bowel—by (1) the early occurrence of vomiting; (2) the limited area of pain and tenderness; (3) the absence of abdominal distension; and (4) the fact that air injected into the bowel could be heard on auscultation to gurgle in the cæcum. In attempting to conclude as to the nature of the lesion, and bearing in mind the above facts, such causes as cancer and intussusception could be dismissed; for, although the patient's age favoured the former, yet a cancerous stricture of the small intestine is a great rarity, and there was no collateral indication at all that he was the subject of this disease. Intussusception was practically excluded by age, as well as by the absence of its characteristic symptoms. The diagnosis thus became narrowed to volvulus and internal strangulation; and whichever of these it was, it was plain that no method of treatment could be of avail except surgical means, since the obstruction had lasted for a week, and he was exhausted to an extreme degree. For, however striking the results obtained in a few cases by the opium or belladonna treatment (see the case recorded by Mr. D. King in *St. Bartholomew's Hospital Reports*, vol. xvii., 1881), it cannot be pretended that such treatment is of avail in the large majority of these cases. Cases of spontaneous recovery or of recovery after such internal measures, or even after manipulation, etc., form but a small proportion, as compared with the long list of fatalities; whilst the difficulties of diagnosing the precise lesion must always be a bar to the strict comparison of the cases of recovery with those of fatal issue. Post-mortem examinations have shown in a very considerable number of cases how nothing short of the prompt and early resort to the knife could have saved life; and the general feeling among surgeons at the present day is to endeavour to deal with these cases as with an external strangulated hernia. As a cause of obstruction, internal strangulation is far more frequent than volvulus. Such strangulation may occur in a variety of ways, and any part of the small bowel may be involved. The most frequent condition is the existence of bands of old peritonitic adhesion passing between the omentum or mesentery and the parietes; or between the cæcal appendix or the epiploic appendages and those structures; or it may be induced by a hernia through a rent in the omentum or mesentery, or foramen of Winslow, or through pouches

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left in the peritoneum by malformation, and, lastly, a not infrequent cause—especially in young subjects—is the formation of a loop by the persistence of a Meckel's diverticulum and its attachment to the umbilicus. In the present case, opinion naturally inclined to some form of internal hernia, or a volvulus, and not to the existence of bands of adhesion, etc., owing to the entire absence of previous symptoms. Exploration of the belly was justified, and, there being no evidence of acute peritonitis, a favourable issue was thought possible, in spite of the patient's age and prostration. The cause of the strangulation proved to be peritonitic adhesions, which must have formed long since. As in pleurisy, so with peritonitis, we cannot hope always to get any history of previous illness to account for such adhesions. The bands of adhesion were numerous, but the primary cause of the strangulation was the cord-like loop passing from the omentum to the parietes. This cord was not detected at the time of the operation, although the surgeon, after dividing a band, continued his search for a second one. The band that was divided had compressed rather than encircled the gut, for it only passed across from the mesentery to the parietes. It was therefore different in kind from the larger loop through which some coils of ileum had passed; the flaccid and empty condition of which was, at the operation, naturally thought to be due to the constricting band that had been severed above. For a few hours hopes were entertained of recovery; but although he rallied and ceased to vomit, there was no fæcal evacuation, nor even the passage of flatus from the bowel, to afford satisfactory evidence of complete relief having been given. Lastly, the existence of foci of broncho-pneumonia in the lower portions of the left lung was suggestive of the inhalation of vomited matters. The attacks of vomiting nearly always excited cough, and there can be little doubt as to the production of such foci of secondary "septic" pneumonia being a real danger in cases of persistent fæcal vomiting. A short time previously a more advanced and extensive condition of this change was observed in a patient who died from intestinal obstruction, and who had much fæcal vomiting.

Poisoning by Sulphate of Copper.—A case is related in the *Allg. Wien. Med. Zeit.* (March 20), in which a strong man, twenty-two years of age, swallowed, for the purpose of suicide, an enormous quantity of sulphate of copper (120 grammes in about 150 grammes of some spirituous liquor). He was seized with violent pain in the stomach and vomiting, and afterwards with tetanic spasms of the extremities. The vomiting continued abundantly, so that neither emetics nor stomach-pump were needed. The spasms of the extremities continued for some days at intervals, but in a day or two his appetite returned, and by the sixth day, the muscular pains having ceased, he would have been able to walk about but for the weakness of the extremities, which were in a state of paræsthesia. In a fortnight he was perfectly well, and left the hospital.

Condemnation of a Pharmacien for Selling Morphia.—A recent decision of the Tribunal Correctionnel (of which a slight notice appeared under the head of "Notes and Queries" last week) should lead those to reflect who, for the sake of gain, favour the production of morphiomania. At the end of some illness a Madame Junot had in her possession a prescription ordering the chlorhydrate of morphia, by the aid of which she obtained considerable quantities of morphia from a *pharmacien*—so that within the space of 516 days it was acknowledged that 693 grammes of this substance had been sold to her. At the present time she is in a most pitiable state, and is placed in a *maison de santé*. M. Junot, the husband, brought the *pharmacien* before the Tribunal for having contravened the law by supplying a poisonous substance several times from one and the same prescription. The Tribunal condemned the *pharmacien* to eight days' prison and a fine of 1000 fr. Moreover, the Tribunal took cognisance of the necessity that had arisen of putting Madame Junot in a *maison de santé* at an expense of 250 fr. per month, observing that the ultimate result and expense of the treatment required cannot as yet be estimated; but, without prejudice to any ulterior demand for damages that may be made, the Tribunal adjudges the *pharmacien* to pay now 2000 fr. damages.—*Union Méd.*, May 12.

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Medical Times and Gazette.

SATURDAY, MAY 19, 1883.

DIABETES.

The discussion on diabetes is now a matter of history, and we cannot claim at present any increased knowledge as regards its pathology. We would not, however, wish to be understood to assert that the discussion has been wholly unproductive,—such is by no means our opinion,—but the immediate gain has not been of tangible amount. The majority of the speakers naturally confined themselves to the macroscopical and microscopical appearances of the viscera, and, with the exception of the kidneys, the nervous centres were almost exclusively dealt with.

Dr. Dickinson alone, of all those who took part in the discussion on either day, had any constant lesion to report. The results of his investigations have taught him that the brain is generally rather hard, and often injected, and that pores or cribriform spaces are to be found in the centrum ovale, and white matter underneath the lateral ventricles. Microscopically he has found dilatation of the blood-vessels, enlargement of their perivascular spaces, and deposits of blood pigment, or even blood corpuscles, in these perivascular spaces. Other changes that he had sometimes found he was not disposed to lay much stress upon: such were changes in the spinal cord, dilatation of its central canal, and the condition described as miliary sclerosis. As, however, all the others who dealt with this part of the subject were unanimous in agreeing that such lesions had not been present in the cases they had examined, and as Dr. Dickinson admitted that he had himself found the same changes in tetanus and chorea, we think the inference is fairly to be drawn, that when such changes are present it is probable that they are the *result* of the disease. When speaking of the first evening's debate, we expressed our surprise that so little attention had been paid to the sympathetic system, and we might do the same in regard to the second evening's debate; Dr. Dickinson is the only one who

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claims to really have paid much attention to it. He found in several cases the ganglia of the prævertebral cord, the intervertebral ganglia, and the semilunar ganglia almost invariably healthy. We cannot at all assent to the doctrine put forward by two of the speakers that diabetes is a functional disease; the mere fact that we are unable to point out the abnormal condition leading to diabetes is no argument whatever in support of such condition having no existence, and we confidently look forward to the time when improved methods of research shall have removed diabetes as completely from the category of diseases whose pathology is unknown, as the cutting thin sections of the spinal cord has done in the case of progressive muscular atrophy or the essential paralysis of children. Dr. Wilks, in his introductory remarks, spoke of the frequency of phthisis as a fatal complication of diabetes in his earlier experience, and it is to be regretted that the subsequent speakers had so little information to impart on this subject. Dr. Douglas Powell denied any causal relationship between the two, and stated that diabetes was extremely rare at the Brompton Hospital. This may be so, but phthisis is certainly not uncommon amongst diabetics; and it should be borne in mind that when the phthisis is severe or acute the sugar may disappear from the urine, to return when the lung affection has subsided. As regards its exact nature, Dr. Dickinson called it a caseating pneumonia, Dr. Stephen Mackenzie a necrotic pneumonia, and observed that in four cases the absence of tubercle-bacilli had been established, whilst Dr. Dawson Williams spoke of it as tubercular. Thus it is evident that opinions are much divided both as to the frequency and nature of the chronic lung-affection in diabetes. Dr. Pavy's remarks on the chemical changes which the carbo-hydrates undergo in the body during health, or under the influence of diabetes, will be read by all with interest, whether they be disposed or not to accept his theory of a vaso-motor paralysis of the chylopoietic viscera as the proximate cause of the conversion of the carbo-hydrates into glucose instead of into maltose. But even supposing that this theory were proved beyond the possibility of doubt, we should still require to learn the cause of the vaso-motor paralysis. The impression left upon our minds as a result of the discussion is, that it is probable that some defect is constantly present in the sympathetic nervous system; but that it is doubtful whether our present methods of examination are competent to reveal it to us.

THE CURE OF BACKWARD DISPLACEMENTS OF THE UTERUS.

A CONTRIBUTION to the clinical history of backward displacements of the uterus, by Dr. H. Löhlein, of Berlin, which raises many questions of interest and importance, appears in a recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie*. If a knowledge of the effects of alterations in the position and shape of the uterus be, as is sometimes said, the keystone of uterine pathology, then anything which enlightens us as to the history of these conditions is of the first importance.

Dr. Löhlein, as a preliminary, makes a remark which will perhaps surprise the more ardent believers in mechanical gynæcology. He says, "The renewed study of the physiological position of the uterus has furnished a solid basis for discussion, and has greatly limited the therapeutics of anteflexion, the treatment of which with intra-uterine stems is, at least in Germany, in all parts of it, even by their most ardent panegyrists, far more seldom and more cautiously practised than was the case eight or ten years ago." Upon which we congratulate the *Frauen*. But while Dr. Löhlein sees the treatment of anteflexion receding, he is, on the other hand, convinced that no one now contests the pathological importance of retroversion and retroflexion, or the need of, where possible, placing and keeping such a displaced uterus in a position of anteversion. Backward displacements of the uterus, he estimates, from a comparison of his own practice with that of others, to form about a fifth of the cases which come to the gynæcologists. The advice usually given to such a patient is, "You must wear an instrument"; and her natural inquiry follows, "Must I *always* wear it?" and if not, "how long?" The importance of being able to give a correct answer to these questions is obvious; and in the paper before us Dr. Löhlein sets himself to ascertain what reply can truthfully be given. Many different statements have been made as to the ultimate prognosis of the cases under consideration, but few writers have taken the pains to complete and collate the histories of cases so that their statements might be founded on exactly recorded facts.

The method of treatment which Dr. Löhlein used was the replacement of the uterus by bimanual manipulation, and then the keeping it in position by either an india-rubber ring, a Hodge's or a Schultze's pessary. The sound was only exceptionally used, and intra-uterine stems Dr. Löhlein says he has completely banished from the out-patients' rooms. With these mechanical means, general treatment, such as regulation of the bowels, the hot vaginal douche, iron, ergot, etc., was combined. The knee-elbow position (often spoken of by writers—the incorrectness of whose statements as to its effects might be inferred from their inaccurate description of the posture itself—as the "genu-pectoral," an attitude which it is impossible for an ordinary man or woman to assume) Dr. Löhlein finds practically useless in the treatment of these displacements—a conclusion in which his experience quite coincides with our own. He remarks that in many cases (he specifies cases of "simple retroversion") the mere introduction of a ring pessary, without previous replacement of the uterus, is enough: another point in which we agree with him. A set of observations carefully made with reference to this particular point showed Dr. Löhlein that it is only seldom that the filling of the vagina with air in the knee-elbow position will change the position of the uterus from retroversion to anteversion. As a rule, the uterus merely is carried out of reach of the finger, but remains retroverted as it was before.

We come now to the main object of Dr. Löhlein's paper. It would naturally be expected that cure would be easier the earlier treatment was begun. Our author, therefore, considers separately the cases in which the displacement was quite recent at the time the patient came under care. These were unfortunately very few—only seven in number. In them treatment was begun within eight weeks after parturition. But in some of these there was reason to think that the displacement had been present before the occurrence of pregnancy, and others could not be watched long enough to warrant any definite statement as to their cure. In only three could a conclusion as to this be drawn. In two the patients were completely cured within three months after parturition; the third, eighteen months afterwards, still required local treatment. The chronic cases which Dr. Löhlein has carefully and long observed are 240 in number. Of these in twenty-two the uterus was more or less fixed by adhesions—a proportion closely approximating that given by Hildebrandt, who found out of ninety-seven retroflexions the uterus fixed six times. It appears to us that these figures have some bearing upon the views of Schultze, according to whom, as many of our readers will be aware, uterine displacements are chiefly important when they arise

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as consequences of pelvic adhesions. But into this question Dr. Löhlein does not enter, and, therefore, with this remark we pass it by. In four others of our author's cases tumours were present, and in fifteen the state of the vagina was such as to prevent the satisfactory use of a vaginal pessary. In a large number of other cases he was unable to keep the patients properly under observation. There were eighteen in which, after wearing an instrument some time, all the symptoms had disappeared, and on removing the instrument the uterus remained in the anteverted position, even when the patient resumed the erect posture. But the patients did not return to report whether or not they continued well, and therefore Dr. Löhlein, with scientific caution, excludes them from his tabulation of results. Eliminating all the sources of error which have been mentioned, there remain only fifty-six of our author's 240 cases which are really available for the ascertainment of the result of treatment. Of these, in only four was there complete cure, meaning by this that, months after treatment had been discontinued, the uterus remained in a position of anteversion or anteflexion. Fifteen cases were improved; *i.e.*, that the uterus, after the leaving off treatment, was not so much displaced as when treatment was begun. In the remainder, when the pessary was removed, the uterus at once sank to its old position.

We may take notice, before leaving Dr. Löhlein's paper, of an interesting case which he mentioned in some supplementary remarks, viz., that of a virgin of seventy-two with retroflexion and pyometra, in whom exceedingly offensive secretion escaped in gushes from the bent womb: this condition disappearing when the uterus was straightened and drained. Cases like this, in which a uterus that has undergone senile atrophy becomes distended with fluid, bent, and its canal blocked at the point of bending, are interesting because they furnish the only anatomical foundation for the theory that a similar state of things occurs in the functionally active organ.

Dr. Löhlein's results closely correspond to those of Dr. Mundé, of New York, as stated by him in a paper read before the International Medical Congress. The latter author, out of 403 cases of backward displacement, found only eight cases of permanent cure by a vaginal pessary. The inference therefore would seem to follow that a woman who suffers from a backward displacement of the uterus is almost certainly doomed either to permanent ill-health or at least to suffering throughout the years of uterine activity. If the mechanical theory of uterine pathology be correct, and retroversions and retroflexions are in themselves causes of suffering, the figures given by Dr. Mundé and Dr. Löhlein would clearly point to the almost hopelessness of recovery of health. There is another view, which the authors quoted seem to have left out of sight, which is, that the displacement may often be quite innocent of causing trouble. If so, it would matter little whether it be removed or not, and perfect health would be quite compatible with its persistence. Drs. Mundé and Löhlein both omit to state whether or not their patients continued to suffer from any symptoms. They assume that, because the displacement was not removed, the subjects of them must still be regarded as out of health. We are inclined to think that there are a larger number of women than these authors suspect going about in perfect health, notwithstanding that their wombs are retroverted or retroflexed. In the words of Fritsch, "Cases are not rare where the patient returns, months or years after the removal of the pessary, full of gratitude for her cure(?), and on examining with the happy anticipation of finding the retroflexion cured, behold! the displacement is discovered entirely unchanged." Is the note of interrogation after the word "cure" necessary?

THE WEEK.

TOPICS OF THE DAY.

Recently, in the City of London Court, before Mr. Commissioner Kerr, a case of importance respecting the liability of landlords for pecuniary damages for defective house-drainage was heard. The plaintiff, a builder's contractor, sued the defendant, a widow, for a sum due for rent. In answer, she filed a counter-claim for £10 damages—first, for breach of a contract by which she agreed to pay an increased rental of £4 a year on condition that the house was made habitable; and secondly, for illness and loss incurred through the bad state of the drains. Defendant deposed that she had lived in the house in question for eleven years, but at length was compelled to leave, owing to the horrible stench which sometimes emanated from the drains. The soil in one place oozed through the floor. Her lodgers, and even her son, left the house because of the nuisance. Three witnesses, who had lived in the house, were called to corroborate this statement. For the plaintiff it was urged that he had done all that was required of him under the contract, and that the illness alleged had not been proved to have arisen from the drains. The Commissioner, however, thought otherwise, and expressed his intention of finding for the defendant, both upon the amount claimed, and also for the counter-claim. He remarked that he would have given a great deal more if he had been asked, because it was impossible to calculate the injury to health at the time, and in the future, from living in an unsanitary habitation. In certifying for costs on the higher scale, his Honour observed that it was high time that landlords were taught that property had its duties as well as its rights.

In those towns in which the Contagious Diseases Acts were in force there has, from the very outset, been little or no opposition to their working; and if anything could make their opponents reflect upon the course they have lately pursued, it should be the fact that at a recent meeting of the Chatham Board of Health the following resolution was unanimously carried:—"This Board, having heard with great regret the recent action of the Government in regard to the altered mode of administering the Contagious Diseases Acts, and thereby rendering them practically nugatory, resolve that a deputation of this Board seek an interview with the Home Secretary to lay their views before him, and that the member for the borough be requested to arrange such interview and introduce the deputation." Hopes were further expressed that the Government might be induced to reinstate the police who have been engaged in carrying out the compulsory clauses of the Acts. At Portsmouth it is also announced that the Town Council have agreed to petition against the repeal of the Contagious Diseases Acts; during the discussion which led to this decision the opinions expressed were unanimously in favour of their being retained unaltered. One of the members thought that the Watch Committee ought to appoint an officer to carry out the measures while the Government were considering the matter, but it was pointed out that such a course could not be adopted.

At the last ordinary meeting of the Metropolitan Board of Works, the Finance Committee submitted a report of the proceedings of the Board during the past year, which was received and adopted. Alluding to the condition of the Thames, the report observed that it had been stated that it had become polluted by the discharge of sewage into it, which led to the appointment of the Royal Commission now sitting. After recapitulating the names of the members of the Commission and their instructions, the report goes on to show that the Board of Works took an objection to the constitution of this Commission,

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as Mr. Abernethy and Dr. Williamson, two of the members, had previously avowed themselves in favour of the Thames Conservancy; and on representing these facts to the Home Secretary, he appointed two additional Commissioners—Sir Peter Benson Maxwell and Colonel C. B. Ewart, R.E. The appointment of these two new Commissioners did not, however, remove the Board's objections to Mr. Abernethy and Dr. Williamson. At its conclusion, this report mentioned that there was at last some prospect that the new streets from Charing-cross and Piccadilly-circus to Oxford-street and Tottenham-court-road would shortly be proceeded with. It was stated that the delay had arisen entirely from the impracticable conditions imposed upon the Board by Parliament with respect to the provision of other dwellings for the working classes to be displaced. The Board had at length, after many efforts, succeeded in convincing both the Home Secretary and Parliament of the absolute necessity for modifying these conditions, if the new streets were to be made; and a promise has been given that a Bill shall be brought in, sanctioning the necessary modifications. So soon as this Bill is passed the improvements will be at once proceeded with.

Well-merited punishment, though some time delayed, has at length been inflicted on Charles Shaw, butcher, of Hackney. He was recently charged at Worship-street Police-court, with having on his premises a quantity of meat, intended for the preparation of food, the same being unsound and unfit for human consumption. The offence was committed so far back as October last, and defendant's son had been fined for it soon after, but the accused having been convicted only one month before on a similar charge, and, it was alleged, fearing the consequences of this second breach of the law, had up till now succeeded in evading arrest. The circumstances of the discovery of the meat, which was diseased and putrescent, warranted, it was shown, the supposition that it was intended for the manufacture of German sausages and spiced meats. There was no defence. In passing sentence, Mr. Bushby said that, having considered how perilous might be the result of selling such poisonous stuff, and remembering that the prisoner had been fined only one month before for similar dealing, he felt he could not impose a fine on this occasion, and he therefore sentenced the prisoner to three months' imprisonment, with hard labour.

A deputation from the Westminster District Board of Works and the inhabitants of Westminster recently waited upon the President of the Local Government Board, with reference to the evils arising from the smoke, fumes, and vapour produced by the pottery manufactures on the Albert-embankment, Lambeth, which is directly opposite the district in charge of the memorialists. Mr. W. H. Smith, M.P., and Lord Algernon Percy introduced the deputation to Sir Charles Dilke, who received them in the company of Mr. Shaw-Lefevre. Mr. White explained the matter at some length, after which Sir Charles Dilke said he should like to know whether the fumes were considered injurious to health. Mr. White replied that the nuisance was so intolerable on particular days that people could scarcely breathe. Mr. Shaw-Lefevre said he sympathised with the deputation, and there could be no doubt the fumes greatly affected the Houses of Parliament and other buildings. Sir Charles Dilke, after a few observations, said he would carefully consider the memorial and forward his decision.

The German Hygienic Exhibition was formally opened, with great solemnity, at Berlin on Saturday last, by the Imperial Crown Prince, who represented the Empress of Germany. Among those present were several princely personages, the members of the Ministry, the Austro-Hungarian Ambassador, the Envoys of the German Federal States, and the municipal authorities. His Imperial Highness, in his inaugural address, greeted the Committee, the exhibitors, and all who had co-operated in the undertaking. He alluded to the practical assistance in promoting the Exhibition which had been afforded by the German Federal Princes, and the provincial authorities of the Empire, and concluded by stating that they might look with well-founded satisfaction upon the completion of a work which he hoped would fulfil the object aimed at—namely, the alleviation of suffering and the welfare of the people.

There would appear to be at the Cape of Good Hope a growing feeling that the time has arrived when increased legislation should be introduced for the purpose of enlarging the scope of the present Medical Ordinance, under which the "Colonial Medical Committee," as it is called, administers medical affairs in that colony. The original Ordinance was passed in 1830, but was considered so imperfect when it became law, that a new Ordinance repealing it was shortly afterwards passed. This latter lapsed by reason of not being confirmed by the Crown within a period of three years, and the old and incomplete Ordinance has therefore been, and is, in force up to this date. It enacts that "no person shall practise as physician, surgeon, accoucheur, surgeon-apothecary, chemist, or druggist, without taking out a licence to that effect from the Governor, and submitting his diploma or other certificate of his being duly qualified to practise, for the examination and approval of the Medical Committee." One instance is quoted which strengthens the demand that increased powers should be conferred upon the Medical Committee. The separate practice of dental surgery was not in existence when the Ordinance was passed, and it is asserted that the colony possesses an unenviable number of persons who have received no scientific or surgical training, but who call themselves dentists, and laugh at the law. It appears to be an open question at the Cape whether it would be better to recast and enlarge the existing Medical Ordinance, or to incorporate the necessary enactments in the Public Health Act which is in contemplation for the colony.

ROBERT DRUITT, M.D., F.R.C.P., F.R.C.S.

It is with deep regret, in which the profession at home and abroad will largely share, that we announce that Dr. Druitt died at his residence in Strathmore-gardens, Kensington, on Tuesday morning last, at the age of sixty-eight. We are all more or less apt to think that any writer whose works have been long before the world must be an old man, and doubtless, judging from that point of view, many members of the profession will be surprised to learn that Dr. Druitt was only sixty-eight; while as surely most of those who knew him personally in former days, or had seen him at any time till within the last year or two, will rather wonder to find he was so old. It will be remembered that in 1872 Dr. Druitt was obliged, by repeated attacks of that still unexplained malady, hæmatinuria, to give up all active work in the profession that he so loved, and for which he had so well laboured; but his interest in it never cooled, and, notwithstanding gradually increasing physical weakness, he retained to the last his large, keen, clear intellectual power. So it was that he continued still to be, as before, the ever-ready, sympathising, attentive listener, and clear, able, kindly, and wise critic and adviser, not only in matters medical, but in many other departments of science and art. The work by which Dr. Druitt first became known—"The Surgeon's Vade-Mecum"—has been a household manual with generations of students, and the eleventh edition of it, which he brought out with the help of Professor John Wood and some other friends in 1878, fully

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retains the position that the work had gained as the most trustworthy and instructive as well as the most popular of manuals. In many other ways Dr. Druitt filled a large space in the medical world, and for ten years he was the highly efficient and acceptable editor of this journal. We look to being able next week to lay before the profession an account of his life and work. We will only add now that the funeral will take place at Kensal Green on Saturday morning, the 19th, at ten minutes past eleven.

SMALL-POX AND FEVER IN THE METROPOLIS.

At the usual fortnightly meeting of the Managers of the Metropolitan Asylums Board, held on Saturday last, the following comparative return of the number of small-pox patients in the several hospitals was presented:—At the Eastern District Small-pox Hospital, 14 were admitted during the fortnight, 2 died, 5 were discharged, 53 remained under treatment, and there were 49 beds available; at the South-Western District Small-pox Hospital, 4 patients were discharged; at the South-Eastern Hospital, 4 were admitted, and 8 discharged, leaving 21 under treatment, and there were 99 beds available. The foregoing figures, as compared with those of the previous fortnight, showed an increase of 1 in the total number remaining under treatment. The following is the comparative return of the fever patients:—At the South-Western District Hospital, 8 patients were admitted, 2 died, 11 were discharged, 39 remained under treatment, and there were 189 beds available; at the Eastern District Hospital, 24 had been admitted, 3 had died, 20 had been discharged, 134 remained under treatment, and there were 27 beds available; at the Western District Hospital, 10 had been admitted, 1 had died, 8 had been discharged, 48 remained under treatment, and 161 beds were available; at the South-Eastern District Hospital, 7 were admitted, 1 died, 9 were discharged, 40 remained under treatment, and 140 beds were available; at the North-Western District Hospital, 5 had been admitted, 1 had died, 6 had been discharged, 33 remained under treatment, and 67 beds were available. Compared with the statistics of the preceding fortnight, these figures show a decrease of 12 in the total number remaining under treatment.

THE PARKES MUSEUM.

The preparations for the re-opening of this Museum by the President, the Duke of Albany, on the 26th inst., are being rapidly completed. At the last meeting of the Council the Vice-Chairman read the following letter from General Sir H. F. Ponsonby, K.C.B.:—"I have laid before the Queen the documents enclosed by you, and I am commanded by Her Majesty to assure you that it has given the Queen much pleasure to learn the satisfactory progress of the Parkes Museum."

UNCERTIFIED DEATHS IN THE WANDSWORTH DISTRICT.

In their report on the sanitary condition of the several parishes comprised in the Wandsworth district during the year 1881, the Medical Officers of Health remark that the deaths not certified by medical testimony continue to attract attention; they amounted in this district to 125, or 3·3 per cent. of all deaths which occurred during the year under notice. Assuming, the report says, that the number in this district is indicative of what takes place throughout the whole country, it becomes at once manifest to what a great extent the Registrar-General's returns, from which are derived life-insurance tables, etc., are invalidated; and, what is of far greater importance, seeing that, in the absence of medical testimony, any of these deaths *may* have resulted from other than natural causes, to what extent the claim of society for protection against the possible perpetration of secret crime remains passively unrecognised by the law. It is much to be regretted, the report adds, that so simple a remedy as the employment of medical investigation in all instances in which the cause of death has not been certified by a registered medical practitioner, has not long since been provided against a continuance of this great and increasing laxity in the registration of deaths.

THE DALRYMPLE INEBRIATE HOME.

A meeting is to be held on behalf of the Dalrymple Home for Inebriates on Thursday afternoon, May 31, at three o'clock, under the presidency of the Lord Mayor. It is a most lamentable fact that, owing to certain defects in the Habitual Drunkards Act (1879), no retreat under its provisions has yet been successfully established. The Committee of the "Dalrymple Home" are making a determined effort to take advantage of the Act, and with that object have registered the "Dalrymple Home for Inebriates" Association as a philanthropic association, limited by guarantee. They have acquired, for the sum of £3700, a freehold property (The Cedars) at Rickmansworth. The house is large, and has attached to it more than four acres of charmingly laid-out grounds; it is situated on the banks of the Colne, and appears to be in every way well adapted for its intended purpose. The Committee now appeal for funds to complete the purchase and to furnish the Home. For these purposes £5000 will be required, and a member of the Committee has promised to contribute £500 if the amount can be raised either by nine similar contributions or in smaller sums. Donations amounting to £1240 have been already promised. We most heartily wish the Committee all success. It will be a disgrace if they fail, seeing what efforts it required to gain the Act under which Homes so much desired can be instituted.

THE SHARP SPOON IN GYNÆCOLOGY.

A recent number of the *Archiv für Gynäkologie* contains an excellent article by Dr. v. Weckbecker-Sternefeld, of Munich, on the use of the sharp spoon in gynæcology. This writer's statements are based upon experience, for he gives a table and careful analysis of one hundred cases in which he has used the instrument which he recommends. In this absence of haste it would be well if his example were more generally followed; for we have known instruments exhibited, and lines of practice laid down, by men who had never once used their instruments, or seen a case calling for the practice they write about. The cases in which Dr. v. Weckbecker-Sternefeld advises the use of the sharp spoon (which, we may mention, is that known as Simon's) are these:—In abortion, when the ovum or membranes, or part of them, are from any cause retained in utero; in cases of mole, vesicular or fleshy; after labour, in cases of hæmorrhage or fœtid discharges, caused by retention of bits of placenta or membranes, or polypoid growths at the placental site. The advantages of the sharp spoon (as compared with the digital detachment and removal of such offending bodies), he thinks, are these: avoidance of septic infection; the small space required for its use; the completeness with which detached bodies can be removed in the hollow of the spoon; the almost painlessness of the proceeding for the patient; the absence of dragging upon the uterus; and the unirritating character of the proceeding. The instrument is used, of course, in the same way as the curette; it may, in fact, be regarded as a large curette, so shaped as to be capable not merely of detaching, but of bringing away any mass loosely attached to the uterine wall. The size of spoon which Dr. v. Weckbecker-Sternefeld finds most generally useful is about an inch long by rather more than half an inch across. The angle at which the

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spoon is set on the handle matters little, but it is convenient to have the direction of the convexity and concavity of the spoon indicated by marks on the handle. Its use does not give pain enough to make anæsthesia necessary. Our author, as we have mentioned, gives a careful analysis of one hundred cases in which he has used the sharp spoon. Of these, in nine it was employed for the removal of an ovum in process of expulsion; in thirty-one for removal of membranes, or portions of them, after the embryo had been discharged; in twenty-seven, for removal of placenta, or portions of it, after premature delivery; in twenty-eight, for the same purpose after delivery at term; in two, for atony of the uterus post-partum; and in the others, for endometritis, deciduoma at the placental site, placental polypus, fleshy and hydatid mole. Of the one hundred cases five died; three from puerperal septicæmia existing before the operation was undertaken, one from enteric fever, one from peritonitis. The last mentioned our author considers the only one in which the fatal result could be connected with the operation, but in this there was also some disease of the rectum, and a previous attempt had been made to effect manually the object for which the spoon was used. In most cases no bad symptoms followed, and the patients quickly recovered.

THE PARIS WEEKLY RETURN.

The number of deaths for the eighteenth week of 1883, terminating May 3, was 1230 (708 males and 522 females), and of these there were from typhoid fever 31, small-pox 21, measles 30, scarlatina none, pertussis 15, diphtheria and croup 37, erysipelas 1, and puerperal infections 3. There were also 64 deaths from tubercular and acute meningitis, 247 from phthisis, 36 from acute bronchitis, 120 from pneumonia, 72 from infantile athrepsia (32 of the infants having been wholly or partially suckled), and 32 violent deaths (28 males and 4 females). The deaths of this week are notably fewer than those of the preceding week (1330), and the number is below the mean of the last four weeks (1313). The deaths from epidemic diseases have all diminished, excepting those from small-pox, which have increased from 12 to 21. The births for the week amount to 1311, viz., 654 males (487 legitimate and 167 illegitimate) and 657 females (491 legitimate and 166 illegitimate): 84 infants were born dead or died within twenty-four hours, viz., 51 males (35 legitimate and 16 illegitimate) and 33 females (21 legitimate and 12 illegitimate).

EXOPHTHALMIC GOÎTRE.

It is well known that the three classical symptoms of this disorder are not always present at the same time, the heart phenomena alone being absolutely essential to the diagnosis. Other manifestations less common, perhaps, are diarrhœa, profuse perspirations (local or general), and alterations of the cutaneous pigmentation. These, too, are well recognised as being, when present, part of the disease. But attention has recently been called to other symptoms which, if not overlooked, have, at any rate, not hitherto attracted the attention of observers in more than the most cursory manner. Amongst these the most constant would appear to be trembling (Marie, *Thèse de Paris*), which affects the whole body equally, and often appears before any of the characteristic symptoms have been observed. It seems to be more common in the incomplete (*frustes*) forms than in perfectly typical cases. M. Ballet (*Rev. de Méd.*, April) mentions certain convulsive and paralytic phenomena as having been observed in association with exophthalmic goître. We think, however, that the cases he brings forward under this head are not sufficiently numerous to exclude the possibility of mere coincidence, though M. Ballet's theory that the convulsive phenomena are dependent upon perturbation of the heart's action is attractive. Further inquiries are needed upon these points. M. Ballet also includes polyuria, albuminuria, and glycosuria as among the occasional symptoms. In his opinion, exophthalmic goître is only an expression of the nervous diathesis, which may occur alone or may be combined with other manifestations of the diathesis (*e.g.*, epilepsy, hysteria, chorea, etc.). In conclusion, we would ask whether it is not desirable to call the disease exophthalmic goître. M. Marie speaks throughout of Basedow's disease. M. Ballet speaks indiscriminately of Basedow's and Graves's disease, both names, in fact, being used on the same page. This surely can tend to nothing but confusion. We should like to call the attention of both these writers to an article by Dr. Wickham Legg in the last number of the *St. Bartholomew's Hospital Reports*, in which he denies that Basedow really described the disease at all, as his remarks allude almost exclusively to the condition of the eyes.

UNCERTIFIED DEATHS IN THE BOROUGH OF BIRKENHEAD.

In his report on the sanitary condition of the borough of Birkenhead for the year 1881, Mr. Francis Vacher, the Medical Officer of Health, remarks that during the period under notice, out of 1462 deaths registered, 27 (18 males and 9 females) were marked "not certified," that is to say, 1·8 per cent. Only 7 of the deceased were adults at the time of death, the remainder being under one year. The alleged causes of death in these 27 cases are, Mr. Vacher points out, absolutely valueless, and must be accepted merely as representing the opinions of nurses or nostrum-vendors. One unqualified person, for instance, who gave information to the registrar that a man had died of suppression or *retention* of urine, must, if he had been treating the case, have possessed an amount of assurance rarely surpassed. Fortunately, Mr. Vacher adds, the proportion of these uncertified deaths is diminishing year by year. In 1879 it was 3·3 per cent. of the whole number, and in 1880 it was 2·2 per cent. The worst feature, Mr. Vacher observes, is that nearly three-fourths of the deaths are those of infants. If professional advice is not obtained for an adult when sick it may be owing to his own default, but if it is not obtained for a sick infant it is obviously referable to the neglect of others. In any case in which the services of a qualified medical practitioner are not procured they are probably not sought, for so manifold are the means of obtaining relief in Birkenhead that no one can plead poverty as an excuse for not doing his duty to his child in this respect. Twelve babies in the present list of 27 deaths are "supposed" to have died of convulsions or debility; doubtless, Mr. Vacher adds, some died of tubercle, some of syphilis, some of exposure, and some from being dosed with soothing syrups or teething-powders. Doubtless, also, in some the cause of death was more or less directly due to their being very dirty, wrapped in soiled clothes, and fed with sour pap. Then as to the 6 deaths ascribed to premature birth, mainly on the representation of irresponsible midwives, one is tempted to ask, says Mr. Vacher, how it is possible to check the use of abortifacients if the deaths of infants can be thus readily registered.

On Tuesday last, the Duchess of Edinburgh, accompanied by Lady Harriett Grimston and Major Poore, visited the Royal Hospital for Women and Children, Waterloo-bridge-road. The Duchess was conducted through the wards, and distributed fruit and flowers to the various patients, with a kind word or two for each of them, and seemed much pleased by the care and attention evidently bestowed on them all.

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Her Royal Highness the Duchess of Connaught visited King's College Hospital on Saturday last week, and was conducted through most of the wards, showing a very kindly interest in many of the inmates. Her Royal Highness visited, first of all, the Tantia Ralli Ward for children, and finished her inspection by visiting the chapel.

The Sharpey Physiological Scholarship, in the University of London, will, it is said, be vacant soon through the resignation of Mr. Francis Gotch.

The degree of Doctor of Medicine of the University of Oxford was conferred, on the 12th inst., on Samuel Dukinfield Darbishire, M.A., M.B., Balliol. Dr. Darbishire works as hard, steadily, and well, and seems likely to achieve as marked success, in medicine as he did with the oar. He is Physician to the Radcliffe Infirmary, and Coroner for the University of Oxford.

At a congregation of the University of Cambridge, held on the 10th inst., it was resolved to establish a Professorship of Surgery, without stipend at present; and the report of the Council, recommending that immediate steps be taken for the appointment of a Professor of Physiology, was adopted.

The following have passed Part I. of the Third Examination for the degree of Bachelor of Medicine of the University of Cambridge:—J. F. G. Dill, B.A., Gonville and Caius; Dowson, B.A., Christ's; Fletcher, B.A., W. Fowler, B.A., and Whittingdale, B.A., Gonville and Caius; W. Groom, jun., Magdalene; Lyon, M.A., Manley, M.A., and Salter, B.A., Emmanuel; Morrison, B.A., Christ's; Owens, B.A., and Syers, non-collegiate; and E. Ward, B.A., Trinity.

The following have passed the examination for the degree of Bachelor of Surgery:—Morrison, B.A., Christ's; Wallis, B.A., Gonville and Caius; Ward, M.A., Trinity.

Professor Huxley has been elected a Foreign Member of the United States National Academy.

Dr. R. Thorne Thorne has been appointed Assistant Medical Officer to the Local Government Board, in place of Mr. J. Netten Radcliffe, resigned. Dr. Thorne Thorne is one of the senior inspectors in the medical department of the Board, and has proved himself a man of great ability, skill, and patient industry in working out the inquiries entrusted to him. His report on the Use and Influence of Hospitals for Infectious Diseases, which was issued last year, is a work of great and lasting value.

Our contemporary *Nature* states that from a list of seven names proposed by the incorporated societies throughout the colony, three gentlemen have been elected honorary members of the New Zealand Institute—one of the three thus distinguished being Dr. W. B. Carpenter, F.R.S., C.B.

The Library of the Royal College of Surgeons will be closed on Friday, the 18th inst., for the purpose of the examinations.

The Hungarian Red Cross Society now numbers 45,000 members; in 1879 the number was only 21,000. Eleven sick transport columns have been completely organised, and everything has been prepared for the erection of field hospitals in case of necessity. A permanent hospital is being built.

MEDICAL MATTERS IN PARLIAMENT.

House of Lords—Thursday, May 10.

The Medical Act (1858) *Amendment Bill.*—Lord O'Hagan moved the second reading of this Bill, the object of which is to enable the Royal University of Ireland to be represented in the Medical Council in the same way that the Queen's University was formerly represented in it.—Lord Carlingford expressed his approval of the measure, which had, he observed, been rendered necessary by an oversight in the existing statute. The Bill was read a second time.

Contagious Diseases Acts.—In reply to a question from Lord Oranmore and Browne, relating to the action taken by the Government with regard to these Acts, the Earl of Northbrook said that it was true that it had been no longer desirable to employ the metropolitan police in carrying out the Acts. Some parts of the Acts were optional, others compulsory, and the Government intended to bring in a Bill to carry out the optional measures only.—Earl Hardwicke did not believe there was the smallest probability that such a Bill would be passed this session. The Acts had been most beneficial to the community at large, as well as to the naval and military services.—The Duke of Cambridge said he did not desire to prolong a discussion on this painful subject, but he must state that the Acts had done far more good than people in general supposed; the physical and moral benefits they had conferred upon the community at large, as well as upon the Navy and Army, had been enormous. It was simply and perfectly true that public opinion in all places where the Acts had been applied was uniformly in favour of their continuance as they had hitherto been administered. He did not advocate the continuance of the Acts merely on the ground that they were most beneficial to the Army, but because he conscientiously believed that they were of immense advantage to the community at large, and more especially to the unfortunate creatures who came under their operation, numbers of whom had been rescued from their unhappy life solely through the medium of those statutes.—The Lord Chancellor simply stated that the Government are fully justified in not making use of the police to carry into effect those parts of the Act condemned by the resolution of the House of Commons.

House of Commons—Thursday, May 10.

Contagious Diseases Acts.—Sir H. Wolfe asked the Home Secretary whether he would delay the withdrawal of the metropolitan police from the districts protected under the Contagious Diseases Acts until Parliament had been enabled to decide on the Bill for the Protection of Young Girls, announced to be brought forward by the Government.—Sir W. Harcourt said he was afraid the course suggested would not be consistent with the view which the Government had taken. But, in answer to further questions, Sir W. Harcourt said that, in order not to terminate the operation of the Acts too abruptly, the withdrawal of some of the inspectors would be postponed.

THE MEDICAL ACT AMENDMENT BILL.

The following letter on the subject of the Medical Bill has been addressed by the Perthshire Medical Association to the Right Hon. A. J. Mundella, M.P., and other members of Parliament specially interested:—

Almondbank, Perth, May 15, 1883.

Sir,—I am directed by the Perthshire Medical Association to express to you their general and cordial concurrence with the Government Medical Bill as it has left the House of Lords.

The most important provision specially affecting Scotland is contained in Clause 9, Section 4. With regard to the vexed question of proportional representation, there formulated, we would express satisfaction with the principle adopted of giving to the Universities a decided majority in the Divisional Board for Scotland. There are very many methods by which this might be effected, but if the entire number of licensing bodies (seven) is to be maintained, no better solution presents itself to us than that in the Bill.

The higher medical teaching is safe in the hands of the

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Universities; and the interests of the Corporations are protected by the right of appeal; while it is also well known that most of our prominent men have connexion with both a University and a Corporation. With regard to extramural teaching, we believe, in its best development, it will be furthered by the other provisions in this measure.

There are a few minor amendments which we venture to suggest for your consideration:—

1. We believe it would conduce to the more easy working of the Council and Divisional Boards, were retirement by rotation substituted for withdrawal *en masse*, as now proposed.

2. Only registered practitioners should be held qualified to sit upon these Boards.

3. A guarantee should be given in the Bill that examinations shall be conducted at the different centres of medical education.

4. Reciprocity of practice should exist between the colonies and this country, and a similar principle should guide the Council in their recognition of foreign diplomas.

5. Any unqualified person *practising for gain* should be made liable for punishment.

6. The fee for reinstatement on the Register should not exceed one guinea, and provision should be made for those whose names have been omitted through simple negligence being readmitted on the same terms.

7. Men proceeding to a degree, or in possession of such, should not be mulcted of more than five guineas for the prescribed final examination by the Board (as recommended by the Royal Commission).

8. A Special Committee of the Privy Council should be named for action under this Bill.

9. The General Council of the several Universities should elect their representative to the Divisional Boards.

In laying these views before you we beg to explain that we have no direct interest in any of the Universities or Corporations further than that possessed by all graduates or licentiates; and that in the highest degree it is important that the continued worry and excitement of threatened legislation should be removed by the immediate enactment of such a thoughtful measure as the Medical Act Amendment Bill now under review. We will feel deeply indebted should you give the preceding statement, on the part of the Association, your favourable attention. With an apology for the length to which these notes have run, I beg to subscribe myself

Your obedient servant,

ALEC BAIRD, M.D., Hon. Secretary.

P.S.—One member dissented from the views here expressed with regard to the composition of the Divisional Boards.—A. B.

FROM ABROAD.

PREMATURE DELIVERY AS A PREVENTIVE OF BLINDNESS.

DR. LORING read a paper, at the American Ophthalmological Society (*New York Med. Journal*, January 20), in which he calls attention to the fact that it has been long known that pregnant women, especially towards the end of gestation, are liable to suffer from a disturbance of vision, varying from the slightest deterioration to total and permanent blindness. This fact was known before the true condition of retinitis albuminurica or uræmic amaurosis was known, and long before the discovery of the ophthalmoscope. In Dr. Loring's opinion, in not a few cases of this kind the induction of premature labour may prove of great utility, and should be had recourse to. He relates what he believes to be the first case in which it has been induced for this cause; and he believes that it ought to have been had recourse to in some of the not infrequent cases in which women complain of impaired vision before confinement, and are told that all will be right again after delivery. This is sometimes the case, or appears to be so; but in numerous instances a deterioration of sight is sustained which may vary from slight impairment to absolute loss of useful vision.

"White atrophy of the optic nerve is certainly a rarer disease in women than in men, but, according to my own experience, it occurs much more frequently in women who are married, and at a much earlier age. I do not mean to say that in every case where atrophy is detected in a pregnant woman an abortion should be performed, but I do say that where it has occurred in one confinement every precaution should be taken to explain the danger of future confinements to patients, and that in extreme cases, such as the one reported above, premature delivery should be performed (it was so at the third month in that case) rather than let the mother go blind, or run the fearful risk of going blind. If this is true in the comparatively rare disease of atrophy, it is doubly true in albuminuria, so much more frequently found in pregnant women, and with which we so frequently find the so-called retinitis albuminurica. . . . . But it often happens that no complaint—not even the slightest—is made by the patient as to her eyes during the entire pregnancy, or at the time of her delivery; and yet a low state of retinitis, or indeed one of great intensity, may exist. Indeed, the vision may remain perfect, or nearly so, for a long time, and only begin to fail long after the active signs of inflammation have passed away and the secondary or atrophic stage has set in. Thus, I have seen women who only began to complain of a loss of sight some four or five months after their confinement, since the subsidence of the inflammatory stage had been so slow, and the advance of the atrophic stage so insidious, that the patients themselves had not noticed the gradual loss of vision until this had been considerably affected, which then admonished them to seek the assistance of an oculist."

Dr. Loring concludes:—1. That examination of the eyes of pregnant women should be made much more frequently than they now are, and that even when they do not complain of loss of vision, as it has been discovered that about one-third of those who have an organic lesion of the retina or optic nerve from kidney trouble, either have none or make no complaint of reduction of vision. From the fact that no complaint is made of any loss of sight until near the end of the pregnancy, it has been assumed that the trouble did not begin until that time; but while this may be especially true of the cases of uræmic origin, there are very many cases, particularly those dependent on albuminuria, in which it really begins long before; and had the eyes been examined they would often have given evidences of disease long, frequently months, before the explosion took place, which has cost many a mother her eyesight, and oftentimes her life, both of which by a timely examination, and a timely operation, might have been saved. "I will even go so far as to say that I believe that evidences of albuminuria not unfrequently show themselves in the eye before any manifestation can be had in the urine." With respect to the difficulty of employing the ophthalmoscope in the detection of disease, Dr. Loring, while admitting this, maintains that it is not greater than prevails with regard to the microscope, which yet is of great practical utility. "For one great microscopist there are thousands who daily use the instrument with the greatest success in the detection of disease, and it might, with a little attention, be the same with the ophthalmoscope. Much as I admire the high standard of skill which some of those specially trained to its use acquire, nevertheless, I firmly believe that the sphere of its greatest usefulness, and therefore of its greatest triumphs, will one day be in the hands of the general physician, and especially in those of the obstetrician. Thus, Mr. Eales reports that a single physician was able to furnish him for examination, from a single hospital in Birmingham, twenty-eight cases of neuro-retinal disease from kidney trouble in one year, while out of 11,000 cases of general disease at the eye infirmary only four such cases were seen.

"2. I would conclude that where a marked deterioration of vision has occurred, with or without ophthalmoscopic changes, and where blindness is threatened, premature delivery is not only justifiable, but often demanded.

"3. When a permanent loss of vision has occurred from a preceding pregnancy, premature delivery in a subsequent one, when surrounded by its proper safeguards, is not only justifiable, but at times absolutely necessary; and that, further, when a loss of vision, either temporary or permanent, has once resulted from gestation, it is the duty of the family physician or obstetrician to explain both to the wife and husband that the cause of the trouble is a constitutional and not a local one, and that there is every probability of recurrence of the trouble in succeeding pregnancies, which may lead not only to the destruction of vision, but even to loss of life."

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Ophthalmic Aphorisms.

In a report presented to the Maryland State Medical Society, Dr. Chisholm stated the following aphorisms (*New York Medical Record*, April 21):—"1. Do not blister. In forty-nine applications out of fifty, as I find blistering used by physicians at large, it is an additional and useless torture in the eye-diseases from which the patient is already suffering. 2. Do not use nitrate of silver. As constantly prescribed by general practitioners, it is not beneficial in one case out of a hundred, and therefore is a very painful infliction to the ninety-nine who would have been so much better off without it. 3. Do not prescribe sugar of lead. In every case zinc, tannin, or alum is better, and with these there is no fear of having insoluble deposits incorporating themselves with the exposed surface of corneal ulcers. 4. Always use weak solutions of mineral or vegetable astringents in the treatment of inflammations of the eye which attack the mucous surfaces, and restrict their application to conjunctival diseases exclusively. One grain of alum, sulphate or chloride of zinc, sulphate of copper, or nitrate of silver, in an ounce of water, will, in the majority of cases of conjunctival disease, do much more good and give much less uneasiness than the very painful five- or ten-grain solutions which are so often prescribed. 5. Solution of the sulphate of atropia, from one to four grains to the ounce of rose-water, is an effectual eye-drop in the treatment of acute iritis, to break up newly formed adhesions. One drop of atropia solution in an inflamed eye is a most valuable means of establishing the diagnosis whether iritic complications exist or not, and should be used in most cases of eye-inflammation to find out whether there are any adhesions of the pupil to the lens. 6. Eserine, in a solution of one grain to the ounce of water, is the remedy for purely corneal lesions. 7. When physicians are in doubt as to the character of an eye-disease, they should seek a consultation with specialists, who are more familiar with diseases of the eye than general practitioners can possibly be. Such timely aid often saves the patient a lifetime of trouble."

REVIEWS AND NOTICES OF BOOKS.

The Concepts and Theories of Modern Physics. By J. B. Stallo. (International Scientific Series, Vol. XLII.) London: Kegan Paul, Trench, and Co. 1882.

This work is described in the preface as "a contribution to the theory of cognition." It is directed against what the author terms "shallow and sciolistic materialism"—that is to say, the application of mechanical principles, not merely to things which can be made the subjects of observation, measurement, and experiment, but to the whole phenomena of the universe. The author analyses the assumptions which underlie the "mechanical theory" of the universe, and criticises them with great acuteness.

In the space at our disposal it would be useless to attempt condensation of the highly abstract reasoning of the author. But we may say that the book is a most able and suggestive one. The author at least shows this, that physical science has not yet solved all the problems of the universe. The work differs essentially from most of the popular books having a somewhat similar aim, in that no theological bias is apparent, and authority is not invoked. The questions raised are discussed from a purely scientific standpoint, and are not obscured by appeals to religious feeling. Those who have an appetite for mental exertion, and have some acquaintance with mathematics, will find excellent fare in this book.

Selections from the Works of the late J. Warburton Begbie, M.D., LL.D. Edited by Dyce Duckworth, M.D. London: New Sydenham Society. 1882.

Unlike Dr. Stokes, one of whose works was brought out by the Society last summer, Dr. Warburton Begbie died at a comparatively early age, and whilst still busily engaged in the practice of his profession. We learn from the memoir with which this volume opens that Dr. Begbie was the second son of Dr. James Begbie, Professor of Medicine in the University of Edinburgh and Physician-in-Ordinary to the Queen in Scotland. Born in 1826, he was educated at the Edinburgh Academy, and proceeded thence to the University, where he graduated as M.D. in 1847. A few years later he commenced practice in Edinburgh, and before he reached the age of thirty he was appointed one of the Physicians to the Infirmary, where, for ten years, he devoted his best energies to the clinical work, and also lectured on the Practice of Physic. From this time onwards—a period of about eleven years—his time was entirely occupied by his private practice as a consulting physician, which rapidly became very large. Personally, we are told he had a simple, friendly, modest manner, and was always courteous. "His manner at the bedside was gentler, if possible, than that of any woman; . . . . none misdoubted the real humanity and heartfelt overflow of the wise clinician. It was unmistakable and true, exhibiting the humility and unselfishness of the man. He was neither hypocrite nor mannerist, and everybody knew it. There was nothing small or mean about Warburton Begbie. His magnanimity and charity were indeed boundless." When to such personal qualities we add that he was an excellent clinical teacher, both as regards diagnosis, prognosis, and treatment, it can be understood how it was that he so entirely gained the confidence of his pupils and patients. We ought to add that he was an earnest believer in the drug treatment of disease, and had the utmost faith in his own prescriptions. His unselfish neglect of his own health or comfort brought its inevitable result in weakened action of the heart, and he died from dilatation of that organ in his fiftieth year.

Although his career was but short, and during the latter half, at any rate, an exceedingly busy one, he yet found time to contribute a good many articles and papers to various journals, etc., besides several papers in "Reynolds's System of Medicine." The articles in the present volume are mostly reprinted from the *Edinburgh Medical Journal*, or were read before the Medico-Chirurgical Society of Edinburgh, and need no praise from us.

Annual Reports of Lunatic Asylums. (a)

The secluded position of most lunatic asylums, the mystery in which they are enveloped, and the suspicion and ignorance of the public in regard to them, have from time to time been commented on in this journal. In their official annual reports the superintendents of these institutions have an excellent opportunity of speaking directly to the public, of clearing away much of the ignorance and dispelling much of the suspicion, and of enlisting on their side the feeling that now unquestionably tells against them. This they might do by displaying their methods of working and the nature and objects of their endeavour, by diffusing a knowledge of the aid that they require and of the obstacles against which they have to contend in the strange world in which they live, but more than all by discussing in the light of their continual experience the momentous social problems connected with their specialty. Of this invaluable opportunity how few avail themselves! The subject matter of the report is for the most part limited to the enumeration of mere trifles—changes of structure, routine statements of working, and small details that have no doubt a certain importance from an administrative point of view, but which can scarcely interest anyone who is not connected with the asylum. In this respect the reports of our superintendents compare unfavourably with those which reach us from across the Atlantic. Two of these (5 and 6) are statesmanlike documents taking a wide purview of insanity in its relations to society and the State, and of the modes and means by which the separation, care, and treatment of the insane are, and may best be, carried out. Of our own asylums one which is but little open to criticism of this nature is that of the county of Sussex, the excellent administration of which is well known. In the report of this Asylum the question of choice between the Asylum and the workhouse for certain cases of insanity is treated with great judgment and courage; and the whole report is thoughtfully written. The Superintendent of the Hereford Asylum gives his experience of the results of substituting milk for beer in the ordinary diet of the patients. The experiment seems to have been cautiously and judiciously made, and to have been remarkably successful. When, however, we learn that the alcohol ordered during the year for medical reasons

(a) 1, Sussex (county); 2, Portsmouth (borough); 3, Hereford (county and borough); 4, Barnswood House; 5, Willard Asylum (U.S.A.); 6, Illinois Eastern Hospital (U.S.A.).

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was exceeded in amount by that in the sauce ordered for the Christmas pudding, it is difficult to avoid a suspicion that the use of a powerful and important drug is unduly minimised. When we remember how prone the insane are to suffer from diseases of enfeeblement and manifestations of "low vitality," and when we remember how powerful a cardiac and nervous stimulant alcohol is when judiciously administered, we cannot but feel a doubt as to the advisability of deprecating its use among the sick in asylums. The statistical tables that accompany all these reports are elaborate and must involve considerable labour in their preparation; and their great value from a practical point of view is well shown in the important conclusions of Drs. Rayner and Chapman as set forth in their papers in the April number of the *Journal of Mental Science*. The most interesting and important of the tables—that which sets forth the probable causes of insanity in the several patients who have come under care during the year—is unfortunately the least reliable. Cases there are, no doubt, in which a great alteration in a person's life is followed at once by insanity, and can reasonably be set down as a cause; but in the majority of cases the teleological investigation can be little better than guesswork. It is not only that the accuracy and completeness of the information obtainable from patients and their friends must always be very doubtful, and that the share that this or that factor may have had in the production of insanity can only be a matter for speculation, but that some of the so-styled causes are of more than doubtful validity. A "previous attack," for example, which is enumerated among the possible causes of a present attack, can surely not be entitled to such an appellation. How can a group of symptoms which occurred, it may be, years ago, be looked on as the cause of another group of symptoms occurring now? Epilepsy, again, is now commonly reckoned, not as an independent malady, but as a symptom—as much a symptom as the phenomena of insanity themselves, and may be as correctly considered due to them as *vice versâ*. Fully recognising the immense difficulty of correctly attributing the causes of insanity, we must welcome the labour represented in these tables as an honest and praiseworthy attempt to grapple with the question.

GENERAL CORRESPONDENCE.

THE PICRIC ACID TEST FOR SUGAR.

LETTER FROM DR. G. JOHNSON, F.R.S.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Crawcour's letter on the above subject in your impression of the 5th inst. has only just now come under my notice. Allow me to say, in reply, that his discovery of a supposed "unexpected and serious source of fallacy" is simply an error of his own. Of course, we all know that when a mixture of picric acid and caustic potash is boiled, the yellow colour of the picric acid is changed to a yellowish-red picrate of potash; but this colour is very different from that which results from boiling picric acid and potash with even a very dilute saccharine solution. Of this Dr. Crawcour may satisfy himself by the following simple experiment:—Mix in a test-tube a drachm of liquor potassæ (P.B.) with half a drachm of a saturated aqueous solution of picric acid, and boil. The result will be a yellowish-red solution of picrate of potash. Now pour half the volume of liquid into another test-tube, add to this portion its own volume of normal urine, boil for a few seconds, and compare the colour of the liquid in the two test-tubes. It will be found that boiling the picrate of potash with half its volume of the lighter-coloured urine has caused a much darker colouration; and this is due to the conversion of picric acid into picranic acid by the saccharine contents of the urine.

It is quite true, as Dr. Crawcour says, "that if the urine be perfectly free from sugar, no change of colour will take place," but since not one in, now, many more than 300 specimens of urine which I have thus tested has been found entirely free from sugar, I conclude that a fraction of a grain of a saccharine material per ounce is a normal constituent of the urine. I am, &c.,

11, Savile-row, May 11. GEORGE JOHNSON.

PROVINCIAL CORRESPONDENCE.

MANCHESTER.

May 15.

THE VICTORIA UNIVERSITY AND THE ADMISSION OF WOMEN TO DEGREES: THE REGULATIONS FOR MEDICAL DEGREES—BRADLEY MEMORIAL FUND: INSTITUTION OF A BRADLEY PRIZE IN CLINICAL SURGERY—APPOINTMENT OF ASSISTANT-PHYSICIAN AT THE INFIRMARY—APPROACHING ANNUAL MEETING OF THE LANCASHIRE AND CHESHIRE BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

In the charter of the Victoria University power is granted to the University to confer degrees and distinctions "on all persons, *male or female*, who shall have pursued a regular course of study in a College in the University, and shall submit themselves for examination," and it was distinctly laid down, as an important feature in the new University, by those who were chiefly responsible for its foundation, that the claims of women to be admitted to university examinations and honours should be fully recognised. Before practical effect can, however, be given to this part of the scheme, it is evident that either a college which provides for the higher education of women must become affiliated with the University, or that the Owens College, which is the only College at present affiliated, should make arrangements for the admission of women to its classes and courses of study. A movement in the direction of the latter of these alternatives has just been made. The Council of the Owens College have had under consideration a plan for the transfer of the Manchester and Salford College for Women to Owens College, and have now been authorised by the Court of Governors to enter into negotiations with the Managing Committee of that institution, and to accept a transfer on the following conditions:—

"*a*. That the Women's College shall become a department of the Owens College, and be managed by the Council of the Owens College. *b*. That an annual sum of not less than £500, for a term of five years, be guaranteed by public subscription. *c*. That if, at the end of that term, the experiment shall not have had an adequate success, or if the College shall not have sufficient pecuniary means for carrying it on, the College shall be at liberty to abandon it."

It is estimated that the total annual cost of the scheme will not be less than £750, and it is anticipated that the £250 which will thus be required, in addition to the £500 alluded to in the conditions of transfer, will be realised out of the fees payable by the students.

A Committee of the General Board of Studies of the University is now engaged in preparing a scheme for the granting of degrees in medicine and surgery, which will be submitted to a departmental board, including the newly appointed external medical examiners, in a fortnight or three weeks. The leading characteristics of this scheme will be found closely to correspond with those that were enumerated in a previous letter. No fears need, at any rate, be entertained that the University is about to bid for popularity by adopting a lower standard than her sisters either in the preliminary arts examination or as to the strictly scientific and medical requirements.

The friends of the late Mr. S. Messenger Bradley met, soon after his early and lamented death, to consider in what way they could most suitably perpetuate his memory, and it was then decided that a fund should be raised for establishing a prize in clinical surgery, open to students attending the surgical practice of the Royal Infirmary. The committee appointed to carry this resolution into effect recently held its concluding meeting, when it was announced that subscriptions had been received to the amount of £533, which sum, after deducting expenses of printing and advertising (£21 13s. 9d.), had been invested in the names of two trustees (Dr. Cullingworth and Mr. Walter Whitehead). The secretary was thereupon authorised to communicate with the Medical Committee of the Infirmary, placing the interest on this amount at its disposal for the purpose of offering an annual prize, the present value of which will be about £20, to be called the Bradley Prize in Clinical Surgery. A sub-committee has since been appointed at the Infirmary to consider and draw up a draft of the conditions under which the prize shall be competed for.

The appointment of Assistant-Physician to the Royal

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Infirmary, rendered vacant by the promotion of Dr. Dreschfeld to the rank of Physician, on the retirement of Dr. William Roberts, has been filled by the election of Dr. Graham Steell, who has held for several years the responsible position of Resident Medical Officer to the Hospital, and whose enthusiasm as a worker and teacher in scientific medicine is recognised by all. It is an undoubted gain to the cause of medical science in this city that so accurate an observer as Dr. Steell has been appointed, and it is to be hoped that the gentleness and refinement which have won him the esteem of his hospital colleagues will insure him success in the larger sphere upon which he is now entering.

The annual meeting of the Lancashire and Cheshire branch of the British Medical Association will this year be held in Manchester, and will take place during the latter part of June. To the great satisfaction of all who have witnessed his self-denying labours for many years past on behalf of the Association, Dr. Louis Borchardt has been nominated for the presidency.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 1.

J. W. HULKE, F.R.S., President, in the Chair.

THE PATHOLOGY OF DIABETES.

DR. SEYMOUR TAYLOR said that he had recently examined the organs in four cases of diabetes. In three cases the kidneys showed changes which he considered characteristic; they were large and congested, there were extravasations into the glomeruli, slight connective-tissue overgrowth in the convoluted tubules, and cloudy swelling of their epithelium. The epithelium was easily detached from the basement membrane. Stained with iodine, he found, as Frerichs has said, that the tubules appeared of a rich brown tint; this was attributed to the presence of glycogen. The liver was congested, and the pressure of the blood had produced atrophy of the liver cells. In two cases he had carefully examined the nervous centres, but had detected no morbid change beyond hyaloid thickening of the coats of the blood-vessels; he had never met with the vacuolations described by Dr. Dickinson. The difficulty of successfully hardening and mounting specimens of the nervous system for microscopical examination was so great that he was inclined to believe that many of the appearances regarded as morbid might be due to the method of preparation. He thought the disease was probably functional.

Mr. VICTOR HORSLEY had examined the medulla oblongata in three cases of so-called typical diabetes mellitus, each case dying comatose. In none was any marked condition to be found, save congestion; there were no hæmorrhages. In one of these cases the liver and kidney showed well marked cloudy swelling. The secondary importance of this condition was proved, he thought, by the experiments lately made, in which glucose injected into the system (rabbits were the animals employed) caused cloudy swelling and disintegration of the renal epithelium. In view of the extreme variation among the results of research into the morbid anatomy of diabetes, he suggested that no such distinct disease existed, but that aberration of function acting not only centrally, but peripherally, would bring about the symptoms supposed to indicate a special disease.

Dr. FREDERICK TAYLOR had paid attention chiefly to two points in connexion with diabetes—namely, the morbid anatomy of the nervous system, and the fatal termination of the disease. Some years ago he had published, in conjunction with Dr. Goodhart, the results of an examination of the central nervous system in nine cases of diabetes; they had been unable to find in these cases the morbid changes described by Dr. Dickinson. Dr. Taylor now exhibited a number of these specimens for the judgment of members of the Society. He considered the majority of the specimens were practically healthy, and that only one case showed anything that deviated much from the usual standard. He thought that no constant change had as yet been found as the central lesion of diabetes, and that the account of degeneration and decay of the nervous system was not justified by what had hitherto been seen. Unusual thickness of the walls of vessels, and large size of vessels, might be part of a general condition. A large central canal was to be otherwise explained than by vascular engorgement, and was not peculiar to diabetes; while the condition called miliary degeneration was, he thought, certainly the result of reagents. Dr. Taylor had not seen varicose dilatation of vessels in his specimens, nor evidence of degeneration of the nervous tissue. There remained the presence of orange semi-crystalline bodies about the vessels, and in the perivascular spaces, which were abundant in one of the cases; but he considered it still unproven that they indicated a congestive state of the nervous system, which could be regarded as the cause of the disease. Recently he had examined four other cases, and, though two were much spoiled by reagents, it was quite clear they had not undergone any such degenerative changes as were described. Dr. Taylor next referred to the mode of death in diabetes, and pointed out that the proportion of fatal cases which occurred in consequence of the curious group of symptoms called "diabetic coma" was a very large one. Of fifty-three cases dying within the last ten years at Guy's Hospital, thirty-three died comatose; and in seventeen of these there was no lesion of the viscera, while in three the lesions were inactive, and could not have contributed to the result, and in ten the coma supervened in the course of pneumonia or phthisis. He had evidence that neither the theory of fat-embolism, nor that of acetone in the blood, satisfied all cases; and he referred to the frequency of severe abdominal pain as an initial symptom, an important fact, as it might give rise to a diagnosis of perforation or peritonitis. Dr. Taylor also exhibited microscopic sections of the pancreas, which was almost entirely converted into fat, from a case of diabetes. It was on record that the pancreas had been occasionally atrophied or otherwise altered in diabetes. At Guy's Hospital some alteration had been found in five cases during the last ten years. Twice it was merely described as small or wasted; three times, including the case exhibited, it was fatty.

Dr. DAWSON WILLIAMS had examined the registers at University College Hospital for ten years, but the number of fatal cases of diabetes available for report was small. He referred to a group of six cases, occurring in young people, which had certain symptoms in common. Well-marked coma, accompanied in four cases with extreme dyspnœa, was the immediate antecedent of death in five of the cases. In three of the cases there was some phthisis pulmonalis present, but in none was any distinct evidence of tubercular disease found elsewhere. In two cases albuminuria was a constant symptom during the whole time the patients were under observation. No constant post-mortem appearances had been recorded; in two cases the puncta cruenta were stated to be more numerous and prominent than natural; in one case the perivascular spaces were said to have been enlarged; in one, some swelling at the tip of the calamus scriptorius, and congestion of the membranes in the neighbourhood, were noticed. A few details with regard to two of these cases were given, in which the onset of the fatal dyspnœa and coma was immediately preceded by sudden violent abdominal pain, brought on in each case apparently by the administration of an enema. It was thought that an examination of the Registrar-General's returns favoured the idea that diabetes was becoming a more common disease. Thus, the number of deaths registered as due from diabetes had risen from 537 in 1862 to 1059 in 1880, an increase of 49 per cent., while the increase in the total number of deaths from all causes was only about 20 per cent.; again, the death-rate from diabetes was 24 per million in 1850, and 41 per million in 1880; whereas the death-rate from all causes was almost the same (it was, in fact, a little lower in 1880 than in 1850). The number of deaths from diabetes, compared with the total number of deaths, had also advanced about 30 per cent. The table published by Dr. Dickinson, in his work on Diabetes, which showed the number of deaths from this disease at each decade of life, during the decennial period 1861 to 1870, was graphically exhibited, and compared with a similar chart which had been prepared from the Registrar-General's returns for 1871 to 1880. It resulted from this comparison that the incidence of diabetes at the various ages had not materially differed in the two decennial periods. It was greatest in the decade of years between the ages of fifty-five and sixty-five in both sexes, but the preponderance in this decade was much more marked

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in men than in women; this difference between the sexes, however, was less marked in the second decennial period than in the first. How far the relative greater mortality among women in the decade of years between twenty-five and thirty-five was due to any connexion between diabetes and childbirth, such as Dr. Duncan had suggested, there was no evidence to show—indeed, only six cases of diabetes had been registered in ten years in women dying within one month after childbirth.

Dr. DICKINSON thought it might fairly be presumed that diabetes was not a disease without a pathology, but that it depended on changes in the permanent structures—indeed, he could not accept the idea that a disease, so regular and so fatal, could be merely functional. He had recently submitted four fresh cases to examination, and many of the specimens he now showed were derived from them. The appearances found in these cases were strongly confirmatory of the opinions he had formerly announced. His earliest observations had been made many years ago, and he was free to confess that, notwithstanding all the care he had exercised, he had not allowed sufficiently for the variations which the cavities and channels of the brain presented, independently of special cerebral disease, and he thought that some exaggerations and misconceptions having this origin might have tended to cast doubt more widely than was deserved. With regard to the appearances he had noted, he would refer first to the brain; to rough examination it usually passed as natural, though it was generally hard in texture, often injected, and more rarely marked with extravasated blood on the surface. On section, pores in a cribriform arrangement, exaggerating the ordinary puncta vasculosa, were often conspicuous in the centrum ovale and the white matter underneath the lateral ventricles. At such places the microscope usually showed dilatation of the bloodvessels, extravasation of blood in a small amount, enlargement of the perivascular spaces, and alterations in the perivascular sheaths and nervous matter bounding the cavities. In some of the specimens he now showed, portions of the bloodvessels (arterial) were notably dilated for short lengths. In others, the spaces around the bloodvessels often contained such quantities of blood-pigment in large grains or conglomerations, as to be fairly presumed to be morbid; and in yet other instances, blood-corpuscles could be easily seen. These changes had been found in the deep perivascular canals, in the pia mater of the medulla oblongata, and in the central brain-tissue. In fifteen brains from diabetic patients, he had found extravasated blood in seven; perivascular changes, thickening of the sheath, and erosion or degeneration of the circumjacent nervous substance, had been invariably found. The walls of the cavities were often superabundantly sprinkled with grains of blood-pigment; and in many cases the nervous matter at their surface was rendered translucent and gelatinous by some degenerative change. The cribriform enlargement of the perivascular channels of the white matter of the centrum ovale was frequently noticed, though it was not peculiar to diabetes. The spinal cord was seldom or never quite natural; erosions were often seen at the base of the anterior fissure; and in a few cases the grey matter of the horns had become translucent. He had carefully examined the sympathetic system in many cases, with results that were almost purely negative. The lungs frequently presented a caseating pneumonia. The liver was always injected, vessels of every denomination being loaded with blood. The kidneys had been found to present all the phases of tubal, and sometimes of interstitial nephritis. The general result of his inquiry went to show that the lungs and kidneys were only affected secondarily, but that the liver was more essentially concerned; and with reference to this, he mentioned the occasional presence of jaundice with severe diabetes. The perivascular changes in the brain were, in his experience, never absent, though they were not constant as to the parts of the brain affected, being widely and somewhat irregularly scattered, so that, to find them, they must be somewhat generally sought for. He thought it important to cut the sections by hand, and to choose those portions only which showed the naked-eye alterations mentioned above. The changes could not be regarded as peculiar to diabetes, though he maintained that in diabetes they were constantly present. Changes of the same kind had been found in tetanus, in chorea, in hydrophobia, and in insanity. The cause of this dilatation of the vessels, extrusion of their contents, and alteration of their channels, was very imperfectly known in any of these cases. Against the opinion that the changes in the brain seen in diabetes were the result of the circulation of morbid blood, must be set the testimony of clinical experience that the disease continually began as the consequence of a mental impression or cerebral state than which there was no fact with regard to diabetes better declared. Dr. Dickinson concluded by expressing the hope that the investigation might be further pursued by others, and suggested that the observations in question would be a fit subject for examination by a committee of the Society, offering to submit his own specimens to such a committee, or to any pathologist who was interested in the subject.

Dr. PAVY said that his remarks would be chiefly directed to the chemical questions involved, and especially to the condition of the blood. He agreed with Dr. Dickinson that there was a pathological anatomy of diabetes, but he felt confident that the primary condition was a chemical fault. He had recently been making, in conjunction with two trained analysts, a series of researches on the physiology of the carbo-hydrates, and the results he had obtained gave an entirely new aspect to that subject. The group of bodies included in the term carbo-hydrates were found in both the animal and the vegetable kingdoms; they were all bodies which, in the presence of certain ferments, underwent changes. Diastase, the ferment of saliva, that of the pancreatic juice, and that of the intestinal juice, all produced the same result when they acted upon starch, converting it first into a series of principles known as dextrins, and finally into maltose; the action of these ferments could go no further, they could not produce glucose. The process of conversion was attended by increasing hydration: thus starch might be said to consist of twelve atoms of carbon combined with ten molecules of water; whereas maltose, the final result of this fermentative action, consisted of twelve atoms of carbon combined with eleven molecules of water. The dextrins, which intervened between starch and maltose, presented intermediate degrees of hydration. Starch had no power of reducing cupric oxide, and it was precipitated by alcohol; whereas the dextrins were not precipitated by alcohol, and had the power of reducing cupric oxide. Starch, dextrin, or maltose, acted on by heat in the presence of sulphuric acid, was converted into glucose. The analytic process of which Dr. Pavy had availed himself was based on these facts. The liquid which was to be analysed was divided into two parts—one part was immediately tested, and its power of reducing cupric oxide estimated; the other half was treated with sulphuric acid, and so converted into glucose; and, the amount of glucose being known by the amount of cupric oxide reduced, on comparing the two results, the exact condition of the carbo-hydrate in the original liquid as to its degree of hydration was known. Now, though it had been shown that all the ordinary ferments of the body could only bring starch into the condition of maltose, yet the carbo-hydrate found in diabetic urine was glucose, the more highly hydrated principle. The glucose-forming ferment existed only in the liver under certain conditions. In health, in the alimentary canal, in the liver, and in the circulatory system, the action upon the carbo-hydrates was the reverse of that gradually increasing hydration above described. He had found, by experiment, that from the mucous membrane of the alimentary canal a ferment was obtainable which converted glucose into maltose; cane-sugar, not into glucose, as was formerly supposed, but into maltose; and starch either into maltose or a dextrin of low cupric-oxide-reducing power. Portal blood contained maltose and dextrins, and, under proper conditions, the liver was capable of converting maltose and dextrins into glycogen. When carbo-hydrates were taken by a healthy person, they were converted, not into glucose, but into a dextrin, or maltose. This was the process of assimilation of the carbo-hydrates in a healthy person, but in a diabetic person this power was lost; starch and sugar in them were converted into glucose, and appeared in the blood, from which it was eliminated by the kidneys: even on a purely meat diet, a person suffering from a severe form of diabetes excreted glucose; this could only occur through the splitting up of a nitrogenous molecule into urea or similar products, and glucose. For this to occur, there must be a glucose-forming ferment; such a ferment existed in the liver, but only under certain circumstances. When the liver was supplied with blood which was

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thoroughly venous, it converted carbo-hydrates into maltose; but, if the blood were imperfectly venous, or partook of the nature of arterial blood, the resulting body was glucose; it could be shown, by a number of different methods, that an excess of oxygen in the portal blood led to glycosuria. These facts threw great light on the cause of diabetes, and had convinced him that it was due to a dilatation of the arteries of the chylopoietic viscera, brought about by vaso-motor paralysis. Experiment had shown that this dilatation actually occurred. Mere congestion of the liver was not an efficient cause; there must be an afflux to it of blood not properly venous, and such an afflux there was in paralysis of the vaso-motor system; for, as the well-known experiment on the rabbit's ear showed, section of the sympathetic caused such a modification in the circulation that the blood, when it reached the veins, still had the arterial characters. If there were a limited amount of vaso-motor paralysis, the diabetes was not severe; in such cases nothing very marked might be observed with regard to the tongue, but, as the case advanced, the tongue became involved—it became intensely red and injected, that is, exceedingly hyperæmic. Here, he thought, there was an ocular demonstration of the theory he advanced; if the chylopoietic viscera were in the same hyperæmic condition as the tongue, then they were in a condition which must result in glycosuria. In young subjects, diabetes was a progressive disease; at an early stage the glycosuria might be arrested, but it returned, and finally ceased to be amenable to treatment. There was no doubt that there was some nerve-lesion in diabetes; and, holding the opinion he had expressed, he would strongly urge those who had turned their attention to the pathological anatomy of the nervous system, to make careful examination of the vaso-motor system.

Dr. Douglas Powell observed that the debate had been useful in indicating more especially the necessity for experimental inquiry into induced living pathology and in physiological chemistry in order to throw more light upon diabetes; in both these respects Dr. Pavy had redeemed the Society from the reproach of having had no contribution of the kind. He believed that the results of Dr. Pavy's valuable and novel researches would dovetail with those of Dr. Dickinson, showing the existence of nervous lesions. He would beg to second Dr. Dickinson's suggestion that a committee be formed to report upon the microscopical specimens from the nervous system brought forward both on the present and on any future occasions. Dr. Powell was himself convinced that most of Dr. Dickinson's specimens were examples of positive lesions; whether the result or the cause of the comatose state, was a separate question. Dr. Powell believed that the idea still prevailed that a causal affinity existed between phthisis and diabetes; this view he thought due to confusing cases of diabetic phthisis—if any such disease existed—with cases of phthisis occurring in the course of diabetes. In his own experience of chest diseases, diabetes was infinitely rare, and in five or six years' experience at the Brompton Hospital, with an average of thirty cases of phthisis of various sorts, degrees of activity, and stages, constantly under observation, he could recall no case. He had, through the kindness of his colleagues and the friendly labours of the resident staff, obtained the results of the examination of the urines of 165 cases of phthisis of various kinds, and sixty-five cases of other chest diseases now in Brompton Hospital; the specific gravities varied from 1010° to 1035°, but in no instance had sugar been found. He would like to have similar statistics in diabetic cases, not of course in the last stage, for some form of pulmonary disease closed the scene in a large proportion of all chronic maladies. He believed phthisis and diabetes to have nothing in common; they were not interchangeable by inheritance, and did not merge into one another, save in so far that, of course, some form of phthisis might arise in the course of an exhausting disease such as diabetes, but in no specific sense.

The President said that the interest of the discussion had proved that the choice of the Society had been wise. Though definite lesions had been found in the abdominal and thoracic viscera, and in the brain, yet the grouping of these anatomical changes did not prove, with absolute conclusiveness, that they had any causal relation to diabetes. Dr. Pavy's communication was very important; but the question remained: If there be this vaso-motor palsy, what is it cause? The suggestion made by Dr. Dickinson, and seconded by Dr. Douglas Powell, seemed to him a good one, and he had no doubt that the Council would be able to arrange for such a committee.

Microscopical Specimens.

Microscopical preparations of the Organs in Cases of Diabetes were exhibited by Dr. Dickinson, Dr. Seymour, Taylor, and Dr. Frederick Taylor.

Tubercular Ulcer of the Tongue.

Mr. S. Boyd showed a man, aged forty-seven, the subject of phthisis in both lungs, who presented a small tubercular ulcer with sharply cut edges, in the middle line of the under surface of the tongue.

Card Specimen.

Dr. W. B. Hadden showed a Tubercular Ulcer of the Tongue.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 8.

John Marshall, F.R.S., President, in the Chair.

Two interesting papers, both dealing with brain pathology, were read and discussed. The first, by Dr. Angel Money, dealt with a peculiar form of disease, which Virchow has described as gliomatous infiltration. In the cases related, this infiltration was confined to the pons Varolii. The second paper treated of a congenital malformation of one hemisphere. This consisted primarily in an absence of the angular gyrus. Owing to atrophy of certain other parts of the brain, which are known experimentally to be in association with this convolution, Dr. Sharkey, the author of the paper, was enabled, he thought, to draw certain definite conclusions as to the function of the angular gyrus. The following are abstracts of the papers, with the discussions thereon:—

Gliomatous Enlargement of the Pons Varolii.
By Angel Money, M.D.

The object of the paper is to draw attention to the existence of a remarkable enlargement of the pons Varolii of undoubtedly infrequent occurrence. The disease is remarkable from the enormous increase in size of almost every part of the pons and neighbouring parts of the brain. The tendency to implication of one half of the pons as much as the other is a noteworthy feature. The cases recorded are entitled to further consideration, from the light they throw on a condition which, in this country, has been ill understood. Cases of so-called gelatiniform enlargement of the pons Varolii, published in the *St. Bartholomew's Hospital Reports*, by Dr. Gee and Dr. Percy Kidd, are unquestionably of the nature of gliomata, and it would seem therefore advisable that the descriptive provisional nomenclature should be abandoned. Virchow in 1863 ("Die Krankhaften Geschwülste") described the various kinds of gliomata (including the infiltrating forms which give rise to diffuse enlargement) as occurring in any part of the brain, and there seems to be no good reason for the employment of a special name for the disease when it happens to occur in the pons. The first instance here recorded is worthy of remark from the fact that although the disease involves both halves of the pons, the symptoms were decidedly unilateral. This kind of thing has been mentioned in other recorded cases. In the second case hæmorrhages into the retina and intestinal mucous membranes were discovered. Though this association may be one of mere coincidence or unreal relationship, yet, looking to the known occurrence of hæmorrhages in various parts of the body, almost undoubtedly as the result of lesions, more especially of the base of the brain, it would seem not unlikely that here also we have to do with a causal connexion. The absence of such hard-featured symptoms as hyperpyrexia and glycosuria is worthy of mention, and a partial explanation may possibly be forthcoming in the notion that, for the production of such symptoms, lesions of sudden onset are required.

The President thought it important to notice how localised the disease appeared to be in the foregoing cases, and how it contrasted with the same disease when it occurred in the retina. In the latter case recurrence commonly took place

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after removal of the primary growth. Was there any family history of sarcomatous growths in these cases?

Dr. GEE did not think the symptoms differed from those caused by other growths occurring in the same part. He agreed with Dr. Money's nomenclature, chiefly on the ground that it referred the cases to a well-known category of disease.

Dr. SOUTHEY wished to know whether there was any history of syphilis. As far as his memory served him, he believed Virchow attributed the disease to syphilis.

The PRESIDENT asked Dr. Ferrier how he accounted for the absence or incompleteness of the paralysis, seeing that the nerve-fibres could not be discovered in the diseased parts.

Dr. FERRIER did not think that the symptoms were such as would follow on a complete destruction of nerve-substance. On that account he was inclined to think that the nerve-fibres were hidden, rather than absent. He related a case of his own, in which only after very careful search had fibres been found. He thought it probable that Dr. Money would find nerves if he looked about very carefully. He thought the symptoms pointed to a pons lesion, although the exact nature of this lesion could not be anticipated.

Dr. KIDD acknowledged that at the time he wrote his paper he was not acquainted with Virchow's description of glioma; he thought the word infiltration very applicable.

Dr. HALE WHITE asked whether the explanation of the benignity of this form of sarcoma might not lay in the highly developed nature of the tissue in which it originated.

Dr. MONEY replied. He said there was no family history of sarcoma, though in the history something was said about other children having died of "brain disease." As regards a syphilitic origin for glioma, he said that modern pathologists held them as quite distinct and unconnected. It was very probable that the axis-cylinders were present, though he had failed to discover the medullary sheath. In some parts of the pons healthy ganglion-cells also could be seen. Glioma was a generic term, and included many varieties of disease. In his cases he thought the growth was something more than mere hypertrophy of the neuroglia.

A CASE OF ASYMMETRY OF THE BRAIN PRESENTING PECULIARITIES WHICH BEAR UPON THE QUESTION OF THE CONNEXION BETWEEN THE OPTIC NERVES AND CERTAIN DEFINITE AREÆ OF THE CEREBRAL CORTEX. BY SEYMOUR J. SHARKEY, M.B.

The patient, whose age was twenty-five, died in St. Thomas's Hospital, owing to injuries received from the fall of a house. Her right arm and leg were somewhat smaller than their fellows, and the former was rigid. After her death this condition was ascertained to have been congenital, but no observations were made during life, either with regard to this malformation, or with reference to the condition of her special senses, etc. The subject of this communication is primarily the anatomical peculiarities of the brain, and secondarily the physiological conclusions which they suggest. The most striking characteristics of the specimen are—(1) the general slight arrest of development of the left hemisphere; (2) the small size of the corresponding crus cerebri and anterior pyramid; (3) the absence of the angular gyrus and superior temporo-sphenoidal convolution, together with the fusion of some of the other convolutions of the left temporo-sphenoidal lobe; (4) the extreme atrophy of the optic tract, optic thalamus, and corpora geniculata on the same side. It is argued that the knowledge we possess at present of the connexion between the central convolutions of the brain and the motor strands justifies us in referring the small and somewhat rigid limbs on the right side, together with the atrophy of the left anterior pyramid and crus cerebri, to the condition of the two ascending central convolutions, and their expansions near the great longitudinal fissure. The atrophy of the left optic tract, optic thalamus, and corpora geniculata must be looked at in connexion with the absence of the angular convolution, and with the malformation of the left temporo-sphenoidal lobe. Although, from a consideration of this single anatomical specimen, we are hardly justified in making any more precise assertion, still we can hardly avoid looking upon it as confirmative of the physiological experiments of Ferrier, which point in the same direction, and which seem to indicate that the angular gyrus is in some way bound up with the function of vision. The specimen likewise supports the views that the optic thalamus has some direct connexion with sight, and that there is semi, and not total, decussation of the optic nerves in the chiasma, for the right optic nerve bears a far larger proportion to the left, than the left optic tract does to the right. And finally, the absence of any inequality between the corpora quadrigemina of the two sides supports the theory that these bodies are not in the direct line of fire, so to say, between the retina and the cerebral cortex; though they may be in some way related to the co-ordination of the ocular muscles, which is necessary for normal vision.

Dr. FERRIER thought the author deserved credit for his lucid and careful description of an important and difficult case. He had had an opportunity of examining the specimen, and could quite confirm the statements made in the paper. It was to be regretted that so little clinical history was to hand. The main lesion, as described, was complicated with atrophy of the pyramid, which was doubtless a descending lesion. The destination of the angular gyrus, as he himself had demonstrated experimentally, resulted in temporary blindness; but this case, as well as experiments, showed that the visual centre included the angular gyrus and the occipital lobe also. In Dr. Sharkey's case the lesion was primary and in the brain, whereas, in the majority of cases, the brain lesion was generally secondary; thus the corpora quadrigemina were intact, and considerable light was thrown on their probable function. As regarded the optic thalamus, it was probably associated with other sensory functions, and not alone with that of sight.

Dr. MONEY asked whether there was any change of colour in the atrophied parts.

The PRESIDENT inquired whether there was any asymmetry either of the head or of the eye, or in the palpebral fissure. He inquired also as to the condition of the cortical grey matter in the affected regions. He considered it as probable that function was not strictly limited to the "centres"; perhaps it was more highly developed in them, but the immediate neighbourhood, to a certain extent, could take up the power if called on to do so by injury or destruction of the centre itself.

Dr. SHARKEY, in reply, said that no asymmetry had been observed either by himself or by anyone else who had seen the case. He had not mentioned the fact, but the spinal cord did show traces of a descending sclerosis, most marked in the upper part of the cord. As regards the cortex of the brain, it had not been examined at present. He regretted the want of a full clinical history. The patient came into hospital suffering from an injury to which the paralysis was attributed. Thus it was that, while the condition of the lower limbs was noted, that of the upper limbs was not observed. Recovery after paralysis from a localised cortex lesion pointed, he thought, to the transference of cortex function to some other part in the course of time.

Dr. BARLOW exhibited a young child, aged two, with Congenital Absence of both Clavicles.

THE CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 11.

ANDREW CLARK, M.D., President, in the Chair.

NEW METHOD OF TESTING FOR SUGAR IN THE URINE.

DR. GEORGE OLIVER, of Harrogate, read a communication on a new method of detecting sugar in the urine. The principle of the test consists in the fact that by boiling saccharine urine with a solution of sulphindigotate of sodium, which has a blue colour, a gradual succession of colour-changes, passing in order from blue across the colours of the spectrum finally to yellow, takes place. The test can be carried about in the form of blue papers saturated with the indigo solution. The papers yield a clear blue solution with distilled or fairly pure water. Indigo blue in the presence of glucose becomes a colourless fluid: this was the circumstance which led Dr. Oliver to examine diabetic urine in this regard.

The PRESIDENT asked whether the constituents of bile produced the colour-changes, to which Dr. Oliver gave an answer in the negative.

EXAMPLES OF THE TWO CLASSES OF CASES IN WHICH CEREBRAL ABSCESS, MENINGITIS, OR PYÆMIA ORIGINATE IN DISEASE OF THE EAR.

Mr. DALBY read notes of eight cases in which suppuration

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within the tympanum had ended fatally. They were selected to show how, by the consideration of a large number of cases, they might be divided into two very distinct classes. In the first class were those in which a person apparently in good health, with both tympanic membranes entire, is attacked by acute inflammation of the tympanic cavity, ending in rupture of the membrane and a discharge from the ear. Within a period to be counted by days he or she has rigors, and in due course the usual symptoms and terminations of meningitis, cerebral abscess, or pyæmia. In the second class, before any serious complications arise, perforations have existed for many years, attended either continuously or at different times by a purulent discharge; and these might again be subdivided into those in which the bone forming the tympanic cavity is diseased and those in which it is not. The questions which were discussed in this paper were as follows:—1. Can it be predicted of any case in an early stage of its history that the probabilities are in favour of a fatal termination? 2. What are the local conditions of the ear, or the symptoms which would point to such a conclusion? 3. Should any especial precautions be taken? 4. Is there any treatment of a local kind that should be employed as a protecting influence? 5. Is there any treatment which is often employed in perforations that should be especially avoided? From a consideration of these cases, as well as of many others which had come under the notice of the writer, he maintained that certain conclusions might fairly be drawn from them; at any rate, that although the subject of any perforation of the membrane was in some degree of peril, those in which the bone was diseased were in greater danger than those in which it was not. It was not difficult to determine whether the bone was affected: a careful examination with the probe under reflected light, exuberant granulations, and fœtor peculiar to bone disease would decide the question. At the same time, it should be remembered that a considerable area of diseased bone in the tympanic cavity is quite compatible with long life, and this is especially the case if the patient has learned to manage the ear by scrupulous cleanliness, and by some sort of protective pad which would keep the external air from the lining membrane of the tympanum. Influences which may lead to a fatal ending are the entrance of sea-water into the ear, and the use of strong mineral astringents. Thus, in estimating the probabilities of a long life for persons with perforations, their habitual discretion forms a distinct element as to their chances, and this might well be kept in view by insurance companies. Other points for consideration are the urgent necessity of removing a polypus if it prevent the egress of discharge from the tympanum; the important bearing of head pains, whether occurring at the commencement of the inflammation of the middle ear or at a later period; the importance of, in recent cases, great profusion of discharge, attended with feelings of giddiness.

Mr. Warrington Haward said that Mr. Dalby had drawn attention to a danger to which persons suffering from otorrhœa were liable, and which was apt to be overlooked. When the grave symptoms have set in, there is very little chance of the patient's recovery. Ought anything to be done beyond removal of the obstruction which may be present? The use of astringents would seem to be able to set up grave symptoms, so that one has some hesitation to order such remedial agents. The great point would appear to be to make a free exit for the pus. The question arises whether a perforation ought not to be made into the mastoid cells in order to obtain a fresh and free canal for purulent discharge.

Mr. Jessett inquired whether a post-mortem examination had been made in all cases. He referred to a case of otorrhœa in a child with brawny induration of tissues over the mastoid process, who had attacks of pyrexia with sweating. The autopsy showed that a pinhole perforation existed, extending from the site of the bone disease into the cavernous sinus. This instance might falsely have been recorded as one of meningitis.

Dr. De Havilland Hall asked whether it would not be better to refuse a life entirely for insurance when the person was the subject of otorrhœa, rather than receive one even at a higher premium.

Dr. Lee spoke of the frequency of necrosis of the bones bounding the tympanic cavity. He mentioned a case of a boy who was apparently suffering from some infectious disease, but in whom an œdematous state of the skin covering the mastoid process led to a suspicion, subsequently confirmed, of disease of the middle ear. This patient died, notwithstanding the use of the trephine to the mastoid cells. A second instance of double otorrhœa of long duration, with swelling of the mastoid cells, was referred to, in which perforation was advised and resorted to. No purulent discharge followed the perforation for two days. The patient in this case eventually recovered. The practical question is—What ought to be done in cases of necrosis with otorrhœa? Are we justified in laying open the mastoid cells in all cases presenting acute symptoms?

Dr. Mahomed said he would like to take exception to some of the alarming views which had been propagated in the course of the discussion. He was not inclined to regard all cases of otorrhœa with swelling over the mastoid as quite hopeless. He recited the outlines of a case in which a patient was apparently dying from meningitis. After trephining of the mastoid cells no more cerebral symptoms were observed, but the patient finally died with pyæmia, abscesses being chiefly found in the lungs. At the autopsy, thrombosis of the lateral sinus and internal jugular vein of the same side as the operation were observed, but no meningitis. Another case was mentioned in which deafness and aural vertigo were present. The man died, but no trace of disease of the internal ear, of the sinuses, or of other cephalic tissues was detected which would be competent to explain the fatal result, which happened about three weeks after the case was first seen. The fatal symptoms preceded the death only a short time.

Dr. Rogers inquired whether Mr. Dalby had found any good result from blistering and counter-irritation. He had seen a large number of cases of otorrhœa, especially in children, and thought that deaths were very infrequent. On this account he did not think that all cases of otorrhœa ought to be rejected for insurance or Civil Service commissions.

The President said that, listening to the narrative of Mr. Dalby's case, one might think that a rough statement of the proportion of fatal results to the total number of cases of otorrhœa would be valuable and instructive, as would also be the means to be adopted when the various phases of aural suppurative disease presented themselves.

Mr. Dalby, in reply, said that nothing was further from his intention than to imply that such fatal results were of frequent occurrence. He could not positively say, but he was sure that the disastrous consequences of suppurative disease of the middle ear could not be much more frequent than about one or two per thousand of all cases of otorrhœa. He considered that it would be ridiculous to reject every case for life insurance. If the disease presented genuine necrosis, he generally advised rejection of the life; if only perforation existed, and the general carefulness on the part of the patient was taken into account, he advised risking the life with a slightly increased premium; but the premium ought to be largely increased when there was an obvious habit of neglect on the part of the patient. He said that post-mortem examinations were made in every case where the fatal result had been given as meningitis or cerebral abscess. That trephining the mastoid cells was a life-saving operation in many cases he could have no reasonable doubt. He did not think that counter-irritants could do much good; in some cases he should prescribe leeches.

A Case of Morphœa in the Region of the Fifth Nerve, with Paralysis of the Intra-ocular Branches of the Third.

Mr. Nettleship read the following notes for Mr. Higgens and himself:—The subject of this case was a married woman, aged thirty-five, who applied to Mr. Nettleship in November, 1880, with mydriasis and partial cycloplegia of the left eye, with evidence of some dilatation of the retinal vessels and thickening of the coats of the retinal veins, and dilatation both of those vessels and the arteries. She also had single patches of ivory-white morphœa on the corresponding temple, side of nose, and upper lip, and a similar but less characteristic change in the skin of the forehead and front of the scalp on the same side, with thinning of the hair. The eye symptoms were of three months' duration; she had not discovered the skin-changes. She was out of health from recent parturition and old uterine troubles. There was no proof of syphilis. She used eserine, and took various medicines, including iodide of potassium and arsenic, for a year, and then went to Guy's Hospital, where, under

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Mr. Higgens's care, she has continued the same local treatment and taken iodide of potassium and mercury. The symptoms in the left eye are unaltered, except temporarily, by the eserine drops; the healthy skin affected by the morphœa has become partially atrophic, and the hair on the affected area has nearly all fallen. Latterly there have been threatenings of an onset of the same disease on the right side of the face and in the right eye, but it is not at present declared. During the course of the case there has been some eczema behind the ear and on the palm of the same side as the morphœa. The authors point out that, whilst the morphœa is strictly confined to territories supplied by the first and second divisions of the fifth nerve, the eye symptoms point clearly to affection of the branches of the third to the interior of the eyeball; and they observe that in this respect the case may be compared with those cases of herpes of the fifth in which the third or other motor nerves are also affected.

Mr. Higgens said that there was a fresh patch on the angle of the left scapula when he last saw the patient.

Dr. Hadden asked whether there was any alteration of sensation in this case which might lead to the suggestion that a central disease of the nervous system existed. From the remark which Mr. Higgens had made, he considered this not unlikely.

Mr. Nettleship, in reply, said that he was not aware of the existence of the patch at the angle of the left scapula. Beyond the numbness of the patch of morphœa on the temple he had not detected any alteration of sensibility. Nothing in the case had suggested to him the possibility of a central affection of the nervous system.

On the motion of the President, and with the unanimous consent of the meeting, an extra meeting of the Society was convened to take place on June 1, in order that some of the matter at present on the Society's books might be got through this session.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 10th inst., and when eligible will be admitted to the pass examination, viz.:—

Bates, Matthew, student of the Middlesex Hospital.
Blackler, H. John, of Guy's Hospital.
Boase, R. Davey, of the Middlesex Hospital.
Fountain, E. Osborne, of St. Bartholomew's Hospital.
Frohwein, O. Fraser, of St. Thomas's Hospital.
Gowan, B. Campbell, of Guy's Hospital.
Heelas, W. Wheeler, of the Westminster Hospital.
Lavies, H. Brandreth, of King's College Hospital.
Manton, J. Albert, of St. Bartholomew's Hospital.
Paine, W. Henry, of University College Hospital.
Peeke, H. Samuel, of St. George's Hospital.
Pettingill, A. E. Albert, of St. Bartholomew's Hospital.
Swete, H. Lawton, of the London Hospital.
Williams, David, of the London Hospital.
Wilson, Arthur E., of Guy's Hospital.

Eleven candidates having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, and two for six months. The following gentlemen passed on the 11th inst., viz.:—

Ayres, Charles J., student of the Westminster Hospital.
Blomfield, G. Wills, of the London Hospital.
Bohrsmann, M. C. Robert, of University College Hospital.
Candler, W. H. Charles, of St. Bartholomew's Hospital.
Conolly, C. Hamilton, of St. Bartholomew's Hospital.
Cranstoun, C. Bruce, of St. Thomas's Hospital.
Harvey, R. John, of Guy's Hospital.
Hawkins, H. Cæsar, of St. George's Hospital.
Ladell, M. Percy, of the London Hospital.
Lyle, C. C. Vacy, of St. Mary's Hospital.
McArthur, D. Campbell, of University College Hospital.
Olding, A. Ebenezer, of St. Thomas's Hospital.
Pedley, G. Aston, of St. Mary's Hospital.
Preston, Frederick, of the London Hospital.
Randall, P. Nicholas, of Guy's Hospital.
Skill, Geoffrey, of St. Thomas's Hospital.
Waite, D. Allan, of Guy's Hospital.

Six candidates were referred for three months and five for six months. The following gentlemen passed on the 12th inst., viz.:—

Bown, J. Quinton, student of St. Mary's Hospital.
Chilcott, Arthur E., of George's Hospital.
Comber, C. T. Thornton, of St. Bartholomew's Hospital.
Cranstoun, George, student of St. Thomas's Hospital.
German, Stanway, of King's College Hospital.
Glanville, Mark, of St. George's Hospital.
Goodchild, N. John, of St. Bartholomew's Hospital.
Graham, C. Nichol, of Guy's Hospital.
Hickey, R. Lewis, of King's College Hospital.
Hutton, John, of St. Bartholomew's Hospital.
Kelsall, C. J. Seddon, of King's College Hospital.
Lange, Masillon St. G., of King's College Hospital.
Le Quesne, F. Simeon, of King's College Hospital.
Marshall, E. Williams, of Guy's Hospital.
Megginson, Mowbray, of the London Hospital.
Morgan, G. F. Elliot, of Guy's Hospital.
Morris, C. Dwight, of the London Hospital.
Morton, J. Douglas, of St. Mary's Hospital.
Phillips, J. Northey, of Guy's Hospital.
Rockley, Henry, of Guy's Hospital.
Smith, R. Edward, of St. Bartholomew's Hospital.
Stacey, W. Henry, of St. Bartholomew's Hospital.
Wright, B. Duncan Z., of St. Bartholomew's Hospital.

Four candidates were referred for three months, and two for six months.

Collegiate Examinations.—At the recent Primary or Anatomical and Physiological Examination for the diploma of Membership of the Royal College of Surgeons, which was brought to a close on the 12th inst., 169 candidates presented themselves, against 167 at the corresponding period of last year. Of this number, fifty-three were referred to their anatomical and physiological studies for three months, and nine for six months, making a total of sixty-two referred candidates. There does not appear to be much improvement in the teaching during the past year, as at the corresponding period last year the total number of rejections amounted to sixty-four—viz., fifty-eight for three months and six for six months. The annual "pass and pluck" of the College, which will be published as usual in July next, will give the full details of both metropolitan and provincial schools. The following were the questions submitted to the 126 candidates at the pass examination for the diploma of Membership of the College on the 11th and 12th inst., viz.:—Surgical Anatomy and the Principles and Practice of Surgery (candidates must answer at least four, including one of the first two, of the six questions—from 1.30 to 4.30 p.m.): 1. Describe the operation for removal of the scapula. Mention the origins and insertions of the muscles in their order, and the vessels and nerves that must be divided. 2. Describe the course, relations, distribution, and inosculations of the profunda femoris. 3. Mention the causes, sequelæ, and treatment of epiphora. 4. What are the causes that may give rise to chronic abscess in the right loin? Mention the treatment appropriate to each case. 5. Give the differential diagnosis of a scirrhous cancer and a cystic sarcoma of the female breast; and lay down the principles which would guide you in respect of their operative treatment. 6. Describe the varieties of stricture of the urethra, the chief points of diagnosis in each, and the proper treatment. The following were the questions on the Principles and Practice of Medicine, of which three must be answered (including question No. 4), from 2.30 to 4.30 p.m.:—1. Discuss the symptoms, progress, and morbid anatomy of locomotor ataxy. 2. What are the physical signs of mitral-valve disease? What are its usual effects on the form, size, and action of the heart; on the lungs; and on the rest of the organism, including especially the liver and kidneys. 3. What are the causes, symptoms, consequences, and treatment of hæmorrhage from the stomach and bowels? Surgical injuries and piles to be excluded. 4. What are the medicinal properties, doses, chief uses, and more important ingredients in, or strength of, the following preparations:—Liq. hydrarg. perchlor., liq. morphiæ acetatis, liq. strychniæ, oxymel scillæ, pil. coloc. comp., pil. rhei comp., pil. plumbi cum opio, tr. lobeliæ ætherea, acidum nitro-hydrochloricum dilut., glycerinum acidi tannici. The following were the questions on Midwifery and the Diseases of Women, of which three must be answered, from 12.30 to 2 p.m.:—1. What are the dangers of lingering labour, and what indications would lead you to interfere to complete delivery? 2. How would you distinguish the following presentations:—Brow, knee, shoulder? How would you treat a case in which the brow presented at an early stage of labour? 3. Describe the mechanism of labour with the child in abdomino-anterior position, with the breech presenting. 4. What are the symptoms of retroversion of the gravid uterus, and the dangers that may arise from it?

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of

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the College at a meeting of the Court of Examiners on the 14th inst., viz.:—

Camps, Samuel, L.R.C.P. Edin., Trinidad, student of King's College Hospital.
Dodd, Anthony, L.S.A., Newcastle, of the Newcastle School.
Dowsing, H. Leopold, L.S.A., Hull, of St. Bartholomew's Hospital.
Doyle, E. A. Gaynes, Trinidad, of the Westminster Hospital.
Etches, W. Robert, Moreton-in-the-Marsh, of Guy's Hospital.
Gravely, Frank, L.S.A., Lewes, of University College Hospital.
Hathaway, H. George, L.S.A., Battle, of St. Bartholomew's Hospital.
Hitchcock, A. John, L.S.A., St. Helier's, Jersey.
Kay, W. Smith, M.B. Edin., Sheffield, of the Sheffield School.
Mitchell, Henry, L.S.A., Bradford, Yorks, of St. Bartholomew's Hospital.
Morris, Albert, L.R.C.P. Edin., Teddington, of King's College Hospital.
Nicholson, J. William, L.S.A., Cheltenham, of Guy's Hospital.
Peskett, A. Freeman, L.S.A., Leyton, Essex.
Philson, S. Cowell, L.R.C.P. Edin., Cheltenham, of King's College Hospital
Tatham, Edward, L.R.C.P. Edin., Hampstead, of St. Thomas's Hospital.
Vann, A. Mason, L.S.A., Durham, of King's College Hospital.
Walter, W. Ernest, L.S.A., Stoke-under-Ham, Somerset, of the Charing-cross Hospital.
Whitfield, D. Williams, L.K.&Q.C.P.I., Oswestry, of the Dublin School.
Wilson, James, M.D. Queen's Univ. Ire., Moneymore, co. Derry, of the Dublin School.

Three gentlemen were approved in Surgery, and, when qualified in Medicine, will be admitted Members of the College; and ten candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies—seven for six months and three for three months. The following gentlemen were admitted Members of the College on the 15th inst., viz.:—

Edgelow, Percy, Cambridge-street, S.W., student of St. George's Hospital.
Gutteridge, M. Wilkins, Brook-street, of the Middlesex Hospital.
Maling, W. Haygarth, Sunderland, of King's College Hospital.
Martin, Albert, Wellington, New Zealand, of Guy's Hospital.
Roberts, Edward, L.S.A., Aberystwith, of Guy's Hospital.
Shorthouse, W. S. Neville, L.S.A., Croydon, of Guy's Hospital.
Smallpeice, W. Donald, Queen Anne's Gate, of Guy's Hospital.
Stewart, Edward, Harley-street, of the Middlesex Hospital.
Walton, W. Fielder, Hull, of St. Bartholomew's Hospital.
Wilson, Thomas, Wolverhampton, of University College Hospital.

Seven passed in Surgery, and when qualified in Medicine will be admitted Members of the College; and seven candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies—viz., three for six months and four for three months. The following gentlemen were admitted Members on the 16th inst., viz.:—

Carter, E. George, Leeds, student of the Leeds School of Medicine.
Cookey, E. Percival, Frome, of St. Mary's Hospital.
Croft, E. Octavius, Edward-street, W., of University College Hospital.
Fasken, E. R. Drummond, West Kensington, of Guy's Hospital.
Forrest, J. Rocheid, L.S.A., Fulham, of St. Bartholomew's Hospital.
Harrison, Edward, Michael's-grove, S.W., of St. George's Hospital.
Oliver, V. Langford, South Kensington, of St. George's Hospital.
Pulling, H. John, Ledbury, of the Westminster Hospital.
Spong, J. Fuller, Clapham, of Guy's Hospital.
Stephens, Samuel, L.S.A., Camborne, of St. Bartholomew's Hospital.

Two candidates who had previously qualified in Surgery, having passed in Medicine and Midwifery, were admitted Members, viz.:—

Polson, J. Ronald, Bromsgrove, student of the Birmingham School of Medicine.
Stokes, F. Alexander, Highbury, of University College Hospital.

Four candidates were referred for three months, five for six months, and one for twelve months.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 10:—

Bowhay, Albert, Albaston, Calstock, Cornwall.
Gittings, Alfred, Wednesbury-road, Walsall.
Hobbes, Thomas George Fosbroke Rice, Clent, Stourbridge.
Hutchison, John, Westmoreland-road, Newcastle-on-Tyne.
Kite, Edwin Whitfield Dawson, Highfields, West Bromwich.
Leach, Alfred, The Hospital, Rotherham.
Parkes, James Stephen, The Manse, Stourport, Worcestershire.
Stevens, Francis Joseph, Elm Lodge, Hammersmith.
Stevenson, William Dymes, Cumberland-road, Kew.
Walter, Walter Ernest, Stoke-under-Ham, Somerset.

BIRTHS.

BECKINGSALE.—On May 9, at Sydney House, Bedford Park, Chiswick, the wife of D. Loftus Beckingsale, M.D., of a daughter.

GRASEMANN.—On May 9, at Albany-street, N.W., the wife of C. E. Grasemann, M.D., of a daughter.

HOBSON.—On May 12, at Lower Addiscombe-road, Croydon, the wife of John Morrison Hobson, M.D., of a daughter.

LEFTWICH.—On May 7, at 281, Kennington-road, the wife of Ralph Leftwich, M.D., of a daughter.

WINCKWORTH.—On May 6, the wife of Charles E. Winckworth, L.R.C.P., etc., of Shefford, Beds, of a daughter.

MARRIAGES.

MARKENDALE—BEECROFT.—On May 10, at Hyde, Ellis, younger son of Richard Markendale, of Sherbrook Lodge, Buxton, to Kate, second daughter of the late Samuel Beecroft, F.R.C.S., of Hyde, Cheshire.

DEATHS.

DRUITT, ROBERT, M.D., F.R.C.P., F.R.C.S., at 8, Strathmore-gardens Kensington, on May 15, in his 69th year.

GILL, JOHN BRADNELL, M.D., formerly of Dover, at Canterbury, on May 14.

HILL, FRANCIS ALEXANDER, son of James Hill, M.D., of Glasgow, in London, on May 10, aged 31.

JEPSON, SOPHIA, wife of Henry Jepson, F.R.C.S., at Hampton, on May 11, in her 80th year.

ROBINSON, RICHARD RODD, M.R.C.S., on May 10, in his 91st year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

COUNTY ASYLUM, NEAR DORCHESTER.—Assistant Medical Officer. Salary £140 per annum, with furnished rooms, board, &c. Candidates must be duly qualified to practise, registered, and unmarried. Applications, with testimonials (three or four), to be addressed to the Chairman of the Visitors, under cover to Thos. Coombe, Esq., 8, South-street, Dorchester, by May 26.

DENBIGHSHIRE INFIRMARY, DENBIGH.—House-Surgeon. Salary to commence at £85 per annum, with board, washing, and residence in the house. Candidates must be duly qualified, and conversant with the Welsh language. Applications to be sent to the Secretary, on or before May 26.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. (*For particulars see Advertisement.*)

HOSPITAL FOR DISEASES OF THE THROAT, GOLDEN-SQUARE.—Resident Medical Officer. Salary to commence at £50 per annum, with board and lodging. Candidates must be registered practitioners. Applications, with testimonials, to be sent to the Chairman of the Committee on or before May 20.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET, LONDON, W.C.—Junior Resident Medical Officer. (*For particulars see Advertisement.*)

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. (*For particulars see Advertisement.*)

POPLAR HOSPITAL FOR ACCIDENTS, BLACKWALL, E.—House-Surgeon. Salary £100 per annum, with board, etc. Candidates must possess qualifications in medicine and surgery. Also an Assistant House-Surgeon. Candidates must be qualified. Applications, with testimonials (not more than three), to be sent to the Secretary on or before May 22.

ST. MARY'S HOSPITAL, W.—Surgeon for the Ophthalmic Out-Patients' Department. Candidates must be Fellows or Members of one of the Colleges of Surgeons of the United Kingdom. Applications, with three recent testimonials, to be sent to the Secretary, on or before May 19.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Downham Union.—Mr. William Louis King has resigned the Wiggenhall District: area 17,678; population 3857; salary £46 per annum.

APPOINTMENTS.

Kingsbridge Union.—George V. Langworthy, M.R.C.S. Eng., L.S.A. Lond., to the Thirteenth District.

Ross Union.—Edward M. Knapp, M.R.C.S., L.R.C.P., to the Second District.

THE NEW ANTIPYRETIC KAIRIN.—Dr. Hallopeau, in a paper read at the Paris Hospital Medical Society (*Bull. de Thérap.*, March 30), gives an account of some trials he has made of the antithermic properties of the chlorhydrate of kairin, introduced to notice by Prof. Filehne, of Erlangen. Its proper name is the methylhydrate of oxyquinoline ($C_{10}H_{12}NO$), being, like quinine, a derivative of quinoline. Prof. Filehne gives from thirty to fifty centigrammes (in a fever of medium intensity) every hour or hour and a half, the temperature becoming lower from a half to two degrees even after the first dose. After the third or fourth dose it descends to the normal or even lower, its fall being rapid in proportion to the dose, and accompanied by profuse sweating, which soon ceases if the temperature be maintained at the normal by new doses of the kairin. During the apyrexia the patients experience a marked sense of comfort, the pulse recovering its normal frequency; but in order to maintain this state the medicine has to be continued at the above-mentioned doses, or in one gramme every two hours and a half, otherwise the fever returns as before. Dr. Hallopeau, from the few trials which he has made of this substance, quite confirms Prof. Filehne's statements, and comes to the conclusion that of all antipyretic agents it is the one of which, at non-poisonous doses, the action is most certain, most powerful, and most rapid, and that it constitutes a precious resource in therapeutics, enabling us to counteract with certainty the dangers which hyperpyrexia in itself induces.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, May 12, 1883.

BIRTHS.

Births of Boys, 1335; Girls, 1302; Total, 2637.
Corrected weekly average in the 10 years 1873-82, 2671·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	838	785	1623
Weekly average of the ten years 1873-82, corrected to increased population ...	810·0	755·7	1565·7
Deaths of people aged 80 and upwards ...	...	...	93

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	...	1	2	10	...	1	.	...
North ...	905947	1	24	12	5	10	...	3	1	4
Central ...	282238	...	11	3	1	4	...	...	...	1
East	697738	...	15	7	2	4	1	3	1	2
South	1265927	2	10	6	3	15	...	2	...	4
Total	3816483	3	60	29	13	43	1	9	2	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·551 in.
Mean temperature	46·5°
Highest point of thermometer	67·0°
Lowest point of thermometer	35·7°
Mean dew-point temperature	43·6°
General direction of wind	Variable.
Whole amount of rain in the week	1·13 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 12, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending May 12.	Deaths Registered during the week ending May 12.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955614	2637	1658	21·8	67·0	35·7	46·5	8·06	0·13	2·27
Brighton	111962	73	45	21·1	62·3	37·0	46·7	8·17	1·24	3·15
Portsmouth ...	131478	82	50	19·8	...	...	...	...	...	...
Norwich	89612	63	35	20·4	...	...	...	...	...	...
Plymouth	74977	47	32	22·3	59·0	35·0	45·2	7·33	1·90	4·83
Bristol	212779	158	73	17·9	62·6	34·0	44·7	7·06	0·99	2·51
Southampton .	77557	58	30	20·2	59·3	29·8	41·3	5·17	0·60	1·52
Birmingham ...	414946	279	176	22·1	...	...	...	...	...	...
Leicester	129483	84	61	24·6	...	...	...	...	..	...
Nottingham ...	199849	148	80	20·9	59·0	35·3	43·2	6·22	0·97	2·46
York	85574	62	29	17·7	...	...	...	...	...	...
Gateshead ...	88700	69	41	24·1	...	...	...	...	...	...
Liverpool	566758	393	333	30·7	60·2	37·1	45·3	7·39	0·41	1·04
Manchester	107862	86	46	22·3	60·4	33·7	42·3	5·73	0·81	2·06
Manchester ...	339262	229	168	25·8	...	...	...	...	...	...
Oldham	190465	136	73	20·0	...	...	...	...	...	...
Salford	119071	67	50	21·9	...	...	...	...	...	...
Bolton	108460	88	49	23·6	...	...	...	...	...	...
Blackburn	98564	71	49	25·9	...	...	...	...	...	...
Preston	84701	50	47	29·0	...	...	...	...	...	...
Hull	75591	40	33	22·8	...	...	...	...	...	...
Sheffield	204907	102	59	15·0	59·8	35·7	42·6	5·90	0·44	1·12
Leeds	321611	200	121	19·6	...	...	...	...	...	...
Bradford	226497	225	150	26·5	65·0	35·0	43·7	5·95	0·57	1·45
Wakefield	176296	112	111	32·9	68·0	32·0	41·4	5·22	1·41	3·58
Birkenhead ...	121117	83	46	19·8	60·0	36·0	48·0	6·11	1·40	3·56
Hartlepool	149464	107	63	23·0	...	...	...	...	..	..
Swansea	90033	69	42	24·3	...	...	...	...	...	...
28 towns ...	8620975	5816	3745	22·7	67·0	29·8	43·7	6·50	0·99	2·51
Edinburgh	235946	131	74	16·4	57·0	29·2	42·2	5·67	0·47	1·19
Glasgow	515589	410	308	31·2	60·3	29·0	43·8	6·56	0·50	1·27
[illegible]	349685	199	212	31·6	59·6	32·4	43·7	6·50	1·96	4·95

the Royal Observatory, Greenwich, the mean reading e barometer last week was 29·55 in. The lowest read- rae 29·34 in. on Tuesday evening, and the highest in. on Friday evening.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

West Bromwich.—The Vaccination Officer, at the last meeting of the Board of Guardians, reported that twenty-five new cases of small-pox had appeared in the parish, and that sixty-nine persons were then under treatment.

Army Surgeon.—The Waterloo veteran who died at Newbury a few days ago in his ninety-first year does not appear to have been a member of the Royal College of Surgeons, as stated in the "Medical Directory," as his name does not appear in the Calendar of the College.

Ambulance Stations.—An indignation meeting of the inhabitants of Clapton Park has been held to protest against the action of the Metropolitan Asylums Board on their determination to build an ambulance station at the Homerton Small-pox and Fever Hospitals, with an entrance from Clapton Park, at the extravagant expenditure of £18,480. A resolution was passed condemning the action of the Board in seeking to plant in the midst of such a thickly populated neighbourhood as Clapton Park and Homerton an ambulance station, when, at no great distance from the hospitals, open land could be had at considerably less cost than the property in Brooksby's-walk.

The Vaccination Laws.—It is stated that the Government have no intention of encouraging attempts to deal with these laws; but the President of the Local Government Board, in pursuance of the policy followed by Mr. Dodson, will continue to discourage the infliction of cumulative penalties under the Act.

The Dental Profession, Manchester.—A provincial correspondent writes:—"It does seem very unsatisfactory that the course of study required for dentistry cannot be obtained in Manchester, but can be in Liverpool. I sincerely hope the authorities of Owens College will soon supply the want, and that the Committee of Management of the Royal Infirmary will see that something is done to develope the dental department of that institution. I am sure many an assistant would gladly avail himself of the study of it were it put within his reach."

C. B. G., Bucks.—The resolution passed by the Melton Mowbray Board of Guardians, in respect to the appointment of the master and matron of the workhouse in question, was to this effect:—"Resolved—that, in reference to their letter, the Local Government Board be respectfully informed that Mr. and Mrs. Wild were appointed, out of a list of fifty candidates, to the offices of master and matron of the Union workhouse by a considerable majority in a full Board; that the fact of Mr. Wild having married his deceased wife's sister was thoroughly known to all the guardians present, who did not, and who do not now, consider that such a circumstance should operate as a disqualification for the offices named; and that this Board, therefore, ventures to urge the Local Government Board to reconsider their decision and to allow the appointments in question to be confirmed." The central authority deeming that, in the present state of English law, there was no valid marriage between these two persons, thought they would not be justified in confirming the appointment.

The Smoke Nuisance.—The Chairman of the National Smoke Abatement Institution has prepared a statement for transmission to the Home Secretary, showing the defective administration of the Acts by the police magistrates in neglect both of the spirit and the letter of the law. This statement has reference to returns from the Home Secretary to the Institution of the number of prosecutions under the Smoke Nuisance Acts in the metropolis during the past five years.

The Thames Embankment "Blow-holes."—The Metropolitan Board of Works has resolved to authorise an expenditure of £1500 for experiments by Sir J. W. Bazalgette as to the means of ventilating the Metropolitan District Railway otherwise than by the erection of shafts in the streets and open spaces, in order that evidence may be given before the Select Committee of the House of Commons.

The Census, 1881.—The first two volumes of this completed Census have been issued. Much of the Registrar-General's report is evidently prepared under the assumption of the great utility of these volumes in connexion with reform of local government. He says that the complex division of the country adds vastly to the labour of compiling a census and to the length of time occupied in the process. It appears that there are 966 urban and 578 rural sanitary districts.

Open Spaces.—The London Corporation, in taking possession of Coulsdon Commons, will add between three and four hundred acres to the open spaces secured by the Corporation for posterity.

A Pattern Architect.—The Guardians of the Salford Union have presented Mr. Laurence Booth, the architect of their new infirmary, with a testimonial expressive of their satisfaction with the statement received from him as to the building expenditure, which is several thousand pounds less than their original estimate of the cost. The chairman, in making the presentation, remarked that the infirmary was so complete in accommodation, and so moderate in cost, that it had obtained the special approval of the Local Government Board and other authorities.

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The London Temperance Hospital, Hampstead-road.—The Duke of Westminster has contributed £100 to the fund for completing the buildings.

The Drainage Scheme, Margate.—The Town Council has decided to inform the Local Government Board that the Council do not consider the present an opportune time to carry out a costly scheme of drainage, inasmuch as the rates were as heavy as could be borne by the ratepayers, and that the generally healthy state of the borough clearly proved that the construction of a scheme of tabular drainage was not a pressing necessity.

Coffee-Houses, Birmingham.—Another coffee-house, belonging to the Birmingham Coffee-House Company, has been opened in Newtown-row by the Mayor. The Company have now twenty houses in prosperous operation, besides manufactories of aërated water and a bakery.

Newcastle-under-Lyme Workhouse.—The Board of Guardians have resolved to increase the accommodation at the infirmary of the workhouse at a cost of £800.

An Evil without a Remedy.—Evasion of the licensing law in regard to "a close time" on Sunday has been successfully carried out at Stalybridge by the establishment of a "workmen's social club," which differs from most of the unlicensed houses of entertainment in that it is open whilst the regular licensed houses are closed. The consequences have been witnessed in the streets on Sunday mornings, and in the police-court on Mondays. This "social club" has become, in fact, a public nuisance. The magistrates have declared that it is a "perfect disgrace" to the town. They have no power at common law to take steps to abate the evil.

Painless Slaughtering.—The Markets Committee of the London Corporation are considering the application of the London Model Abattoir Society for a site in the Islington Cattle Market, whereon to erect a model slaughter-house on improved principles.

House Sanitation.—The Sanitary Assurance Association has resolved—"That the Council of the Association be requested to consider whether they cannot recommend legislation compelling the builders of all new dwellings to obtain a certificate from some authority or qualified person as to their sanitary condition before it shall be lawful for such buildings to be inhabited."

Factory Inspector.—Mr. William Paterson, the General Secretary of the Associated Carpenters and Joiners of Scotland, has been appointed an assistant factory inspector. This is the third similar appointment.

Staff-Surgeon.—Yes; all candidates for admission into the Royal Navy as assistant-surgeons had formerly to undergo an examination at one of the three Royal Colleges of Surgeons of England, Scotland, or Ireland; and for *full surgeons*, even when members of the Colleges, they were required to undergo re-examination.

A Grievance and its Remedy.—Dr. Gaze, the Workhouse Medical Officer, applied to the Paddington Board of Guardians for assistance in the discharge of his duties in consequence of the sick-wards being so full, and being unable to avail himself fully of the services of his deputy, Dr. Stewart, because of the distance he resided from the house. Dr. Felce thought if Dr. Stewart lived at such a distance as to be practically useless as a deputy medical officer, Dr. Gaze should appoint some one living nearer—an opinion which met with the concurrence of the Board, and was their reply to Dr. Gaze's request.

Meat Seizures in the Holborn District.—Dr. Gibbon, Medical Officer of Health, presented at the last meeting of the District Board of Works an elaborate report on the subject of the seizures of meat in the City, as compared with those in this district, in which he strongly condemned the City practice as a waste of food.

The "Sober" Movement.—No less than 71,775 persons have signed the pledge and donned the blue ribbon at Belfast during the recent mission of the Irish Temperance League. Over 14,000 signed in ships and offices. It is computed that in this city, out of a population of 220,000, there are 62,000 personal abstainers, and 45,000 wearing the ribbon. —In the last four years 24,019 merchant seamen, fishermen, and bargemen have been pledged by the chaplains of the Missions to Seamen Society to total abstinence. These men were enrolled in thirty-eight different seaports, either on board their ships at anchor one or two miles from land, in outer roadsteads, or in the inner harbours. ——The Metropolitan Railway Temperance Association, which is a branch of the United Kingdom Temperance Union, has now 126 members, *employés* of the Metropolitan Railway Company, and the last annual report, just printed, is of a most cheering character.——The Church of England Temperance Society during the past year has formed thirty new branches in connexion with the union, and several new classes for women have also been opened. The work amongst laundrywomen during the year had been most successful. The male and female servants' society was progressing satisfactorily, and was steadily increasing in numbers.——A meeting was held a few days since, at the residence of the Duke of Sutherland, on behalf of the Blue Ribbon movement; the object was to invite the help of the aristocracy in the cause. Lord Mount-Temple, who addressed the meeting, expressed the opinion that if the cause could boast of a large number of adherents in the higher circles of society it would acquire an enormous impetus throughout the country, and he solicited those assembled to don the blue ribbon of abstinence.

Co-operation.—The Committee of Management of the Aberdeen Infirmary have had a meeting with the medical and surgical staff, with regard to the financial position of the Hospital. The staff expressed their desire to co-operate with the Committee as to any improvement in the economical arrangements of the institution, and to do all in their power to bring the claims of the institution under the notice of the public, with the view of assisting the managers to place the Hospital in a more satisfactory and healthy position in the matter of funds.

COMMUNICATIONS have been received from—
Dr. C. J. Cullingworth, Manchester; Dr. Willoughby, London; The Registrar-General for Scotland, Edinburgh; The Registrar of the Apothecaries' Hall, London; Mr. William Young, London; Mr. Sampson Barnett, London; Dr. C. B. Stemen, Indiana, America; Dr. Norman Kerr, London; Dr. Leslie Phillips, Birmingham; Mr. J. Chatto, London; Dr. George Johnson, London.

PERIODICALS AND NEWSPAPERS RECEIVED—
Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—Le Progrès Médical—Journal de Saxon—Fort Wayne Journal of the Medical Sciences—Torquay Times, May 12—Manchester Examiner and Times, May 11—North Carolina Medical Journal—Detroit Lancet—Morning Post, May 11—Dublin Journal of Medical Science—Journal of the British Dental Association—Journal of the Vigilance Association—New York Medical Journal—Health.

APPOINTMENTS FOR THE WEEK.

May 19. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Turner, "On Russian Social Life."

21. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

22. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

Royal College of Surgeons of England, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. Knowsley Thornton, "On a Case of Cysts in connexion with both Kidneys opened and drained, and Tumour of Right Ovary removed, the patient remaining in good health." Dr. H. G. Rawdon, "On a Case of Nephrectomy for Rupture of Kidney, and Lateral Cystotomy for Relief of Cystitis caused by Retained Blood Clots." Sir Spencer Wells, "On a Case of Excision of an Enlarged Cancerous Kidney." Mr. Berkeley Hill will exhibit a patient after Nephrotomy for Calculus.

23. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

Hospital for Consumption and Diseases of the Chest, Brompton, 4 p.m. Dr. J. Mitchell Bruce, "On Cases of Chronic Lung Disease belonging to Unusual Types."

24. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Mr. R. S. Poole, "On Recent Discoveries in Egypt."

25. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Clinical Society of London, 8½ p.m. Dr. R. J. Lee, "On a Case of Nystagmus Infantilis." Mr. A. E. Barker, (1) "On a Case of Goitre producing Great Difficulty of Breathing on Exertion—Excision—Recovery, and Complete Relief"; (2) "On a Case of Sebaceous or Dermoid Cyst of the Tongue—Removal by Submental Incision—Cure." Dr. Habershon, "On a Case of Ulceration of the Stomach at the Pylorus in which Food relieved Pain." The following cases will be exhibited: Mr. J. A. Lunn—1. Myxœdema (male and female); 2. Peculiar Deformity of Wrists, probably of Rheumatic Origin. Dr. D. Drewitt—Myxœdema. Dr. F. Taylor—Infantile Hemiplegia, with Unusual Reflex Phenomena.

Royal Institution (Council Meeting, 8 p.m.), 9 p.m. Prof. Flower, "On Whales, Past and Present, and their probable Origin."

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ORIGINAL LECTURES.

CROONIAN LECTURES
ON
MODERN THEORIES AND TREATMENT OF PHTHISIS.

Delivered at the Royal College of Physicians, London.

By JAMES EDWARD POLLOCK, M.D.,
Consulting Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

LECTURE III.

MR. PRESIDENT AND GENTLEMEN,—In considering the whole modern history of researches into phthisis, its nature and its difficulties, we are struck at once with the return to Laennec's original doctrine of the specific character of tubercle. That there is a definite product, an entity with peculiar and distinguishable characters, with invariable results, and that the disease of phthisis is a pathological unity, have become more and more the doctrine of the day. Be tubercle what it may, it is now more defined than ever; and if we can assign to it an unvarying cause of production, an origin constant and unique, in a germ-producing bacillus, we have certainly receded from some late teaching. If tubercle, or those small masses seen on the lung and prone to cheesy degeneration, be only common products of ordinary inflammation, as some have taught, we must believe that ordinary pulmonic inflammation, if it affect the walls of the alveoli and the interlobular tissue, has its origin in the parasitic germ. Koch attributes miliary tubercle and all cheesy degenerative nodules to the bacilli. He has inoculated with them all, and found the same result.

Since Koch's observations have been published there have of course been many experimenters anxious to prove or to disprove them, and we have already numerous records of their experience. In Germany, Fränkel found bacilli in 120 cases of phthisis, which were all he examined, and Heron in sixty-two cases. Dr. Dreschfeld, of Manchester, has contributed most valuable observations. He found the tubercle-bacilli in all cases (forty-six) of phthisis where the physical signs were well marked. He has also examined six cases of bronchitis and emphysema, one of bronchiectasis, and two of fibroid phthisis, without finding bacilli. Of catarrhal pneumonia he had three cases with the same result. In two well-marked cases of lung disease there were no bacilli. Taking cases of tubercular disease of organs other than the lung, Fränkel found bacilli in fifteen out of sixteen cases in the secretion covering laryngeal ulcers, and Crudeli found them always in the stools of tubercular enteritis. Rosenstein also found bacilli in the urine of a patient who had tuberculous disease of the epididymis, the lungs being free from disease; Fränkel also in the pus of a scrofulous joint. We thus seem to have it proved that bacilli are present in all tuberculous disease, and absent in non-phthisical lung affections.

As regards the stage of lung disease in which they are most prevalent, observations show that it is rather in the later stages that they are in greatest quantity. Our evidence hitherto also seems to prove that their greater number is accompanied by a higher degree of pyrexia, and signifies a more acute form of disease. On this point further observations are necessary, and the same may be said of acute miliary tuberculosis, about which we have hitherto no evidence. My colleague, Dr. Williams, has examined the sputa in 130 cases at Brompton Hospital. Of these, 109 were cases of phthisis, cavities in eighty-one; nine were cases of early consolidation. Bacilli were found in all of them, excepting three. There were twenty-one cases examined of other lung affections—bronchitis, bronchiectasis, pleurisy, empyema, and pulmonary congestion from heart disease,—but no bacilli were found in any of them. Of the 109 cases of phthisis, there was pyrexia in fifty-one, the temperature ranging from 100° to 105°. Taking the fact of Koch's discovery as sufficiently established, and that bacilli being found in all cases of phthisis, they stand in the position of a causative agent, and taking also into due estimation that all persons exposed do not get the disease, we have to inquire whether there are not antecedent conditions—that is, conditions prior to the introduction of the germs which favour their development. There is, we may assert, a state of health, or of constitution, or of lung, which is a main factor in the induction of disease. It is here that the old pathology meets the new, and we imagine that it will be found that in all instances there is a pre-existing state which prepares the way for such germs as shall be accidentally introduced. This consideration demands our earnest attention. The period to which we allude is as much a first stage period as is the manured and prepared bed in the garden to the crop which is to grow in it. It is probable, nay certain, that germs daily enter the air-passages and take no root. The two factors of heredity and inflammation are those which all recognise as difficulties in the way of accepting off-hand the bacillus theory. But they seem to be the agents which exactly prepare the way for the reception of infective germs. In the first lecture we dwelt on the evidence for the presence of inflammatory products in all cases of phthisis, and it is so proved that it cannot be omitted in any theory of the disease.

Let us examine what heredity and inflammation do, and how they are supposed to act. Heredity may mean not only a germ conveyed by the parent or more remote ancestor, but may be, and in fact often is, a weakness of constitution, a tendency to disease, an especial vulnerability of lungs, and proneness to their inflammation. As Dr. Green has remarked, the tendency to retention and accumulation of inflammatory products is a leading character of scrofulous inflammations. An inherited proclivity to phthisis favours congestion. It is also conceivable that a want of tone of the bloodvessels is inherited, with a general deficiency in the power of products of the circulation, which no doubt favours transudation of low vitality. On the whole, then, a want of resistance to such attacks is considered to be the most likely preparation of a bed which will grow bacilli. A mere exposure of the bronchial membrane is not considered sufficient for their development, but their entrance to and impaction in the alveoli.

Another question which has been dwelt on by Dr. Green and others is the condition of the apex of the lung. The common localisation of tubercle in the apex has been referred to a diminished range of movement tending to stagnation in the pulmonary capillaries, a state which is closely allied to congestion and the formation of inflammatory products. In this manner a nidus or bed is formed fit for the reception of germs, and ready to reproduce them. Thus the old pathology joins on to the new, and we carry the idea of inflammation as a necessary preparation for the reception of the bacilli. It is indeed essential to conceive some such preparation for the elaboration of the germ into an established disease of specific character, and it also accounts for the innumerable cases of exposure to contagion where no disease results, for we must uphold that clinical experience is against the contagious nature of phthisis, and that something more is required than the mere presence of the organisms. Again, we would say that the recognised observation that the walls of the alveoli are essentially engaged in true tubercular disease favours the bacillus theory, the germs being found in that position. We seem, then, to have advanced from one pathological view to another, and, if Koch's observations turn out to be correct, he has discovered that specific element of disease to which all advancing pathology pointed, and which the best observers were expecting. It is not a contradiction of their observations, but an addition, which is not out of harmony with their results, and may even account for phenomena for which all previous reasoning had failed to find an adequate cause. It is in these subtle causes which influence the constitution, as heredity and sexual transmission of tendencies to disease, and even of particular forms of disease bearing the same name, that we shall find ground for referring the germ theory to some deeper line of argument than can be resolved by a chemical experiment. Whole families are liable in a peculiar degree to phthisis, to rheumatism, to typhoid, to diphtheria, or to scarlet-fever poisons. They seem to have been born with a proclivity which others have not. Is phthisis always the result of contact with diseased persons? Is the seed always sown at a given time, and can we gather

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more than one kind of fruit from a definite germ? Again, is it not possible to account for the phenomena of phthisis in another way? Granted that a given cause has originated a local deposit in the lung, do we see more in the symptoms of irritative fever so initiated than can be accounted for by the local cause of impacted alveoli, with compressed and strangled walls, pressure on the nutritive and pulmonary vessels, and resulting necrosis? Only last year we should have said "No." Again, are we to class all diseases from germs as of one or two kinds—say, septic and non-septic? There is a vast difference between the infection from the spirilli of anthrax and the bacilli of tubercle, as we have seen both in the incubative and crisis periods, in the latency and intensity of the symptoms, yet some of the later symptoms of phthisis are very like septic poisoning.

The question of the contagious nature of phthisis is one which cannot be decided by experiments of inoculation alone. They go a long way towards establishing a likelihood, but must be backed by clinical evidence of the largest kind. In discussing the question we are met in the outset by the fact that other diseases in which infective germs are found are well known not to be contagious—that is, capable of being communicated by one individual to another. The malarial poison and rheumatism are illustrations, as is also pneumonia, of the acute or croupous variety. In the latter, according to Crudeli and Koch, micrococci are found in the exudation in the alveoli of the lung, in the pia mater in cases of pneumonia with meningitis, in red hepatisation, and in the interalveolar tissue. The clinical evidence will have to prove that in a large number of cases, not to be accounted for in any other way, phthisis has been conveyed from one person to another; it would also be expected that the poison would be intensified by the grouping of large numbers of diseased persons together, as in the Consumption Hospital. As a very remarkable outbreak of disease occurred in my own clinical practice at Brompton Hospital, I may with advantage quote it here. A few years since, in the old building at Brompton, an error was discovered in the ventilation. The system of Dr. Arnott had been adopted when the hospital was built, by which air was driven by a fan at the basement through various air-passages which permeated the building, in the walls and under the floors. There was no extracting power used, but the wards were furnished with the usual Arnott's ventilators opening into the chimneys. A serious outbreak of erysipelas occurred in several of my wards, which were in the terminal part of the system of air-passages—that is, in the portion furthest removed from the entrance of air at the basement. We had many cases and several deaths. This event led to an examination of the system, when it was found that really no air at all found its way into those wards by the shafts, the propelling power at the basement being quite insufficient. There had been several preceding but more slight outbreaks of erysipelas, and more than the usual amount of "hospital throats." The ventilation was immediately rectified, and the system of extraction substituted, which now works so well both in the new hospital and the old one; and since then there has been no more erysipelas. Now, we may ask, why had we not an outbreak of phthisis among the sisters and attendants instead of an attack of erysipelas? The germ was evidently septic, and produced its customary effects; but the bacilli of phthisis must also have been present in great abundance in the unrenewed air, and ought to have produced the characteristic results. I may mention here that bacilli in fair numbers have been discovered in the air of the extracting shafts of the hospital, which carry off the used air from the wards and passages.

Regarding the experience of the hospital since it was established, the evidence has been most carefully collected by several observers—by my late colleagues, Dr. Cotton, Mr. Edwards, the late resident medical officer, and more lately and completely by my colleague, Dr. Williams; and as this comprehends by far the largest experience of phthisis to be found in any country, I shall here condense it for our use. It is the more valuable as Crudeli has expressly quoted the evidence of the Brompton Hospital to prove the opposite. I think it can be shown that after an experience of thirty-six years during which the hospital has been established, not only has no infecting process been evidenced, but that the medical officers and nursing staff, and the officials and servants, have been unusually free from phthisis. Three different forms of infection are possible: first, that by inhalation of the air breathed by phthisical patients, or of the germs set free by their secretions; secondly, infection by marriage, which partly includes the first, the husband and wife commonly occupying the same room and bed (but impregnation by one diseased parent may, through the ovum or placenta, affect the offspring); a third is stated to be by milk of diseased animals, or of the mother. The first will engage our brief attention now—namely, that from contact with phthisical persons, and breathing the same air. The hospital began with ninety beds, increased in 1856 to 200. At present there are 240 beds in use. The ventilation, which I have described, was very faulty in the earlier years, but has now for a long time been carried on by extraction of the used air, which has been proved to produce complete change of the whole air of any ward at least twice in one hour. The faulty system of Arnott was, however, adopted in one wing, that first built. Three-fourths of the cases are phthisis in all its stages; the others are pleurisy, empyema, bronchitis, asthma, and heart disease. In the old building the dispensary rooms were bad, and in direct communication with the out-patient department, where from two to three hundred patients attended daily, most of whom were consumptives. The residents in the hospital comprise medical officer, lady superintendent, four clinical assistants (who reside for six months), sisters, nurses, and servants. All the resident medical officers are now alive, and all the matrons but one, who died in advanced age. About one hundred and fifty clinical assistants have held office. They work in the wards and spend much of their time in the post-mortem room. Eight of them are known to have had consumption, generally at long periods after leaving the hospital, but none had it while resident; one had hæmoptysis before coming into residence, and in only one instance was it clearly proved that the disease was contracted while in the hospital. The sisters sleep in rooms communicating with the wards and galleries, and have a system of ventilation common to the patients. The nurses sleep in rooms above the wards, but of course are all day in attendance on the sick. In the course of thirty-six years only one had consumption while in the hospital; she married a consumptive patient, and ultimately died in the hospital. Three died of phthisis some time after leaving the hospital, two of whom were attacked many years after. Since 1867 there have been one hundred and one nurses, of whom one died of phthisis some time after leaving. The gallery-maids scrub the wards daily; we have had thirty-two since 1867, but no case of phthisis occurred. Of porters, most of whom have to work in the dead-room, we have had twenty, none of whom had phthisis. Of dispensers we have had twenty-two—among them three cases of phthisis, one of whom only was ill while in the hospital; the other two contracted the disease after leaving, one from intemperate habits. There have been twenty-nine physicians and assistant-physicians, of whom eight have died; one only died of consumption, which he had contracted before his appointment. There have been four chaplains, and nine persons in the secretary's office, but no phthisis among them.

Regarding the communicability of phthisis from husband to wife and *vice versâ*, Dr. Hermann Weber's cases, published in 1874, give support to the opinion that the disease is communicable in this relation, and eminently from the husband to the wife. In the cases of thirty-nine diseased husbands, the wives of nine of them became consumptive after marriage, or, taking second and third marriages into consideration, in fifty-one cases eighteen wives suffered from the disease. In comparing this with fifty-one marriages between healthy husbands and wives, we certainly do not find such a proportion of consumption among the wives. He found also that in twenty-nine marriages between consumptive wives and healthy husbands, only one husband became consumptive. He thinks that this disproportion can scarcely be explained by the ordinary means of intercourse. The wife, it is true, runs greater risk than the husband through nursing her husband much more closely, and so being more in the atmosphere of the sick-room, but this does not explain the great preponderance of wives in the present case, for with scarcely an exception the husbands were in good health, not one being confined to the sick-room. Dr. Weber considers that a more likely cause is to be found in impregnation and infection through the fœtus. And so far as his data go he found that wives who do not become pregnant are more likely to escape infection. He remarks on the great rapidity

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of the form of disease in the wives, and its slowness or quiescent character in the husbands. The remarrying of consumptive widowers thus becomes a serious problem if these facts prove to be of general application. My colleague, Dr. Reginald Thompson, considers that he had seen fifteen instances of wives becoming infected through nursing consumptive husbands out of a total of 15,000 consumptives. He evidently inclines to the opinion that the symptoms of phthisis in these cases are rather due to septic than specific tubercular germs, the latter phenomena being pyæmic in most instances. In these communicated cases the symptoms were acute, and the morbid appearances almost pyæmic. My own experience, which has not been inconsiderable, and has extended over thirty years of hospital and private practice, does not supply other than occasional instances of the apparent communicability of phthisis, either in the case of husband and wife or of attendant on the sick. In families whose members successively fell victims to the disease, the attack seemed rather due to the peculiar age at which persons closely related by blood begin to exhibit its symptoms. On the other hand, I have seen many instances in which the most assiduous personal nursing of the sick, living in the same room, sleeping in the same bed, and undergoing the same influences of air and lodging, of anxiety and harass as the sick, have failed to produce it. There have been waste of flesh and strength, loss of sleep and appetite, and all the evidence of depressed vital powers in numerous cases, but no phthisis. The apprehension of the disease has added to the risk, but the tried and trusty attendant has outlived the trial, and survived (often unwillingly survived) the object on which these attentions have been unselfishly lavished. This, too, has occurred again and again where an inherited taint has rendered the disease most probable to invade. But I confess that further and searching investigations are needed on this question, investigations which shall extend over this and other countries, which shall not have been dictated by already formed theories, and which shall stand the closest and most impartial scrutiny. As I shall presently notice, the result is of the gravest social importance, and is one on which the profession will often be called upon to decide in varied domestic problems influencing the lives and happiness of families. In Southern Europe the opinion of the contagiousness of phthisis has long been held, and in Italy especially, where I have often witnessed the expense to which surviving relatives have been put after a death from phthisis in a lodging or hotel. I fear that the advanced views of Professor Crudeli in Rome will not tend to lessen this apprehension of contagion nor render the residence of consumptive invalids more agreeable in that city.

SALICYLIC ACID FOR VENEREAL WARTS AND ULCERS.—In relation to this application, Dr. Solon Stone writes to the *Boston Journal* (April 26) that for three years past he has applied the acid to venereal warts and ulcers in its pure, dry form, filling or packing the ulcers (especially chancres and chancroids) with it constantly until a healthy granulating surface appears. The acid, which is only slightly caustic in its action, gives severe pain on its application to a raw surface, but this soon subsides. This treatment is adopted by many surgeons in the United States army. Dr. Stone first began using the acid as a stimulant in indolent granulation.

EFFECTS OF MEDICINAL SUBSTANCES ON THE SECRETION OF MILK.—Dr. Straupf comes to the following conclusions on this subject:—First, as to the quantity of the milk—1. A considerable diminution takes place under the use of iodide of potassium. 2. No change is produced by alcohol, morphia, or lead. 3. A slight increase takes place from salicylic acid. 4. There is perhaps a diminution from pilocarpin. 5. A considerable diminution, and sometimes a total suppression, is produced by ergotin. Next, as to the quality of the milk—1. The iodide of potassium so disturbs the secretion of the mammary glands that it is impossible to recognise the modifications which the milk undergoes. 2. Alcohol, and in general all the drinks which contain it, increase the proportions of the fatty elements. 3. Pilocarpin, morphia, and lead produce no change. 4. Salicylic acid increases the proportion of sugar of milk. 5. No particular form of diet is capable of increasing the secretion of milk.—*Presse Méd. Belge*, May 13, from *Deutsches Archiv.*

ORIGINAL COMMUNICATIONS.

CASE OF

MALIGNANT DISEASE OF THE TONSIL.

By W. MACNEILL WHISTLER, M.D., M.R.C.S.,
Physician to the Hospital for Diseases of the Throat.

IN referring to writings on the subject of malignant disease of the pharynx, the unanimous opinion of all observers as to the infrequency of cancer of the tonsils is striking. It is not my intention to encroach upon the space of the journal by entering into many statistical details of this affection. This question has been already thoroughly gone into in monographs on the subject, notably in Mr. Poland's very interesting paper,(a) in which all the principal cases published up to that time are recorded, and later in the inaugural dissertation by Dr. Froelich.(b) Suffice it to say that, taking the evidence of post-mortem examinations such as those published by Lébert,(c) Tauchou,(d) Marc d'Espine,(e) Sibley,(f) and Baker,(g) and the recorded cases, whether in works on general surgery or others more specially treating of diseases of the throat, together with isolated instances reported in journals, these pathological researches and clinical records, covering a period of about fifty years, point to the fact that the tonsils are exceptional in their immunity from cancer occurring as a separate and primary affection or as a true secondary growth. Cancer attacking these organs by extension from neighbouring parts is more often met with, generally spreading from the tongue or palate in the form of epithelioma, though then it is curious how the tonsil oftentimes escapes. A very interesting case of this kind is recorded by M. Weiss in the *Revue Médicale de l'Est*, December, 1881, where a malignant tumour having all the appearance of a cancerous tonsil proved at the autopsy to be really a sarcoma of the pharyngeal wall, while the tonsil was found atrophied and pushed downwards to the side of the tongue.

Doubtless, a certain number of cases are lost sight of through errors in diagnosis or want of definite characteristic signs in the earlier stages of the disease, such cases being looked upon as simple hypertrophy of the tonsil. On the other hand, were all recognised cases more carefully reported, a better opportunity would be offered for coming to a definite conclusion in reference to the frequency of the disease.

In my own experience, including both private and hospital patients, during over ten years' special observation of throat diseases, I have met with only three cases where the disease presumably began in the tonsil. In two of these there was already considerable extension to the surrounding parts, precluding any operation for the removal of the diseased structure. The third one (the subject of this communication) I venture to think may not prove uninteresting, more especially as the subject of cancer of the tonsil has comparatively recently been brought forward by the two very interesting cases read at the Clinical Society by Mr. Golding Bird and Mr. Lucas.

H. W., aged forty-four, a sugar-baker, applied at my clinic at the Hospital for Diseases of the Throat and Chest, on November 19, 1881. The patient, a native of Germany, stated that he had not been subject to recurring sore-throat, though five years previously he had had an acute pharyngeal swelling, which was lanced, and soon got well. For the last six months he had again noticed a swelling on the right side of the pharynx, accompanied by soreness of the part. This had been growing rather rapidly of late, and the pain had become almost constant, shooting from the throat into the ear. He suffered also with a cough, which sometimes brought on slight bleeding. In addition, dyspnœa was a troublesome symptom, which especially disturbed his rest at night. He said that he had been losing flesh; he was, however, still very stout, although anæmic. During the previous six months he had been treated by local applications, and a small piece of the growth had been cut off.

(a) "On Cancer of the Tonsil Glands," *British and Foreign Medico-Chirurgical Review*, 1872.
(b) "Ueber Tonsillarpolypen und Geschwülste des weichen Gaumens." Göttingen, 1880.
(c) "Maladies Cancéreuses." Paris, 1851. (d) *Op. cit.* (e) *Op. cit.*
(f) *Transactions of the Medico-Chirurgical Society*, vol. xlii.
(g) *Ibid.*, vol. xlv.

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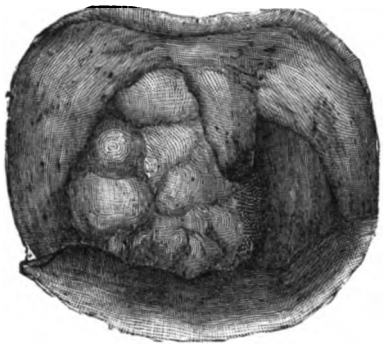
On examining the fauces, the right tonsil was found very much enlarged. It was partially subdivided by a fissure, the lower lobe being the larger of the two. The surface was rough and nodulated, livid red for the most part, while upon it there were patches of a deep purple. It was highly vascular, but not ulcerated. It was very hard to the touch. The tumour reached beyond the median line, pushing the velum palati upwards and to one side, blocking up nearly two-thirds of the pharyngeal space. Posterior rhinoscopy showed that it reached upwards to the orifice of the right Eustachian tube, and with the laryngoscope its lower border was seen to be opposite the right aryepiglottic fold. The left tonsil was not affected, nor was any other part of the throat diseased. There was no enlargement of any of the lymphatic glands.

No family history could be obtained which would indicate with any certainty that there had been any cancerous antecedents. The father died at fifty, and his last illness was associated with dropsy. The mother died at eighty, of "old age." Still, the history and progress of the case, and the appearances of the tumour, pointed to malignant disease.

The patient could not enter the hospital at this date, and in the interval, before proceeding to more radical measures, I instituted the following treatment:—Inhalations of conium vapour frequently repeated, as a sedative, and liquor arsenicalis. Early in December I found that the tonsil had grown larger, and there was a lobule projecting from its inner and lower border of a deep bluish-red colour, which bled very readily. Liquid extract of ergot with gallic acid was added to the treatment, and this was carried out for the remainder of the month. At the end of this time the livid projection at the lower part of the tonsil showed a tendency to slough, and the upper portion close to the velum had two raised nodules upon it, each about the size of a small bean, dead white in colour. There had been no bleeding or pain since the patient had taken the ergot.



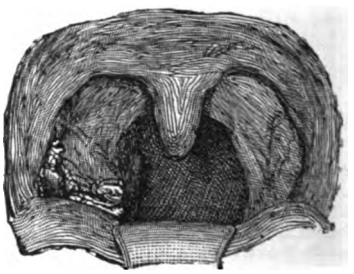
Although the tonsil rested upon a hard base with infiltration of the underlying pharyngeal wall, it was movable, and the glands below the angle of the jaw were still not affected. The man was fairly strong and well, and in a favourable condition for operation. On December 30 I operated, assisted by Dr. Woakes. Ether having been administered, the tumour was seized with a vulsellum forceps and raised from its bed. The wire loop of an écraseur (No. 11 piano wire) was then passed around the base, the upper part of the growth having first been turned out from above the velum by the finger. Some slight trouble was experienced in getting the loop well around the lower portion which extended so deeply down in the pharynx, the base here being very broad. This having been accomplished, the écraseur was very slowly tightened, and the entire tumour removed. The base was then freely cauterised with the galvano-cautery. There was very slight hæmorrhage, and that only of a venous character. In the immediately subsequent course of the case there was nothing special to note. The patient did well in every respect. His highest temperature never rose above 100°, and his worst symptom was a troublesome cough, with some scattered bronchial râles, which he suffered from during the first two days. The slough resulting from the cautery separated on the fourth day, leaving a deep wound in the pharyngeal wall, and the whole of the diseased portion appeared then to have been removed.

The tonsil was subsequently examined microscopically by Dr. Whipham, who kindly furnished me with the following report:—"The growth is typical carcinoma; in some places the cells are very large and the fibrous tissue scanty, comparatively speaking; in others the fibrous loculi are thick and dense, and the contained cells altered greatly in shape by pressure. Parts of the section are quite free from cancerous growth, but in such places an abundant cell proliferation is seen."

The patient returned to his home on the eighth day after the operation. There still remained some inflammatory swelling and redness, especially of the posterior pillar, but this was subsiding; and by January 21 (three weeks after the operation) the wound had cicatrised. On February 11 I saw him again, at which time there was neither hyperæmia nor swelling of the part, no induration about the cicatrix, and no trace of growth either in the upper or lower part of the pharynx, which presented a normal appearance. He was discharged as an out-patient.

A fortnight later, being eight weeks from the date of removal of the tonsil, he returned to the hospital complaining of itching and heat at the seat of operation, and on examination I found a roughness of the surface like large granulations springing from the tonsillar space. This small mass was quite pale. Its progress was very slow, and for some weeks it remained quite stationary. By the middle of April it was the size of a small bean. Its surface was irregular and red, with a tendency to bleed on slight irritation. The posterior border was a little prominent and everted, and this small flange-like process was firm to the touch, if not decidedly hard. The man suffered so little that I did not think it advisable to operate further, with no reasonable prospect of ultimate success, in view of the former complete extirpation having been followed so soon by a recurrence of the disease. Local applications of chloride of zinc were repeatedly made, alternating at times with strong solutions of perchloride of iron. Chian turpentine was added to the treatment as a tentative measure, but, although given with regularity and continuously, in the form recommended by Mr. Clay, it did not arrest the disease.

By the middle of May an ulcer had formed, extending forwards and downwards from behind the anterior pillar, by the side of the tongue. From this he suffered much pain, but daily applications of iodoform, tannin, and morphia, in powder, blown over the part, gave much relief. During this treatment the surface of the ulcer cleaned, it filled up, and the pain ceased. This improvement continued to the beginning of July, when again ulceration set in actively. Up to this date he had been able to attend to his work, which now he was obliged to give up. By the end of the month both pillars on the right side were greatly thickened and livid in colour. They were ulcerated on their inner borders, continuously with the ulceration at the base of the tonsillar region. This latter formed an ashy-grey sloughing mass of vegetation, not prominent, and reaching only to the edges of the pillars. The ulcer now extended deeply by the base of the tongue. There was an enlarged gland over the hyoid bone.



During the month of August the growth became in excess of the ulcerative process, and when I saw him in the second week in September, after an absence from town, there was a ragged growth below the base of the tongue, springing from the wall of the pharynx deep down, and impinging on the epiglottis. Above this it formed a broad flange behind, surrounding a deep ulcer between the pillars. This extended to the velum, and was continuous with the posterior pillar. Neither the growth nor the ulcer involved any of the immediately surrounding parts, excepting where it impinged on the tongue. The cheek, the hard and soft palate, the posterior wall of the pharynx, and the larynx were free from disease.

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On the opposite side of the mouth there was a firm, somewhat elastic, swelling in close relation to the left superior maxillary bone, opposite the anterior molar tooth, and extending into the cheek. It had commenced a short time previously, and was increasing in size. It was at this time the size of a small walnut. It was non-fluctuating, but tender. There was no carious tooth near it.

After this I lost sight of the patient, and afterwards learned that he entered the London Hospital, where he underwent a second operation, performed by Mr. Treves in the middle of October last. He was convalescent at the end of a fortnight, when he returned to his home, at which date he wrote to tell me of his recovery.

At this second operation the right common carotid artery was tied, after which the diseased structure was removed by operating through the mouth with the galvano-cautery and by free cauterisation with the thermo-cautery. In the first week in December I again heard from the patient that he was very ill and unable to leave the house, expressing a wish to see me. At my visit I found him suffering much from pain, with dysphagia and some occasional dyspnœa. The growth had returned and was as large as when I had last seen him in September. It was still singularly limited to the region of the tonsil above; below, it impinged upon the epiglottis. The right side of the tongue was, however, more involved. The growth on the left side of the jaw, about the malignant nature of which there could be no doubt, was larger. It was adherent to the superior maxilla, fixed and hard; the swelling extending upwards nearly to the lower margin of the orbit. It was tender, and the teeth below it were loosened. A large glandular swelling the size of a small hen's-egg had formed behind and below the angle of the jaw on the right side.

The above case adds one more to the list of unsuccessful attempts to obtain a cure of malignant disease of the tonsil by operation, although the patient experienced several months' comparative ease after the removal of the growth by the écraseur, whilst it was still isolated and free from glandular swelling.

The second operation, which was doubtless resorted to for the relief of urgent symptoms, though thoroughly carried out by extensive dissection and destruction by cautery, was followed by almost immediate return of the disease.

The accounts of other operations and tabulated statistics give no better results, and the question is forcibly brought before one, how far operative interference is advisable when dealing with these cases. Undoubtedly in this one, life was prolonged, urgent dyspnœa was averted, and dysphagia relieved for many months.

To effect this much I should be inclined to follow a similar course of treatment in any subsequent case. In the later stages of the disease, or when there is very extensive ulceration, thereby reducing to a minimum degree any hope of affording rest from suffering, there appears to me to be no indication for the removal of the parts, whether by *écrasement*, by the cautery from within the mouth, by Chevers's operation, or by any of the various modifications of these procedures. Palliative measures are the only ones to be resorted to, as a rule; and, when suffocation seems imminent, tracheotomy should take the place of other operations.

IN MEMORIAM.—Subscriptions for the restoration of Hempstead Church, as a memorial to Harvey, are received by Messrs. Gibson, Tuke, and Gibson, bankers, Saffron Walden, Essex.

EXTRACTION OF A BULLET BY LEGAL PROCESS.—A somewhat unusual question has arisen as the result of a shooting affair in Washington. Shots were fired both by a man and a woman, each having a pistol of different calibre. Balls have been found in the walls of the room corresponding in size to the bores of both pistols, and one bullet took effect in the body of the victim, but it is uncertain from which of the weapons it was fired. The man declines to have the bullet removed, as the surgeons decide that the operation is not at present necessary to save his life. The prosecuting officers suggest that the Court should order the extraction of the bullet to determine who was the assailant. To the ordinary classification of operations into those of necessity, expediency, etc., we shall now have to add another category of those in aid of public justice.—*Boston Medical Journal*, April 26.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

PROLONGED SUSPENDED ANIMATION.

(Under the care of ROBERT BRANNIGAN, M.D., Liverpool.)

AT 11 a.m., January 5, 1883, W. M. called at my house in a state of incipient delirium tremens, and begged me to do something for him as he felt he was "going out of his mind." He had been drinking to excess during the previous fortnight, and wished to give it up. I gave him eight doses of bromide of potassium, five grains to the dose, one to be taken every hour until 3 p.m., when I was to call and see him. At that hour I found he had only arrived five minutes previously. He had taken but one dose of the mixture, and had been drinking freely during the interval. He was now in a highly nervous condition, and implored me to give him a hypodermic injection of morphia in order to procure sleep as on former occasions. I injected four minims of Squire's solution of morphia and atropine, and ordered him to bed immediately. At 3.15 p.m. I left, intending to call in the evening. Soon after he became very drowsy, and was carried to bed, but could not be undressed owing to his violent resistance. His friends left him lying on his right side and partly on his face, and in a few minutes he was "snoring heavily." About 4 p.m. he began to breathe slowly, and "only now and again"; also becoming purple in the face, "which was darkest on the side on which he lay." His wife being uneasy about him, called her mother and one of the shopmen into the bedroom, but they came to the conclusion "he must be better because he was sleeping." The patient's wife, however, kept watch. She now and then felt his heart, and found it beating very quickly, and noticed that his breathing was still becoming slower. At five o'clock, hearing a peculiar noise in his chest, "like a clock running down," she again put her hand over his heart, and found it beating very hard. It then suddenly stopped. She now placed her ear to his chest, but could hear no sound. She also noticed that "his face was very black." She ran off for me immediately. Not finding me at home, she returned, and found her husband had been undressed by her mother and the servant. They persuaded her "he was much better now as he was so quiet." I arrived at the house at a quarter to seven o'clock and found the patient lying on his back, arms folded across the chest, covered up to the chin with bedclothes, and his head propped by three pillows. His face was livid, jaws clenched, pupils widely dilated and giving no response to light. I could not detect any sign of respiration or pulse, and in fact the man seemed quite dead. His body was warm and livid, but the hands and feet were cold and pale. I threw the clothes off the bed, drew the pillows from under his head (leaving the bolster), opened the window and door (the bed being midway between them), dashed cold water on him, and then flipped him all over the abdomen and chest with a wet towel for a few seconds without any apparent result. I sent for my magneto-electric battery, which was brought to me at seven o'clock. I occupied the interval of fifteen minutes in trying Sylvester's mode of artificial respiration, but could not detect any air entering the chest. While preparing the battery the shopman continued the artificial respiration under my directions without producing any effect. Having rubbed the chest all over with salt and water, I, at a quarter-past seven, applied one electrode over the left phrenic and pneumogastric nerves, and the other over the epigastrium, and tried full power till half-past seven; still there was no visible effect on either pulse or respiration. Continuing the electric stimulus a few minutes longer, the lower jaw was drawn towards the sternum, and on one of the electrodes slipping over the brachial plexus the arm was drawn up. At ten minutes to eight o'clock I obtained the assistance of Dr. Wollaston, who felt carefully for the pulse, but could not detect the faintest beat. We, however, continued the electric stimulus, but in addition to pressing one electrode over the phrenic and pneumogastric nerves, occasionally moved it over the chest-walls. At a quarter-past eight the heart began to beat feebly, and in a few seconds we were rewarded by what appeared to be a slight shallow inspiration; and in a

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few minutes more the pulse could be distinctly felt at the wrist. At half-past eight the pulse was 120, and the respiration one to the minute. On ceasing the electric stimulus the respiration also stopped, but the pulse remained at 120. We therefore continued the battery until nine o'clock; pulse still 120, respirations increased to four per minute, but ceasing on discontinuing the stimulus. Dr. Wollaston was now obliged to leave, and I decided on the hypodermic employment of liquor ammon. fortior, and injected ten minims deeply into the muscles of the right thigh, still continuing the electric stimulus. In a short time respirations increased to seven per minute; on ceasing the faradisation the respirations fell to four per minute. Five minims more of the liquor ammon. fort. were injected, and one electrode was applied over the phrenic and pneumogastric nerves, and the other passed over the epigastrium, when the respirations alternated between eight and nine per minute, the pulse still being 120; and at half-past nine the respirations continued at eight and nine per minute without any stimulation. Water was again dashed on the patient's face, but there was no response; the pupils were still widely dilated, and not affected by light; neither was there any reflex action of the eyelids on rolling the eyeballs about with my fingers; the face was still livid, and the skin of the body became brighter in colour. I may mention here that a fly-blister was applied to the back of the neck, liquor vesicatorius and hot fomentations over the heart, and a jar of hot water between the patient's legs. Having now to leave, and believing my patient to be safe, I directed the shopman to watch the respirations, and, should they fall to four per minute, to immediately apply the battery and send for me. In my absence, Dr. Wollaston visited the patient, and found him in the same condition as I had left him. At half-past ten o'clock I returned, and stayed with him until a quarter-past eleven; I then again left. The patient remained in the same state till ten minutes to one in the morning. The shopman then observed his face twitching and the lips moving as if trying to swallow. He immediately slapped patient's face vigorously, who suddenly opened his eyes, and said, "What's that for?" then looked around, recognised those in the room, and mentioned their names. On trying to move, his arms and legs flew about and were quite uncontrollable. He then asked for a drink. They gave him half a pint of milk, which he swallowed at a draught, but vomited immediately, as well as a quantity of "pure spirits." At 5.30 a.m. a messenger called to say patient was conscious, and asked "if he might have a glass of whisky." I allowed the patient half a glass of whisky, which he vomited. When I visited him at nine o'clock the patient's face wore a very anxious expression. Respirations 20; pulse 120; temperature 100°; choreic-like movements of arms and legs. Bromide of potassium and digitalis were given every hour. At 5 p.m. he was less nervous; pulse 120, temperature 100°. At 10 p.m., same; had taken a little tea, also beef-tea during the day; no stimulants. Delirium tremens set in on January 6. At 11.15 a.m. on the 7th patient's temperature and pulse the same. At 10 p.m., same state; not violent. January 8: Face and chest covered with a bright measly rash; pulse, respiration, and temperature same; perspiring; profusely covered with sudamina. At 10 p.m., pulse 120, temperature 99°, respirations 20; rash appeared on abdomen and extremities. January 9: Pulse 120, temperature 99·4°, respirations 20. Delirium tremens passed off. January 10: Pulse 120, temperature 100°, respirations 20; melæna. Not much change till January 18, when the pulse was 120, temperature 99°; melæna ceased. January 19, pulse 100, temperature 100°; 20th, pulse 92, temperature 100·6°; 22nd, pulse 93, temperature 99·2°; 23rd, pulse 92, temperature 99°; 24th, pulse 88, temperature 98·6°; 25th, pulse 88, temperature 98·6°; 26th, pulse 88°, temperature 98·5°; 27th, pulse 88, temperature 98·5°; 28th, pulse 88, temperature 98·5°; 29th, pulse 80, temperature 98·5°; 30th, pulse 68, temperature 98·5°. On the 24th of the month the pulse fell to 88, and the temperature to 98·6°; and at the end of the month both remained normal.

Remarks.—What great disturbance took place in the nerve centres to cause absolute suspension of respiration and circulation for three hours and a quarter? On two former occasions I gave grain doses from the same solution with good effect to the same patient when suffering from the effects of drink. On January 8 his servant was removed to Toxteth Fever Hospital suffering from typhus. This fact, combined with the measly rash and the prolonged febrile state of the patient, caused me afterwards to suspect that he might have been suffering from a suppressed fever, and I am inclined to think it was the febrile state that made him more susceptible to the effects of morphia than alcoholic poisoning. My reason for persisting in treatment was that I believed the morphia alone to be the cause of the coma, and I have no reason to be dissatisfied with the result of my efforts. I consider the injection of ammonia an essential part of the treatment, as after each dose there was a marked improvement in the patient's state. A medical friend, however, informs me that a few years ago he saw a young lady in a state of such deep coma that it was pronounced catalepsy. She remained a whole night in a state of suspended animation, recovered spontaneously next morning, and afterwards confessed to having taken an ounce of laudanum. I am afraid my patient would not have recovered spontaneously.

LIVERPOOL WORKHOUSE HOSPITAL.

PROLONGED SUSPENSION OF VITALITY THROUGH THE SUBCUTANEOUS INJECTION OF MORPHIA AND ATROPINE.

(Under the care of WILLIAM ALEXANDER, M.D., F.R.C.S., Visiting Surgeon.)

THE following case shows that a full dose of morphia and atropine may, under some conditions of the system, set up alarming symptoms of interference with the circulation and respiration. The hasty action of a nurse increased the dose much beyond the ordinary one, and the resulting coma was so profound that the patient was at one time almost abandoned to the death that seemed to have irrevocably seized her. Prolonged efforts to resuscitate her caused the pulse to be just felt, and the respiration to become automatic at the rate of four per minute, and for several hours this was all the progress. At the end of that time the awakening was instantaneous, and just as suddenly the pulse and respiration resumed their normal rate and vigour.

Margaret M., aged thirty-seven years, had the left ovary removed, under the spray, on March 20, 1882, on account of an enlargement of that organ that had been for a long time attended with acute pain. Previous to operation the pain had been relieved by morphia injected subcutaneously, and after operation these injections were directed to be repeated twice a day should extreme restlessness or abdominal pain call for them. On the 21st, the day after operation, she had nine minims of the hospital solution injected. As this only calmed her, and did not produce any soporific effect, and as on the 24th she had been excited and disturbed by the dressing of the wound, twelve minims were administered a little after twelve o'clock mid-day. This represented three-fifths of a grain of morphia and one-fortieth of a grain of atropine. At one o'clock she became livid, breathless, pulseless, and insensible. A head nurse was summoned, who sent the ordinary nurse for a doctor, and, in ignorance of the previous injection, injected into the arm of the comatose patient five minims more of the morphia solution. The house-surgeon, when he came, injected ammonia, gave brandy enemata, used artificial respiration, and applied electricity, without effect; and when I happened to call at four o'clock to see how my patient was getting on, I found them straightening her out preparatory to putting her in her shroud. She was to all appearance dead, but a faint flicker over the cardiac region caused me to hope. The night was a windy one, and a current of fresh air was blowing along the corridor with considerable force. The patient's bed was removed into the fresh air, and artificial respiration, galvanism, frictions, and warmth were resorted to with renewed vigour. Up to 5.30 p.m. only a spasmodic breath every quarter of an hour and a feeble beat of the heart every now and again encouraged us to proceed. At six o'clock the respirations had become automatic, but only at the rate of about four per minute; and the pulse was irregular and difficult to feel. I then left the patient under the charge of relays of nurses, who were to continue the artificial respirations and the frictions, and who were to give her some strong coffee as soon as she could swallow. I returned at seven o'clock. Just as I was entering the ward a nurse poured some coffee into my patient's mouth. She suddenly fell back

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as if dead, and both respiration and circulation again stopped. I immediately turned her over on her side, so that the head hung out of the bed, and, slapping her on the back, secured the discharge of the coffee from her mouth and windpipe. In half an hour the respiratory movements were performed spontaneously at the old rate of four or five in a minute, and the pulse was as feeble as before the coffee accident. At nine o'clock the patient's state was much the same, except that she had become a little warmer and the pulse stronger and more regular. But shortly after nine o'clock she opened her eyes and looked around her, astonished at the number of nurses round her bed, and at the strange place in which her bed was. Her pulse and respiration became at once natural, and at first one felt as if the patient had been humbugging, and that the sleep was only feigned. She declared she had been in heaven, so delicious had her sensations been, and was inclined to be angry with us for disturbing her sleep. During the next two hours she was rather restless; then she fell asleep, and slept comfortably all night. The operation was not interfered with in the least by the means used to resuscitate the patient. I have lately heard from her that she is quite well.

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The Medical Times and Gazette *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, MAY 26, 1883.

THE DEPARTMENTAL INQUIRY INTO HOSPITAL MANAGEMENT IN THE FIELD.

It has for some time been known that the Committee appointed by the Secretary of State for War to inquire into hospital management in the field, and into medical transport, had agreed on their Report, and that the whole of the proceedings were in the printer's hands. But, up to the time of our writing, the Report even, much less the evidence, is not available. Portions, however, of the Committee's recommendations have appeared in the daily papers, together with very small portions of the evidence upon which the recommendations are founded. It may be well, therefore, to note the impression these parts of the results of the Committee's labours have made upon us, reserving further comment till we have had time to study the Report itself.

In the first place, then, we are struck by the magnitude of the whole inquiry, and cease to wonder why the Committee have taken so long a time over their work. In fact, when first instituted, the inquiry was limited to the investigation of the working of the Army Hospital Corps, and the desirability of disconnecting it with the Army Medical Department by taking away the command exercised by the doctors and restoring it to combatant officers. The necessity for some inquiry of the kind was to be found in the confusion and irregularity which had existed during the Cape wars in the hospital services; which confusion, however, appears to have been shared by all departments and arms of the service, and would probably have been neither lessened nor increased in medical matters if the Army Hospital Corps had been officered by the best trained military officers. The breakdown of transport was quite sufficient to account for hospital shortcomings in that unfortunate campaign. If the inquiry of the Committee had been limited to these Cape matters, there would doubtless have been a "fight" between the members who think that army doctors should be as much as possible civilians, and those who consider that they should have exclusive command over their own departments. Probably, however, the Committee would then have decided, as they have done now with regard to the question of command, that medical officers should be supreme in the management of their own affairs. But the state of the Army Hospital Corps was destined to form merely the foundation-stone of the inquiry, which was soon enlarged, to embrace more weighty topics. The Egyptian war broke out, and there were complaints not only of the Army Hospital Corps, but of the doctors themselves and everything connected with them. The cooking was declared to be bad, the medical comforts deficient, the meat indifferent, and the bread bad. But far worse than the complaints made of hospital shortcomings was the suspicion and rumour, soon growing into assertion, that the medical officers were personally careless, indifferent, and inefficient. And, while the Committee might have been fully occupied in considering charges of this kind, side issues sprang up, involving so much difference and dispute that it would not have been very wonderful had the inquiry merged altogether into the discussion of the comparative merits of the old regimental as compared with the unification system. In the Report, indeed, traces of this dispute are to be found in the recommendation of the Committee that a kind of compromise should be recognised, and a certain number of doctors become once more regimental, provided that they are not supplied with regimental hospital establishments. But, coming back to the alleged shortcomings in Egypt with regard to supplies and the efficiency of the medical officers, we would observe that if the medical comforts ran short, if hospital necessaries were wanting, it does not necessarily follow that the doctors were to blame. Medical officers have been trained for ages past not to consider themselves independent in regard to supplies. They have had the power to recommend and to make requisitions, but if a medical officer ever ventured to order articles for the comfort of the sick on his own responsibility, it was much more than probable that he would be made to pay out of his own pocket for his independence. Now, no doubt there are times and seasons when the heart of the nation is stirred, and at such moments anyone in authority may break through the fetters of routine, and be applauded for doing so; but the puzzling question must, with medical officers who have to risk the possibility of having to refund, always be, Is this the time? Will the authorities hold me blameless if I overstep regulations, or shall I be made to pay out of my own pocket for my enthusiasm? It is all very well to say, as Lord Wolseley said, that when the health of a patient is concerned a doctor should be indifferent as to whether the necessary loaf costs one shilling or one pound. Probably

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he is utterly indifferent, but he cannot afford to act upon his impulses if the loaf has to be paid for by himself; and he has been kept in swaddling clothes and bands, as regards the matter of expenditure, all his official life. Moreover, the generous impulses of a nation soon merge into a general stagnation; taxpayers resent enormous hauls upon their breeches-pockets, and Lords of the Treasury are not always as tender-hearted and emotional as successful commanders after the conclusion of a well-won battle. And when all the war fever and fervour have long quite passed away, a medical officer who has disregarded the regulations in order to get comforts for his wounded, may be confronted by a request from the authorities to produce his authorisation for such-and-such items of expenditure, and he may then have to bitterly regret that he ever took "the initiative." With regard to the professional efficiency of the great body of army doctors, we are glad to say that on the field, during and after an action, their conduct seems to have been beyond praise. We are told that "it is doubtful whether on any previous occasion the wounded were so quickly collected from the field of battle, so well treated in the field hospitals, or removed to the rear with so little suffering." There were other complaints, however, of the shortcomings of the medical officers as time went on and the excitement of "practice under fire" died away. It was rumoured that one medical officer was so indifferent that he would saunter round the wards with a box of pills and administer one to each patient, utterly reckless as to the nature of the man's ailments. We are glad to learn that all such reports are declared by the Committee to be gross and palpable falsehoods. Having finished their inquiry as to hospital treatment on shore, the Committee had then to pass on to the medical treatment of the invalids sent home in the transport ships. We fear there was much to regret here, but we hardly see that the medical officers "in charge of the transports" were to blame as a rule, although there may have been a black sheep here and there. The bedding on board one ship is said to have swarmed with vermin; but in answer to this it is stated that the men brought the vermin with them—not a satisfactory reply if meant as a justification. In another ship where rations were complained of, it is stated that the fault was to be found in the way the men manipulated the provisions; and in one case alone does there seem to have been an utterly improper supply of provisions.

We have even now not mentioned a tithe of the questions which sprang up to perplex the Committee during the progress of the protracted inquiry. We may instance the power of punishment to be exercised by medical officers, the value of trained female nurses, the attendance on the wives and families of combatant officers, the privileges of the medical officers of the Household Cavalry, and fifty other things; but we must hasten on to notice very briefly the recommendations of the Committee on some of the more important subjects. First in magnitude we consider the conclusion that a check should be placed on the too rapid transfer of slightly wounded men to field hospitals, it having been found that some of these men show no particular hurry to rejoin the colours. We share in the opinion that there should be a separate establishment for the treatment of officers, and we approve of the recommendation that hospitals should be more frequently visited by combatant officers, as tending, at all events, to foster the sympathy which should exist between Tommy Atkins and his captain or lieutenant. Until the evidence produced before the Committee is published we cannot say what led to the recommendations that the examination of medical officers for promotion should be restored; that facilities for study in London hospitals should be afforded; and that sanitary training of medical officers and the Army Hospital Corps should be provided for. We have no doubt that the two latter of the recommendations are very good and very wise, and that some means should be taken of securing that an officer does not rust; but we confess to having had an impression that the professional knowledge of the officers of the Army Medical Department was the one thing that had never been called in question. On the whole, the recommendations give an impression that the Report has been very much *fought over*, and when pieced together at last still bears traces of the struggle. We notice that the Medical Department is *not* to have a separate transport, and *not* to have a separate commissariat. It is to have the power to "indent," but the expression is vague, and may mean much or very little. It is to have many small concessions made—it is to become "Royal," for instance; but then, again, to balance the importance of the boon, guards and sentries are to be discontinued by the Army Hospital Corps. The establishment of schools of cookery is indeed a useful recommendation, so also is the suggestion of voluntary aid being accepted in time of war; but we have not discovered any such great salient points in the recommendations as would give promise that in future campaigns the sick and wounded should not have some cause to grumble.

Some of the evidence appears to be very open to unfavourable criticism. We cannot but think that parts of Lord Wolseley's evidence, for instance, do not so much represent what he felt and said in Egypt, as what he has come since to think it would have been useful and well to have said. We have been favoured with some remarks on the evidence by one of the Committee, Sir William Mac Cormac, which support the opinion just expressed. The communication, which is published elsewhere in our columns, will be read with much interest. When the whole work of the Committee becomes available we shall be able to do it more justice, as we shall have the opportunity of studying the minutes of evidence, which must be voluminous.

THE GULSTONIAN LECTURES.

The Gulstonian Lectures of the present year present several unusual features. As these lectures fall to one of the most recently admitted Fellows of the College of Physicians, it is commonly the case that they are given by a young man who has yet to gain a large experience, and whose lectures are therefore rather a promise of work yet to come than a finished achievement. But in 1882 it happened, that among those elected to the fellowship of the College was a physician who, had he practised in London from the commencement of his career, would have attained that honour nearly a generation before, and who stood before the College as one pre-eminent in his own department; one distinguished for original research, for extensive and exact knowledge, large experience, and independence of judgment, and remarkable above all for scientific precision of thought and language. Not only was the lecturer one who could speak with exceptional authority, but his subject was in some respects equally peculiar. Sterility is one of the most difficult subjects to investigate, for the reason that the functions of the organs concerned cannot be subjected to the same close scrutiny, in vigorous healthy activity as in weakness, failure, or perversion of function. Besides being one of the most difficult to investigate and treat thoroughly, it is one for which treatment is seldom asked, except by the well-to-do; and, consequently, there is, to an unscrupulous practitioner, great temptation to treat it improperly, to exaggerate the hope of success, and use this hope for the benefit of his own pocket. The only previously published accounts of the subject that are at all trustworthy are the brief chapters on its management

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contained in systematic treatises on diseases of women, and these make no pretence to an exhaustive discussion of it. The books which have been written with especial reference to the sterile condition in women, it is scarcely too much to say, deserve little more than to be ranked with quack advertisements. They differ from these, unfortunately, in that their authors have some technical knowledge and skill; but they resemble them in being wholly untrustworthy, in asserting success in treatment which has never been attained. In the Gulstonian Lectures of the present year we have for the first time the subject of sterility in woman treated according to scientific method and in a scientific spirit.

Dr. Duncan began by defining his terms. Sterility means the failure, under ordinary conditions, to produce living and viable children. It may be absolute, that is, no conception occurring; or not absolute, that is, conception occurring, but from some cause the ovum being cast off before reaching a viable age. Lastly, it may be relative, that is, a child or children may be produced, but the number of children may be below the average produced by women under similar circumstances. This relative sterility shows itself in two forms—as an exhaustion of reproductive power, the general health remaining good; or as an exhaustion both of sexual power and general constitutional strength. The average number of sterile marriages, Dr. Duncan, from various data, puts at about one-tenth of the whole. Married women delaying the commencement of fertility beyond sixteen months after marriage he finds are already exhibiting a degree of relative sterility; and those do so also who do not during married life produce a child every twenty months. Childbearing ceases on an average at between the age of thirty-five and forty; and a woman therefore, who, remaining married, ceases to be fertile before that age, is to that extent relatively sterile. A healthy woman, living in wedlock all her childbearing life, under the most favourable circumstances, should have a family of ten; and those who, under such circumstances, have fewer than ten, are relatively sterile, the degree of sterility being inversely as the number.

These, then, are the data from which we are to infer the presence of sterility, relative or absolute. Dr. Duncan then considers its causes. Proceeding from the lower to the higher, from the simpler to the more complex, he reviews the conditions upon which sterility in animals and plants is known to depend, showing the effect of constitutional conditions—such as cold and heat, overfeeding and underfeeding, youth and old age, degradation of general health, confinement, and interbreeding—in modifying fertility.

Coming then to the constitutional conditions upon which sterility in woman depends, he finds first that the years from twenty to twenty-four are those in which fertility is greatest. Before twenty, and after twenty-four, there is a degree of comparative sterility. Further, too early marriage in itself tends to produce sterility. This tendency to sterility is manifested not only by the non-production of offspring, but by smallness and feebleness of the children that are produced. Idiots and monstrosities are produced under circumstances identical with those which favour sterility. The offspring of relatively sterile parents are often themselves absolutely sterile—a law proved by the frequent barrenness of heiresses, who are, of course, commonly the only children of their parents. The causal conditions which disturb perfect reproduction by inducing defect or deficiency in the offspring, also sometimes lead to fertility excessive as to quantity, though poor or poorer in the kind of offspring produced, as when the number of children is below the average. Excessive families occur chiefly in women married in the ages of weak productive energy. Pluriparity is an abnormal condition resulting from imperfection of reproductive power, and a cause of danger and disaster both to child and mother. It is etiologically connected with idiocy, malformations, and weakness in the former, and with an increased liability to the diseases and accidents of pregnancy and parturition in the latter. The influence of age Dr. Duncan finds to be the most extensive and powerful cause of sterility, and it follows that, for the prevention of sterility, marriage at a proper age, neither too young nor too late, is the best safeguard.

Dr. Duncan then considers causes which may be regarded as pathological, as compared with those previously expounded. Of these, he finds two that are paramount, viz., dysmenorrhœa, and functional disease of the generative apparatus leading to absence of sexual desire and pleasure. The term "dysmenorrhœa" Dr. Duncan understands in a limited sense—not as meaning, according to the usage of most authors, simply menstrual pain, but a neurosis, characterised by painful spasms of the uterus at the menstrual period, independent of any gross structural change in the organ. Absence of sexual desire and pleasure, with or without sexual antipathy and dyspareunia, Dr. Duncan regards as an allied neurosis, not invariably causing sterility, but powerfully favouring it. Excessive sexual desire he regards as an evidence of deficient sexual power, just as is excessive fertility.

In the treatment of sterility there is but one local remedy in which Dr. Duncan appears to believe, and that is the dilatation of the cervix uteri by bougies. The treatment other than this resolves itself into the improvement of the general health. In this branch of the subject Dr. Duncan only gave general deductions as to the conditions which seem to so hinder fertility that, by treatment of them, pregnancy may be rendered more likely to occur. Among these come over-feeding and fatness, and over-indulgence in alcohol.

The local conditions which one studying the ordinary text-books on diseases of women would think the most important of the causes of sterility, the lecturer said very little about. The conditions which render pregnancy impossible, such as absence of uterus, etc., he dismissed at once, their influence being too obvious to need elucidation. But other local conditions upon which much has been written, and for which perhaps too much done, he dismissed with a contempt which, seeing the eminence of some of his contemporaries who believe in them, may seem scarcely appropriate. A belief in the efficiency of flexions, of stenosis of the cervix, or cervical endometritis, for instance, as causes which actually prevent pregnancy, is not confined to peripatetic sterility-curers, but is, strange as it may seem to some, held by some English gynæcologists who are respected and admired; and we cannot but think that Dr. Duncan's rejection of their views would have much more influence upon professional opinion if he had collated, examined, and criticised the evidence for and against the opinions in question with completeness and care, and in a manner which should show that, even though his conclusion might be in the main adverse, he was anxious to discover and do justice to any grains of truth that the theories refuted might contain. Although we are disposed to think Dr. Duncan more nearly correct than his opponents, yet we cannot but think a less scornful attitude would win more adherents to his side. However, we would hope that, as they are, the lectures may have some influence in teaching the profession to regard proposed or asserted cures of sterility in a scientific light.

THE WEEK.

TOPICS OF THE DAY.

It has been decided to renew the practice of taking daily records of the temperature of the river Thames—a practice which, after many years' continuance, was relin-

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quished in 1880. Instructions have been given by the Committee of the Corporation, who act as Port Sanitary Authority for London, to Mr. G. J. Symons, F.R.S., to sketch a scheme of observations to be organised and continued at their expense. Some years ago the Corporation purchased the dockyard at Deptford, and converted parts of it into a foreign cattle market, and for the convenient unloading of vessels three jetties were run out, each to a distance of about 200 feet, into the river. The extremities of these jetties have a depth of eleven feet of water, even at the lowest state of the tide; there is, therefore, at all times a sufficient volume of water to entirely annul any warming or cooling effect due to shallow shore-water: and it is here that the operations will be conducted. For observations of river or sea temperature it is, of course, imperative that the thermometers be so constructed as not to be liable to derangement in pulling up or letting down, and the instrument to be employed in this case will be something like those used at sea, but specially adapted to the circumstances. Two have been provided—one to show the highest and lowest temperature within a foot of the bed of the river, the other to be kept floating with the tide, but always two feet below the surface. Besides these, some air thermometers, etc., have been erected on a grass plot opposite to the offices. Taken together, these should supply all the data required for a climatological station, and a copy of the results will be forwarded to the Meteorological Society for publication. It is expected that these observations will be of considerable interest when compared with those taken on the Observatory Hill at Greenwich, which have for so many years been accepted as representative of the climate of London. In the organisation of these river observations, Mr. Symons has been assisted by the Astronomer-Royal and Mr. Ellis, under whose supervision the later river observations were made.

It is well now and again to remind the wearers of those very important aids to health—"false" teeth—that they have not only their inconveniences but their special dangers. An inquiry was recently held by Mr. Langham, the coroner, at St. Bartholomew's Hospital, on the body of a Mr. Richards, a Congregational minister, who died in that institution from the effects of swallowing a couple of false teeth. A sister of the deceased, who resided in Wales, deposed that a few days since he accidentally swallowed two false teeth which he wore, and, on the advice of his medical attendant, was brought up to London. He was admitted into St. Bartholomew's Hospital, where he was promptly attended to, but he died on the 16th inst. Mr. Power, house-surgeon, stated that he saw the deceased on his admittance into the institution on the 14th inst., when he was suffering from a severe injury to the throat through swallowing the false teeth, and could scarcely breathe. An operation was at once performed, which appeared to give relief, and he progressed satisfactorily until twelve o'clock on the 16th inst., when he became rapidly worse, and expired about three o'clock the same day. Death had resulted from a small abscess, caused by the obstruction, which had made its way into the trachea.

We have so frequently recorded the dangers resulting from the manner in which diseases of an infectious nature are conveyed by canal-boats, that it is satisfactory to find that there is a prospect of legislation in this direction. In the Canal-Boats Bill, recently introduced into the House, Mr. Burt, M.P., proposes to make the registration of each vessel annual; the renewal of the certificate of registration would then only be granted on proof that the conditions of such registration had been duly complied with. The Bill also prohibits the employment of children under the age of thirteen years in a canal-boat, or for the purposes of one, unless they have attained a certain standard of instruction, to be fixed by the Local Government Board with the consent of the Education Department. Certain penalties are provided for non-compliance with any of the clauses of the Act; and every canal-boat that contains accommodation for cooking or sleeping is to be deemed to be used as a "dwelling" within the meaning of the Act of 1877, and of this amended Act. It is to be noted that the expression "canal-boat" in these Acts is to be made very comprehensive by including "all travelling and temporary dwellings not raised for the relief of the poor." It is to be hoped that, with the view of making these Acts complete, more stringent regulations will be introduced for the medical inspection of canal-boats and their occupants.

Many of the difficulties of workhouse legislation run in very small grooves, and it would certainly seem that, in dealing with the poorer classes, some of those who are elected to act as guardians administer the law on a particularly hard-and-fast line. At a recent meeting of the Worksop Guardians, it appeared that the issue of tobacco to paupers is a standing perplexity in that part of the country. In the Rotherham and Retford Unions tobacco is supplied to the inmates by order of the medical officers, and as it is generally understood that these gentlemen recommend it in the shape of a medical comfort, the expense is borne by the ratepayers. The Medical Officer of the Worksop Union declines, however, to adopt that view, and hitherto the guardians have themselves good-naturedly borne the expense. They have now, however, come to the conclusion that if tobacco is a medical comfort at Rotherham and Retford, it should equally be so at Worksop. We fear it is almost hopeless to suggest such a course in the present day; but surely the central authority might deal with this question, and authorise a small expenditure which, without unduly pressing on the ratepayers, would secure what really is a comfort to many a broken-down and aged pauper.

Dr. C. H. Fisher, Medical Officer to the Melton Union Workhouse, near Sittingbourne, has presented a special report to the Board of Guardians upon the subject of the consumption of alcoholic liquors in that institution, by way of reply to the comments of a visiting guardian, who stated that he observed that stimulants were given to the sick with scarcely any exception. Dr. Fisher explained that there were sixty-three inmates on the books, all more or less worn out and very infirm. Of the sixty-three, only eighteen were having wine and spirits, whilst several of the aged were ordered small quantities of beer or porter. A visit to the hospital would, he says, fully prove the necessity for the issue of stimulants in moderate quantity. He might remark that in nearly all the unions where a non-stimulating diet had been tried it had proved a failure, and he was thoroughly convinced, from long experience, that with the aged poor of that malarious district it was imperative that stimulants should be liberally ordered in bad cases.

In Sunderland two cases of reckless exposure whilst suffering from small-pox are reported to have recently occurred. In the first of these, Margaret Dunn, aged eighteen, was charged at the local police-court with being in a public place while suffering from this disease. The young woman had travelled from Seaham Harbour by railway, but at Sunderland Station the ticket-collector, noticing the state in which she was, refused to allow her to proceed, and she was taken off to the infectious hospital. She was fined 40s. and costs. In the second case, an elderly lady, named Miss Holmes, had fallen a victim to small-pox, her housekeeper having, unknown to her, brought into the house a child which was suffering from the disease.

At a recent special meeting of the Cardiff Town Council

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the recommendation of the Waterworks Committee, that a plan for the extension of the system at a cost of £218,000 be adopted, was, after a long discussion, rejected in favour of an amendment to extend the system at a cost of £27,000 in addition to the sum named, on the ground that a greater supply would be thereby obtained.

THE ROYAL COLLEGE OF PHYSICIANS.

At an extraordinary meeting of the Royal College of Physicians of London, held on Thursday, the 17th inst., the following eight Fellows, who had been elected at the last meeting, were admitted:—James Sawyer, M.D., of Birmingham; George Frederick Elliott, M.D., of Hull; Robert Mundy Gover, M.D., of the Home Office; Julius Dreschfeld, M.D., of Manchester; Francis Warner, M.D., of Harley-street; William Murrell, M.D., of Weymouth-street; Henry Cook, M.D., of Teignmouth; and Thomas Clifford Allbutt, M.D., of Leeds. The Licence of the College to practise was granted to Mr. George Arthur Johnson, of Guy's Hospital. Mr. William Osler, M.D., of McGill College, Montreal, was elected to the Fellowship of the College. The Baly Medal for 1883 was awarded to Dr. Brown-Séquard. The report on protection of the College from fire was referred back to the Committee. The finance report was before the College, but the full consideration of its recommendations was deferred for the present. It was decided that the examinations on hygiene and state medicine shall be conducted by special examiners to be appointed by the College; and, "That registered practitioners be admissible, under conditions, to the examinations on hygiene and state medicine in order to qualify for a distinct certificate of proficiency in that subject." Dr. Garrod was elected on the Council of the College in the room of Dr. Quain, who has resigned. Dr. Dyce Duckworth and Dr. Ewart were appointed representatives of the College at the coming Congress on Colonial Medicine at Amsterdam.

MEETING OF THE GLASGOW FACULTY.—THE NEW MEDICAL BILL.

A largely attended meeting of the members of the Faculty of Physicians and Surgeons of Glasgow and of the medical practitioners of the West of Scotland was held on the 18th inst. to consider the Medical Bill now before the House of Commons. Resolutions were adopted approving generally of the measure, but declaring that the representation proposed to be assigned to the Medical Corporations of Scotland is inadequate; that all candidates, whether studying within or outside the Universities, should be admitted to the examinations of the Board on a uniform fee; and that to all the candidates who pass a Medical Board examination there should be granted a registrable title.

A RECENT PAPER ON VACCINATION.

On Monday evening last a numerously attended meeting, including several members of the medical profession and representatives of various metropolitan boards of guardians, was held at the offices of the Society for the Abolition of Compulsory Vaccination, in Victoria-street, Westminster, to hear a paper read by Dr. H. Tomkins, of the Fever Hospital, Manchester, on "Vaccination: the Amount of Protection afforded by Vaccination against Small-pox." Dr. Tomkins pointed out that the vaccination question not only affected medical men, but it was one about which every citizen had a right to form an opinion. Some objected to vaccination as useless; others, because it was compulsory. For himself he was strongly in favour of vaccination, since he knew as a fact that the death-rate of the country was not so high now as it was in the time of free vaccination. During the period he had had charge of the Manchester Fever Hospital, 1138 cases of small-pox had come under his care. Of these, 195 died; 932 had been vaccinated, 96 admitted that they had never been vaccinated, 46 were said to have been vaccinated, and in 64 cases it was not known whether vaccination had or had not been performed. The death-rate of the vaccinated cases was a trifle over 9 per cent.; whereas, out of the 96 unvaccinated cases 60 died. He should, himself, uphold vaccination in every shape and form; feeling confident that, if repeated after proper intervals, no one need have any fear of dying from small-pox. He moved—"That in the opinion of this meeting vaccination, properly performed, has the power for a limited number of years to protect mankind almost absolutely from death from small-pox." This was seconded "for the sake of a discussion," and then the Secretary of the London Society for the Abolition of Compulsory Vaccination moved an amendment to the effect that the statistics produced by Dr. Tomkins demonstrated the failure of vaccination to protect from small-pox. It is, perhaps, quite needless to add that the amendment was carried by a large majority, the place of meeting and the character of the majority of the audience being hardly conducive to serious and unbiassed discussion.

THE PARIS WEEKLY RETURN.

The number of deaths for the nineteenth week of 1883, terminating May 10, was 1272 (649 males and 623 females), and of these there were from typhoid fever 57, small-pox 13, measles 25, scarlatina 2, pertussis 16, diphtheria and croup 43, dysentery 1, erysipelas 3, and puerperal infections 7. There were also 73 deaths from tubercular and acute meningitis, 254 from phthisis, 37 from acute bronchitis, 119 from pneumonia, 59 from infantile athrepsia (20 of the infants having been wholly or partially suckled), and 30 violent deaths (23 males and 7 females). The number of deaths registered is below that of the mean of the last four weeks (1293). The deaths from typhoid have, however, notably increased (from 31 to 57), and the number of admissions to the hospitals is also on the increase. A slight increase of deaths from diphtheria has also taken place, and a slight diminution of those from small-pox and measles. The births for the week amount to 1287, viz., 657 males (470 legitimate and 187 illegitimate) and 630 females (449 legitimate and 181 illegitimate): 80 infants were born dead or died within twenty-four hours, viz., 41 males (31 legitimate and 10 illegitimate) and 39 females (26 legitimate and 13 illegitimate).

A NEW DRESSING FOR WOUNDS.

The list of materials which have been suggested for the purpose of dressing wounds is already so considerable that it would almost require a lifetime to test them by practical experience and to estimate the rival claims of the various dressings. Imbued as we were with the notions of antisepticism circulated by Professor Lister, the restoration to use of such apparently unclean substances as turf, moss, and mud came upon us as a startling event when we had been trained to look upon all unprepared articles as scientifically filthy and improper. From Professor Bruns of Tübingen we receive a fresh addition to our means for carrying out the after treatment of wounds, in the form of a preparation which he calls "wood-wool," and which he recommends to surgeons (*Berl. Klin. Woch.*, No. 20). Fine-grained wood in the form of splinters and shavings such as are largely employed in paper factories, according to Bruns, is the kind of material to be used in preparing the dressing which is called wood-wool. Pine wood is preferred, and especially the *Pinus picea*, which is poorer in resin and of coarser grain as compared with the wood of other pines and firs. The further preparation of the wood shavings and splinters consists in their reduction to a state of finer division by being rubbed through a wire sieve, then dried, and finally

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impregnated with various antiseptic substances. That considered best is a half per cent. of corrosive sublimate and 10 per cent. of glycerine (the percentage apparently referring to the ratio between these substances and the wood-wool). The advantages of such a dressing are believed to be manifold. Compared with ashes and turf it is absolutely clean, fresh, and of white colour, and is soft and pliable like ordinary wool, and withal of extraordinary cheapness. It possesses, in virtue of its contained resin and ethereal oils, certain antiseptic properties, and is so easily adapted to the wounded parts and of such elasticity that a uniform and equable pressure is easily obtained. Its principal property, however, is its extraordinary power of taking up fluids; in this it excels all other forms of dressings: it absorbs twelve times its own weight of fluid, so that ten grammes of dried "wood-wool," after complete saturation, weigh 130 grammes. Simple sawdust absorbs only three to four times and a half its weight of water, ashes only nine-tenths, and sand only four-tenths. This dressing has been in use by Bruns for half a year, and he has every reason to be greatly satisfied therewith. With the exception of one case of erysipelas no secondary accidental wound diseases were met with.

GUY'S HOSPITAL.

A PORTRAIT of Sir Astley Cooper, the celebrated surgeon, through whose influence the United Schools of Guy's and St. Thomas's became separated, has recently been presented to Guy's Hospital by Mr. R. Clement Lucas. The painting, which has been hung in the operating theatre, is a very excellent copy by Mr. J. L. Wimbush of the original by Sir Thomas Lawrence, in the possession of the Royal College of Surgeons. It is a three-quarter portrait representing Sir Astley as if addressing an audience, and is considered one of Lawrence's best works.

LONDON ŒDILES.

ON Wednesday evening last, Dr. Norman Chevers delivered an address, at 9, Conduit-street, W., on the objects of the Sanitary Assurance Association, which he entitled the "London Œdiles." Dr. Chevers compared the sanitary condition of ancient Rome and modern London, and referred to his experience in Calcutta; and he urged that the sanitary condition of London was such that no householder should be satisfied without the assurance of some competent authority that his dwelling, whether a palace or a cottage, was free from drain contamination. He expressed an opinion that consumption was hereditary principally because successive generations neglected to remedy the sanitary defects from which their forefathers suffered. A discussion followed, in which Sir Joseph Fayrer, Mr. H. Rutherfurd, Mr. Cave Thomas, Mr. Mark H. Judge, and others took part, and a desire was unanimously expressed in favour of the lecture being re-delivered to a popular audience at Exeter Hall or other capacious building.

THE ELECTION OF PROFESSOR RICHET.

THE place left vacant in the Section of Medicine and Surgery of the Académie des Sciences by the death of Professor Sédillot has just been filled up by the election of Professor Richet. The scheme of the Academy having been devised before physiology had commenced attaining its present commanding position in the world of science, the physiologists have, on the occurrence of vacancies in the Section of Medicine and Surgery, endeavoured to wrest the seat from the doctors and surgeons. Indeed, Claude Bernard always actively opposed the admission of the latter, on the grounds that their rewards, as their calling, were non-scientific though lucrative, and, in fact, that they had no business in the Academy at all. One would think that the natural solution of the difficulty would be to found a Section of Physiology, or to incorporate this with the present Section of Anatomy and Zoology. However, in this instance the surgeons have been triumphant. For the three candidates recommended by the Section—Professor Richet, Professor Brown-Séquard, and Dr. Jules Guérin—the votes given on the first ballot were 22, 18, and 14; but as Professor Richet did not secure an absolute majority of the fifty-seven Academicians present, a second ballot was taken, when he polled 32 votes to Professor Brown-Séquard's 23.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE annual general meeting of the Society was held in the rooms of the Royal Medical and Chirurgical Society, Berners-street, W., on Wednesday, May 16, at 5 p.m. In the absence, through illness, of the President, Sir George Burrows, Bart., Mr. Charles Hawkins, Vice-President, took the chair. The chairman, before commencing the business of the meeting, moved a vote of sympathy with the President on his late serious illness, and regret at his inability to preside; the members cordially responded to the motion. The election of officers for 1883-84 took place—Dr. Johnston was elected a Vice-President in place of Sir Thomas Watson, Bart., deceased; Mr. Cooper Forster, Mr. Garman, Mr. Freeman, Dr. Garrod, Dr. Grigg, and Mr. Warrington Haward were elected in the place of the six senior directors who retired. Mr. Upton, solicitor to the Society, and Mr. Croft, F.R.C.S., a benefactor, were elected honorary members. From the report and statement of finances read, it appeared that eighteen new members had been elected in 1882, nine had died, and three had resigned or ceased to be members; the number of members being only 370 out of at least 4500 members of the profession who were eligible for election. Six new widows had been added to those already receiving grants, and four had died or become ineligible for further assistance—leaving sixty on the books at the end of the year. One fresh orphan had been relieved, five had become too old for further assistance, and only five remained on the funds. A sum of £2871 10s. had been distributed in grants during the year, and the expenses had been £190 6s. 9d. The receipts available for the payment of grants and expenses had been £3061 16s. 9d., the balance on receipts and expenditure being £130 16s. 9d. No legacies had been received during the year. A vote of thanks to the editors of the medical journals for their aid in forwarding the interests of the Society was proposed by the acting treasurer, and carried unanimously. Regret was expressed by many members present that so few medical men availed themselves of the benefits offered by the Society, especially since the alterations of the by-laws had made so great an addition to the income allowed to a widow (from £50 to £80), and had in so many other ways increased the powers of the Society to render assistance to the widows and orphans of deceased members. The Secretary stated that the increased radius of the Society (now twenty miles round Charing-cross) had as yet made little or no difference in the number of the members. A vote of thanks to the chairman closed the proceedings.

THE COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES IN NOTTINGHAM.

THE Town Council of Nottingham have decided to put in force the powers relating to the notification of infectious diseases conferred on them by the Nottingham Improvement Act. One portion of the clause has been in force for about a year, and the Medical Officer of Health for the district states in his report to the Health Committee that the notifications respecting cases of small-pox have been attended with the greatest advantages to the community. Notification has

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enabled the Health Committee, by taking the necessary precautions, to limit the spread of disease, as well as to diminish its fatality, the latter result being of course the natural outcome of the precautionary measures adopted for preventing its extension. The adoption of these measures has also, it is stated, prevented many susceptible persons from being attacked with scarlet fever; and in these cases the notification has been instrumental in furthering this desirable object, by keeping the Medical Officer of Health informed as to any cases which may have occurred. The Town Council have now taken a further step in this direction by passing a resolution requiring local medical practitioners to notify the existence of typhus fever, cholera, typhoid fever, and diphtheria. The future reports of the Medical Officer of Health will be watched with some interest as affording an illustration of the manner in which the new Act is viewed by the local practitioners of Nottingham, since it is certain that no legislation in this direction can hope to succeed without the cordial co-operation of the profession.

THE ENGLISH REGISTRAR-GENERAL'S RETURN FOR THE MARCH QUARTER, 1883.

THE first quarterly return of the English Registrar-General for the present year has recently been published; and the following is a short summary of the information contained in it:—The births registered in England and Wales during the three months ended March last were 232,086, showing an increase of 8284 upon the number returned in the corresponding quarter of 1882. The annual birth-rate was equal to 35·2 per 1000 of estimated population, and was 1·0 below the mean rate in the ten preceding corresponding quarters. The birth-rate last quarter, however, showed an increase of 0·8 upon that which prevailed in the corresponding period of 1882, when the birth-rate was lower than that recorded in the first quarter of any year since 1850. The lowest county birth-rates during the period under notice were 25·9 in Huntingdonshire and 27·3 in Herefordshire, and the highest 39·9 in Durham and 40·2 both in Staffordshire and Nottinghamshire. In the twenty-eight great towns the birth-rate of this quarter averaged 36·7 per 1000, and was 1·5 above the general English rate, and 0·5 above the rate recorded for London. The deaths registered during the period under notice were 146,856 in England and Wales, and were equal to an annual rate of 22·3 per 1000 of the estimated population. This death-rate was 1·0 below the mean rate in the ten preceding corresponding quarters, but exceeded by 0·8 and 0·7 respectively the exceptionally low rates in the first quarters of 1881 and 1882. The report remarks that, judged by the weekly returns from the twenty-eight great towns, the rate of English mortality would have been again exceptionally low last quarter, but for the unusually cold weather during March. The rate of mortality in these towns, which did not exceed 22·7 and 22·8 in January and February last, rose to 26·1 in March last. Assuming a constant proportion in the three months of the quarter between the rate of mortality in England and Wales and in the twenty-eight towns, it may be estimated that the rate in England and Wales did not exceed 21·3 and 21·4 per 1000 in January and February, and that it rose to 24·5 in March. In the several English counties last quarter, the death-rates ranged from 17·3 in the extra-metropolitan portion of Surrey, and 17·6 in Sussex, to 25·2 in Lancashire, and 26·9 in Monmouthshire. The total number of deaths attributable to the class of zymotic diseases was 13·184, corresponding to an annual rate of 2·00 per 1000, against an average rate of 2·85 for the ten preceding first quarters. The most fatal of these diseases was whooping-cough, from which cause 3462 deaths were registered, and next in order came scarlet fever—responsible for 2837 victims. It is also noticeable that the mortality from small-pox during this quarter (269) corresponded to an annual rate of 0·04 per 1000, against an average of 0·11 for the ten preceding first quarters; it was, however, considerably greater than in either of the two preceding quarters, when the number of deaths was 209 and 190 respectively. The number of uncertified deaths during this quarter was 6238, or 4·2 per cent.; the proportion did not exceed 1·4 per cent. in London, whereas it averaged 4·7 per cent. in the rest of England and Wales. In the counties the proportion of uncertified deaths ranged from 1·2 and 1·4 per cent. in Wiltshire and Buckinghamshire, to 7·1 in Herefordshire, 7·8 in Cornwall, and 8·0 in Westmoreland. In Wales, 11·1 per cent. of the causes of death were uncertified, the proportion being equal to 10·9 in South Wales, and 11·5 in North Wales.

GLASGOW DISTRICT BOARD OF LUNACY.

THE first meeting of the Glasgow District Board of Lunacy, recently elected under the provisions of the 61st clause of the Prisons (Scotland) Act, 1877, was held on the afternoon of the 16th inst. In the matter of the proposed site for an asylum, the clerk read a letter from the General Board of Lunacy in regard to the acquisition of the estates of Browntod and Hartwood; and a deputation consisting of the chairman, Sir Wyndham Anstruther, and other gentlemen, was appointed to confer with the General Board on the subject.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the meeting of this Society on Tuesday last, four papers bearing on the diagnosis and surgical treatment of injuries and diseases of the kidneys were read, and shortly discussed. What, on previous occasions, we have called renal surgery has undergone a vast change within the last two or three years; indeed, so great have the changes become, that there are those among us who seriously advise the removal even of kidneys for malignant disease of the organ—such an operation to be undertaken, of course, with deliberation, and for the same reason that a cancerous breast is removed. In the cases related, the only point in common was the organ affected; the disease varied considerably, and not less so the ages of the patients. Mr. Thornton's case was a complicated one. The patient had had some cysts connected with the kidney operated on in 1877 by Mr. (now Sir) Spencer Wells. She came under treatment again for an ovarian cyst, which Mr. Thornton removed. While the abdomen was open he examined the kidneys and ureters, and found the left one healthy; but the right kidney and ureter large and sacculated. She recovered rapidly from the ovariotomy, but, soon after getting up, the swelling in the right loin again manifested itself, and finally broke. She recovered from this and left the hospital six weeks from her admission. Shortly after this there was a swelling in the left loin, with a similar sequence of events. Dr. Rawdon, of Liverpool, detailed the history of a case of nephrectomy for rupture of the kidney, where lateral cystotomy was also subsequently performed for the relief of cystitis caused by retained clot. Unfortunately the patient died. Whether regarded from the diagnostic side, or as a bold and original method of treating a rare but very dangerous accident, the case stands almost unique. Sir Spencer Wells's case of excision of an enlarged cancerous kidney engrossed most of the discussion. The case was that of a gentleman about fifty-eight years old, who had suffered from oft-recurring and dangerous hæmaturia. Operative treatment was suggested some months before the patient would consent to it. Hence valuable time was lost; the disease grew more formidable, while the patient's strength lost ground. Dr. Dickinson thought the case was one which

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raised the question, was it justifiable to deal with malignant tumours of the kidney. In the present case the man had had the best surgical aid that could be obtained, and therefore the fatal result could only depend on the malignant nature of the disease. In his own experience of nineteen cases, in three only was the disease confined to the organ in question. In all the other sixteen, secondary deposits were found in other parts; a fact, he thought, which alone contra-indicated surgical interference. In reply, Sir Spencer said he agreed in the main with Dr. Dickinson; on the other hand, it was extremely difficult to say beforehand whether in a given case the disease was malignant or otherwise. In the case related the history spread over so many years that he felt some degree of doubt. Furthermore, the patient was bleeding to death, and he felt that it would have been a reproach to surgery not to have made some effort to save the patient's life, just as he certainly would have done had the hæmorrhage been coming from the femoral artery. The President's case was a curious one. A girl had been knocked over by a light cart, one wheel of which passed over her groin. Subsequently a painful swelling, which fluctuated, formed at the seat of injury. She never passed any blood in her urine. The swelling was tapped with a trocar and canula, and some chocolate-coloured fluid was got out. On heating, this fluid gave off a urinous smell, and on analysis a considerable amount of urea was found present. The question to decide was the source of the urea. Had there been rupture of the kidney the absence of hæmaturia was remarkable. On the other hand, how did urea get into a perinephritic effusion of blood? The author suggested that it was possibly by endosmosis. We have said enough to show what an interesting evening the Fellows enjoyed. Surgery at the present time is ahead of diagnosis. The lesson to be taken to heart is the need for a careful study of the symptoms found in all these and the many other recorded kindred cases, with a view to the selection of suitable cases at a period of the disease when recovery is not interfered with by almost irreparable organic complications. The full report will appear in due time.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The quarterly meeting of the Medico-Psychological Association was held at Bethlem Hospital on Friday, May 18; Dr. D. Hack Tuke in the chair. Drs. Wiglesworth, Macfarlane, and Blair were elected to be members of the Association; after which a paper was read by Dr. Sutherland on "Prognosis in Cases of Refusal of Food," in which he advanced certain propositions based upon the circumstances under which, according to his experience, prognosis would be good or bad. A long and interesting discussion followed, embracing the causes of the refusal of food; the best method of administering it, whether by the stomach-pump, the nasal tube, or the enema; the beneficial effect of enforced rest at the first appearance of the symptoms, etc.; several of the speakers concurring in the desirability of varying the treatment.

PARIS REGISTRATION RETURNS FOR 1882.

During 1882, 21,411 *marriages* were celebrated, viz., 17,579 between bachelors and spinsters, 1206 between bachelors and widows, 1710 between widowers and spinsters, 904 between widowers and widows, and 12 between divorced persons. There were registered 62,581 *births*, viz., 31,828 males and 30,753 females, *i.e.*, 103·5 males to 100 females. Of these 62,581, 46,059 were legitimate, 3471 illegitimate and recognised, and 13,051 illegitimate and unrecognised. The *deaths* registered were 58,702, 17,411 of these being of children under five years of age. The proportion of sexes was 116 males to 100 females, and the proportion to the births was 106 6 births to 100 deaths. Of these 58,702 deaths, 10,342 were caused by phthisis, and 7579 by epidemic diseases, viz., typhoid fever 3352, small-pox 661, measles 1018, scarlatina 158, and diphtheria 2300. There were 767 suicides, 612 males and 155 females. There were registered 5170 infants born dead, viz., 3486 legitimate and 1684 illegitimate.

COLLEGIATE LECTURES.

Mr. Henry Power, F.R.C.S., will commence his course of three lectures "On the Lachrymal Apparatus and Accessory Organs of the Eye," in the Theatre of the Royal College of Surgeons, on Wednesday, the 30th inst. He will be succeeded by Mr. Frederic S. Eve, F.R.C.S. (the Erasmus Wilson lecturer), who will deliver three lectures "On Cysts and Cystic Tumours in General," commencing on the 6th prox. Professor Jonathan Hutchinson, F.R.S., will conclude with six lectures "On Certain Diseases of the Tongue," commencing on the 13th prox.

HIGH MORTALITY FROM WHOOPING-COUGH AT DUNDEE.

The Dundee Sanitary Committee have had under consideration the enormous death-rate from whooping-cough during the last few months. The Medical Officer of Health reported last week that during the month of April there had been no less than forty-three deaths, and that from December 1 to April 30, a period of only five months, whooping-cough had caused 225 deaths in Dundee. It was unanimously resolved that the sanitary officers of the Commissioners, with the sanction of the Convener, should be entitled to enforce all the rules of the Commissioners both upon teachers in day and Sunday schools, and parents of children attending schools, and all others concerned, regarding whooping-cough, as well as to enforce Section 42 of the Public Health Act in respect to infectious diseases generally.

MEDICAL WOMEN IN BOMBAY.

The *Hindoo Patriot* states that the project for introducing medical women into Bombay is now fairly established, upwards of 40,000 rupees having been already subscribed for this purpose. The scheme includes four distinct objects—the bringing out of women-doctors from England; the establishment of a dispensary for the poor; medical education for female students, through the Grant Medical College; and, finally, the establishment of a hospital for women and children. A Parsee has offered a lakh of rupees to build a hospital of the latter description.

VACCINE LYMPH FROM THE CALF.

It is reported that there has been a fear, for some time past, that the calves which are used at the Animal Vaccine Lymph Station in Lamb's Conduit-street, for vaccination purposes, might be infected with foot-and-mouth disease. The notice of the Privy Council has been called to the matter, and arrangements have been sanctioned, by which a kind of quarantine will be established so as to prevent the contagion being conveyed to the calves. Extensive structural alterations are being made on the premises to prevent the spread of the disease should any case of infection occur, and the authorities are believed to entertain strong hopes of being able to keep the station free from the epidemic.

BENEFIT SOCIETIES AND THEIR DOCTORS.

At the Newcastle-under-Lyme County Court, a case of some importance to members of these societies is reported as having been recently heard. An Odd Fellow sued the trustees of his lodge for the amount of his private medical attendant's bill, on the ground that the doctor employed by the lodge

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had only a surgeon's qualification. The judge said that the single qualification was not sufficient, and gave judgment for the amount.

The Royal College of Physicians will hold a *conversazione* at the College on some evening during the season, most probably in June.

At the recently held First Examination for the Licence of the Royal College of Physicians, 126 candidates presented themselves, and eighty-seven (two-thirds of the number) were approved by the examiners.

The Medical Act Amendment Bill still stands in the "Orders of the Day" of the House of Commons for the second reading; and there seems to be but little chance of its getting any further for some time to come. That very prominent and active among blockers (we had very nearly automatically written the word with a different second syllable), Mr. Biggar, has blocked the Bill; but it seems to be generally believed that no amendments will be seriously offered till the measure is in committee.

Candidates for the Professorship of Physiology in the University of Cambridge, and candidates for the Professorship of Anatomy in the same University, are requested to send their names to the Vice-Chancellor on or before June 7.

The following candidates have passed the second part of the Third Examination for the degree of M.B. of the University of Cambridge:—Class 1—Morris, B.A., Gonville and Caius; Morrison, B.A., Christ's; Syers, non-collegiate. Class 2—Deighton, B.A., and Taylor, B.A., Peterhouse; Dowson, B.A., Christ's; Floyer, B.A., King's; Pash, Pembroke; Peskett, M.A., Downing; Sanders, B.A., and Whittingdale, B.A., Gonville and Caius; Slater, B.A., St. John's.

Dr. Julius Althaus has been elected a Corresponding Fellow of the New York Academy of Medicine.

At a General Court held May 9, the governors of Guy's Hospital appointed Dr. Braxton Hicks, F.R.S., to be Consulting Obstetric Physician to the Hospital.

The inaugural dinner of the Cambridge Medical Graduates' Club will take place on Wednesday, June 27, at the Marlborough Rooms, 307, Regent-street, Professor Paget, M.D., F.R.S., in the chair.

Ambulance Litters in Hyde Park.—In accordance with leave given by the First Commissioner of Works, an "Ashford" litter, and a hamper containing splints, bandages, and other things necessary for the first treatment of injured persons, have been placed at the Hyde-park Corner lodge by Mr. J. Furley, deputy-chairman of the St. John Ambulance Association, who has given instructions as to their employment. A second litter will in a few days be put in another lodge; meanwhile, it has been left at the Hyde-park Police-station, in order that the constables, many of whom hold certificates of the St. John Ambulance Association, may have an opportunity of practising with it.

Deaf and Dumb Institution.—The annual meeting of the subscribers of this Institution was held at Langside on the 16th inst. The annual report stated that the number of pupils in the Institution at the vacation in June last was 140. Of these 23 left finally, and 117 returned in August. During the past session 25 new pupils were admitted, leaving the total number on the roll for the year at 142, or an increase of two over the previous year. The treasurer's accounts showed a balance of £559 7s. in the bank and in the treasurer's hands, and the stock account now amounted to £26,200 19s. 6d.

SOME REMARKS ON THE EVIDENCE

GIVEN BEFORE THE

COMMITTEE OF INQUIRY ON HOSPITAL MANAGEMENT IN THE FIELD.

By SIR WILLIAM MAC CORMAC.

General Lord Wolseley says, speaking of his visit to the Ismailia Hospital on August 26—"I was immensely disappointed with the condition of the Hospital, and thought it very discreditable. The men were very uncomfortable. There were quantities of flies, and they had no mosquito-curtains, and they seemed to be short of hospital attendants." The senior medical officer in charge, Dr. Beath, who accompanied Lord Wolseley on this occasion, states that the General spoke to him "in the most complimentary way," and expressed himself as "highly satisfied with everything in the Hospital."

Lord Wolseley again visited the Hospital on August 30 and 31, or August 31 and September 1, and on these occasions Dr. Veale, then the Principal Medical Officer, tells us "he found no fault whatsoever. On the contrary, when leaving the Hospital on the evening of the second day he thanked me emphatically twice over for the care and attention which he said he saw that I and the other medical officers had given to the sick. Not a syllable that could be construed into disapprobation emanated from Lord Wolseley at that time." Moreover, the General appears not to have expressed any adverse opinion of the Hospital to the Surgeon-General at the time, and the latter officer altogether dissents from Lord Wolseley's description.

Great complaints were made of the bread, which was bad. It seems to have been first issued by the Commissariat on August 27, and on September 2—probably as soon as the limited resources of Ismailia could furnish it—the so-called French bread was obtained for the Hospital. Lord Wolseley blames the doctors for having no better bread, and considers a military officer would have obtained better; but, in point of fact, there was at this time no other bread to be had. Indeed, Surgeon-General Hanbury says there was absolutely nothing procurable in the bazaar at Ismailia for the first four or five days after his arrival. Meanwhile, there was no failure of bread stuff, for there was good biscuit in abundance. There must be some error in Lord Wolseley's statement, for on August 26 (the day he visited the Ismailia Hospital, and pronounced the bread he found there "unfit for human food") no bread had been yet issued by the Commissariat.

It would be unfair, I think, to overlook the comprehensive character of the medical work performed in Egypt, compressed, as it of necessity was, within the brief limits of the campaign. As may be seen by the evidence, hospitals had to be quickly organised in empty buildings, foul often to a degree only known in Eastern countries, and at first almost everything required, outside the bare equipment, had to be extemporised. Works of drainage and water-supply had to be done. Ventilation had to be provided. Preparations had to be made for the various actions fought or anticipated. Arrangements had to be completed for rapidly conveying the sick and wounded along the canal or railway, and for a special boat service on the Nile to Alexandria. Food and medical attendance had to be provided along these lines. The transports had to be inspected, invalids selected, and then embarked. A hospital was established at Alexandria, another at Ramleh, and another at Ismailia, with field hospitals in advance. At Cairo the Citadel Hospital was organised, also a hospital at Abassayeh Barracks, and a camp hospital at Ghezireh.

Collegiate Examiners.—The Council of the Royal College of Surgeons will in June next proceed to the election of four Examiners in Medicine from the Fellows of the Royal College of Physicians, and two Examiners in Midwifery either from the Fellows of the College or from the Fellows of the College of Physicians. Candidates are invited to send in written applications for either of the appointments.

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MEDICAL MATTERS IN PARLIAMENT.

HOUSE OF COMMONS—MONDAY, MAY 21.

The Delay of Promised Measures.—Sir H. Wolff having inquired of the Secretary of State for the Home Department when it was intended to bring in the measures in substitution for the Contagious Diseases Act, and the Bill for the Protection of Young Girls,—Sir William Harcourt said that in the absence of the Secretary of State for War he could not state when the measures in substitution for the Contagious Diseases Acts would be brought in. It was expected that the Bill for the Protection of Young Girls would be introduced in the House of Lords next week.

TUESDAY, MAY 22.

Vaccination with Calf-Lymph.—Mr. Hopwood inquired of the President of the Local Government Board as to the memorial from a Mr. H. Allen, alleging that his child, Mabel Emma, had died, on April 19, from the effects of vaccination with calf-lymph from the Marylebone Institution; whether, as an inquest was held without a post-mortem or other evidence available to prove the cause of death, he would grant the prayer of the memorialist for an official inquiry; and whether it was the fact that calf-lymph was usually followed by more inflammatory and severe effects than even human lymph.—Sir Charles Dilke, in reply, said: "The memorial has been received, and the coroner has been communicated with, who informs me that the jury, in view of the evidence that was offered at the inquest, gave as their verdict that the child died 'from the mortal effects of pneumonia, following septicæmia from a labial abscess, and the jurors further say that the death was from natural causes.' I have had before me the depositions in this case, and I have been advised that the course of the disease in this child, beginning in an altogether different part of the body from the vaccinated arm, and extending to altogether different parts of the body, while the vaccinated arm showed no undue inflammation, was not such as to suggest any connexion whatever between the disease and the vaccination." He added that the Board had therefore replied that they had no power to review the decision of the coroner's court, and that, after fully considering the circumstances of the case, they were unable to satisfy themselves that there existed any sufficient ground for an inquiry, such as the memorialist had suggested. It was a fact that calf-lymph produced somewhat more decided constitutional symptoms than those produced by average humanised lymph.

THE PUBLIC HEALTH, GLASGOW.

THE medical report for the fortnight ending May 12, 1883, states that there were 611 deaths registered as compared with 679 in the fortnight preceding, being a decrease of 68, representing a death-rate of 31·2 in place of 34·2 per 1000 living. If the total deaths under and above five years be compared, it will be found that last year there were 209 deaths below five years as compared with 303 this year, an increase of 94; while above five years there were 306 deaths last year, and 308 this year. The excessive mortality of the fortnight was absolutely confined to the population below five years of age. When it is noticed that 53 per cent. of the excess was directly ascribed to measles, whooping-cough, and scarlet fever, it might safely be inferred that the greater part of the remainder might be ascribed to the indirect effects of these diseases on the frail bodies of Glasgow children, the causes of whose death, as a rule, were not registered with much refinement. The number of deaths from pulmonary diseases was 202 in place of 223, representing a death-rate of 10 in place of 11 per 1000 living, and constituting the same proportion of the total deaths, viz., 33 per cent. The number of deaths from fever was the same as in the preceding fortnight, viz., 6, of which 5 were from enteric fever and 1 from typhus. The number of deaths from infectious diseases of children was 105 in place of 103, viz., 65 from measles, 28 from whooping-cough, and 12 from scarlet fever. The mortality from measles had risen further—from 51 to 65. It prevailed uniformly over the whole north side of the river with great intensity, and only 7 of the total deaths occurred on the south side. The death-rate from measles alone was 3·3 per 1000, and from whooping-cough 1·4, so that these two diseases added 4·7 to the death-rate. No cases of small-pox had been registered during the fortnight. The number of cases of fever registered was 36 in place of 24, namely, 31 of enteric fever, 4 of typhus, and 1 undefined. There were 425 cases of measles, 72 of scarlet fever, 50 of whooping-cough, and 17 of diphtheria registered, of which 68 were removed to hospital and the remainder attended to at home.

THE PARKES MUSEUM OF HYGIENE.

THE opening of the Museum by H.R.H. the Duke of Albany, at its new home in Margaret-street, marks the commencement of a new era in its history. It is now nearly seven years since, at a meeting of the subscribers to the memorial to the late Dr. Parkes, it was resolved "That it is desirable that the proposed memorial take the form of a museum of hygiene." Three years later, practical effect was given to this resolution by the temporary establishment of the Museum in one of the galleries of University College; and now, after a stay of less than four years, it has been moved to Margaret-street, where a much greater scope is afforded for carrying out the intentions of its founders by making the Museum more accessible and more suited for imparting useful information to the general public. The work which the Museum hopes to carry on is set forth in a synopsis which has been specially prepared for students and contributors. In the first place, there is a library, which already contains many valuable works of reference, reports, etc., and which will one day be no doubt supplied with every important work connected with the subject. One of the most valuable sections is that under the head of Architecture. Here there are illustrations of every kind, showing the application of hygienic principles and of forethought in respect of fire and other disasters, in the design and construction of dwellings and public buildings of all descriptions, especially of those intended for the use or benefit of the industrial classes. Here, too, will be found models of urban and suburban dwellings of every description, of model lodging-houses, of movable dwellings, camp huts, barracks for various climates, hospitals and infirmaries, schools of all degrees (including *crèches*), public drinking fountains, public baths and washhouses, soup kitchens, coffee-houses, industrial factories, churches, theatres, mortuaries and crematories; also illustrations of the various kinds of building materials, of foundation and wall work, of chimneys, of roofs and fireproof staircases; and examples of the different kinds of drainage and sewerage, of the means of storing water, of warming public buildings, of windows and ventilators, of floors and wall surfaces and wall papers, and of the means to render the two latter non-absorbent. The illustrations of the Section of Food have been supplied by a member of the Council, Mr. T. Twining, who has arranged them on a plan similar to that adopted by himself in his Twickenham Economic Museum. The stands illustrating the chemistry of food are at present in the Education Department at the South Kensington Museum, but we understand that they will shortly be transferred to Margaret-street. On the subject of Food there will be lists of food supplied from the animal and vegetable kingdoms. Amongst the former, milk will hold a most important place, its consideration including, of course, its adulteration, as also the value of condensed milk, the various kinds of butter, the substitutes and adulterations of butter, and the chief varieties of cheese; and it is intended by means of models to illustrate the manufacture of butter and cheese. The vegetable kingdom will be represented by lists of food-supplying plants, by dried specimens or pictorial representations of the plants, by analyses of the various products. Under the head of beverages and drinks, tea, coffee, and cocoa will be illustrated with their adulterations and substitutes; fermented liquors, distilled liquors, and non-alcoholic drinks. Lastly, various dietaries will be exhibited, such as military and naval dietaries, and special ones designed for the avoidance of scurvy, dysentery, pellagra, leprosy, etc. Full and detailed information will be afforded on the subject of personal hygiene, and also under the head of protection and rescue, which

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is to include precautions against all the zymotic diseases, a list of disinfectants and their uses, the antidotes to the more common poisons, the treatment of the bites of noxious insects or venomous animals, first relief in cases of drowning, means and appliances for the prompt extinction of fires, the prevention of railway accidents, and protection from excessive cold. The Section of Industrial Pathology will, it is hoped, be a repository of all that may serve to protect the lives and health of working people in their various occupations; the main point in this section being the means to be adopted to minimise the danger of injuries from sudden violence, *e.g.*, scaffolding and ladder accidents, street accidents, machinery accidents gas or mining explosions, etc., and also to obviate, as far as may be, the chronic injuries to general health that arise from overcrowding, from malaria, from poisonous vapours, from irritating dust in various trades, and from the effect of exposure to extreme heat, as in the case of stokers, cooks, etc. The Museum will be open daily from 10 a.m. to 7 p.m., and on Mondays and Saturdays to 9 p.m.; it will be free to the public every day from 5 p.m. to 7 p.m., and on Mondays and Saturdays from 2 p.m. to 9 p.m. The Library will be open daily from 10 a.m. to 7 p.m. for the use of members and others recommended by members. Lectures will be given during the next two months by Mr. Rawlinson, C.B., Sir F. Bramwell, Professor Corfield, and Mr. Robins. The inaugural address will be delivered by Professor de Chaumont on Friday, June 1, at 5 p.m. We cordially wish the Parkes Museum success in its new and enlarged sphere.

FROM ABROAD.

Cerebral Atrophy after Amputation.

Dr. Bourdon communicated to the Académie de Médecine (*Bulletin*, May 15, and *Gazette Médicale*, May 17) a new example of cerebral atrophy consecutive to amputation of a limb. It occurred in the person of a soldier who died at the Invalides, at the age of sixty-three, having undergone disarticulation of the left arm forty years ago. He died from a cerebral congestion, which lasted thirty-six hours, but up to that time had not manifested any cerebral symptoms. But during the latter years of his life the lower extremity of the same side as the amputated arm had become gradually paralysed, so that he slightly dragged the limb as he walked. At the autopsy, a notable depression was observed at the upper part of the ascending frontal convolution of the right hemisphere, and also at the paracentral lobe and on the crest of the hemisphere. The lateral ventricle was considerably enlarged, and especially at the level of the affected convolution, denoting very extensive atrophy of the subjacent white substance. The middle of the neighbouring striated body presented also a depression. Sections of the protuberance and the bulb showed the median raphe to have deviated to the right, and that the nervous substance on that side was considerably atrophied. The right hemisphere weighed thirty-one grammes less than the left.

This case, then, has to be added to six others (three of amputation of the arm and three of the leg), accounts of which have been published in a preceding memoir by Dr. Bourdon, demonstrating, as they did, that the amputation or arrest of the development of a limb may, in consequence of the ensuing functional inactivity, lead to the atrophy of the superior portion of the motor zone of the cerebral cortex. It proves, also, that the lesion, ordinarily confined to the cerebral cortex, may extend secondarily to the central parts of the brain, and even to the medulla oblongata. Such an extension had not been observed in other similar cases. A fact which is entirely new also comes out in this case, namely, the paralysis of the leg of the same side as that of the amputation; and Dr. Bourdon suggests that this paralysis should be attributed to the propagation of the atrophy—the primary lesion by its invasive progress gradually affecting the adjoining nervous cells and fibres which govern the movements of the limb corresponding to the mutilated side.

Gelatine Bougies.

In a paper read at the Medical Society of New York (*Philadelphia Med. Reporter*, March 10), Dr. Newman, after describing the difficulties he had encountered in finding a suitable mass for the manufacture of medicated bougies, states that he had succeeded at last in meeting with what he wanted in "Dr. Mitchell's (of Ninth and Race streets, Philadelphia) Soluble Medicated Gelatine Preparations," among which are found nasal, prostatic, and urethral bougies, rectal suppositories, intra-uterine pencils, hollow vaginal suppositories, etc. These last, he says, are of peculiar value, being hollow and having the shape and elasticity of the finger of a kid-glove. The cavity is filled with absorbent cotton, which acts as a tampon, keeping the medicated part in close contact with the mucous lining. The soluble part, after having done its work, is absorbed by the cotton, which prevents leakage, and thereby promotes cleanliness. The pressure excited also produces an absorbent action on the indurated tissues.

As to the bougies, Dr. Newman regards them as perfect, excelling all similar preparations—(1) in their neat, clean, uniform appearance; (2) in that the medicinal remedies are equally distributed and divided, being held in solution; (3) they are soft, elastic, flexible, never breaking, and, at the same time, are substantial and stiff enough for easy introduction; (4) after introduction, and in contact with the walls of the urethra, the mass dissolves readily, and exerts an even and prolonged local action; (5) they are not affected by change of temperature, remaining uniform in any climate, neither do they change or melt in the hand; (6) time does not affect them, some of those exhibited having been lying about for more than two years without any loss of their qualities.

As to the indications for their use, they should never be employed when their introduction causes any pain, which signifies that acute inflammation is present. They may be used in all chronic cases in the third stage of urethritis, and they may arrest the disease in its initial stage. When uneasiness, even a slight soreness, is felt, with frequent micturition, and a slight watery discharge, sedative medicated bougies may arrest further progress and abort the disease. In chronic cases astringents may be used either alone or combined with sedatives, antiseptics, or absorbents, the approximate remedy and its dose to vary with the case. The bougie should be applied at bedtime, moistening it in warm water (which is better than oil) before passing it. It is introduced like Nélaton's catheter, the movement being a rapid one; and if any impediment be caused, a slight rotation or partial withdrawal may be necessary before another trial is made. The end of the bougie should project a little beyond the meatus, which is then held closed with one hand, the lips pressed together and secured by adhesive strips. Sometimes a little bit of cotton over the meatus, beneath the plaster, will answer still better, because the cotton (non-absorbent) will prevent the plaster from becoming moist and loosing its hold. A good way of securing this plaster more firmly is to insert each end in the furrow between the glans and prepuce, and then sliding the prepuce upwards, using it as a kind of bandage to the plaster. The penis must be kept up resting on the abdomen; its hanging down must be prevented, because it may irritate and cause erection, and also the running out of the dissolved bougie. Both indications are fulfilled by the application of a T bandage. If there is, during the night, a desire to micturate, the plaster can be moistened, loosened, and any remaining fluid let out. In some cases it is sufficient to leave the bougie in the urethra one hour, but in most cases it is better to leave it in the whole night. There are some cases cured by a single bougie, but the rule is that from ten to twelve nights of medication are required to cure an urethritis, and some patients require considerably more. If it be desirable to limit the treatment to a certain portion of the urethra, a short bougie, or part of one, may be introduced through a tube, and by a plug pushed down to the spot.

Dr. Newman refers to several cases of urethritis and gleet in which he has employed these bougies, and says that he has used them now for two years with better success than any other bougie, and with more benefit to patients than by injections.

The Library of the Royal College of Surgeons will be closed on Friday, the 25th, and Saturday, the 26th inst., for the purposes of the Fellowship Examination.

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REVIEWS.

Diseases of the Rectum and Anus. By C. B. KELSEY, M.D. London: Sampson Low and Co.

THE above work is another of the American books which certain publishers have of late been pouring into the English market, and its title prompts the reflection that it would be a good work should it prove even equal to some of its predecessors in English, French, or German. But in no way does it appear to approach them, for, whilst the works above alluded to teem with the results of original observation and thought on the parts of their authors, the evidence which Mr. Kelsey gives of his individuality is but slight. A careful reading leaves the impression that were the thoughts and cases of other writers on the subject taken out, there would be very little left. Surely one might expect to find, at the least, in such a work proofs of a wide practical acquaintance with the diseases treated of; yet the cases illustrative even of simple fæcal impaction are borrowed, and the treatment employed (free purgation), in spite of the presence of colitis, receives no condemnation. The author has certainly read largely, most of the standard works on the rectum being freely quoted, and selections have been diligently made from American, English, French, and to a less extent German, periodicals of late dates; but the critical and literary skill employed do not enable us to recommend the book as a good and readable summary.

The work opens with a long chapter on the anatomy of the parts, containing some errors of simple description, and devoted largely to the statement of everybody's opinion as to the existence of Nélaton's superior sphincter and Houston's folds, the quotations being apparently taken from a recent paper by van Buren. The malformations are clearly described; but this part of the book is prefaced by the lucid statement that "the rectum is developed with the other abdominal viscera, gradually separates itself from them, and, ending in a blind pouch, advances to meet the anal depression." In cases of occlusion, operation from the perineum is almost always to be attempted first; this failing, inguinal colotomy is recommended. As illustrating "very well the difficulties which may be met with" in the latter operation on the adult, a case is quoted from Mollière, in which the colon was so distended that it was taken for an ovarian cyst, and the small gut was opened by the operator, who despaired of reaching the large. The description of lumbar colotomy is singularly poor; thus, the reason for Bryant's advice "to roll the exposed colon out" is not explained. Nothing is said of the importance of avoiding burrowing in the subperitoneal fat, and of perfect drainage of sacs thus formed, and, probably as a consequence, diffuse lumbar cellulitis is not mentioned as a complication; inflation of the bowel with air is only casually spoken of; and the employment of antiseptics, as in gastrostomy, would probably be new to the author. There is a good chapter on the examination of the rectum; but it scarcely seems necessary to occupy half a page with a picture of a chest in which Mr. Kelsey keeps his instruments. A curious case, perhaps of mechanical congestion from displaced uterus, given as an example of the early stage of proctitis, excites a suspicion that pathology will not be one of the strong points of the work; and the suspicion deepens into certainty when it is found that rodent ulcer is classed as a scrofulous manifestation; that scirrhus is admitted without any comment, and described as though it were as typical in the rectum as in the breast; that encephaloid rises from the glandular tissue and is encapsuled, whilst scirrhus begins in the submucous tissue and is diffuse; and, finally, that colloid cancer has "alveolar sarcoma" for a synonym, though its structure is essentially that of encephaloid, the alveoli being filled with *mucous* material. A very extraordinary case from Cruveilhier is then given as "typical" of the disease. Naturally, the author has nothing to add to our knowledge of the ulcerations and strictures of the rectum. In the matter of practice it may be noted that stress is laid on the free and early incision of ischio-rectal abscess, as preventive of fistula; and it is said that free drainage from below may enable a complete fistula outside the sphincter to heal without division of that muscle. Carbolic acid injection is well spoken of in the treatment of piles and prolapse of the mucous membrane. Finally, an interesting statement of the facts with regard to linear proctotomy, and the relief which it affords in cases of simple and malignant stricture of the lower four inches, will encourage a more extended trial of the operation by English surgeons, with whom colotomy has hitherto been the great remedy.

Le Cuivre et le Plomb dans l'Alimentation et l'Industrie. Par M. le Dr. GAUTIER, Membre de l'Académie de Médecine, Professeur Agrégé à Paris. Paris: Baillière. 8vo, pp. 310.

THE purpose of this work is to turn the attention of the public and the profession from the dangers supposed to follow the use of copper, which the author maintains to be imaginary or insignificant, to the more real dangers arising from lead. Saturnism, he asserts, may be so insidious and obscure in its symptoms when the doses are small, though long continued, as to excite no suspicion as to their real cause, consisting in progressive anæmia and dyspepsia alone. Salts of copper have been given by MM. Burq, Bourneville, and Gerbier in epilepsy and cancer with no apparent ill effect, and M. Gautier with his family partook of acetate of copper at every meal for a whole year without any appreciable alteration in health.

The "tinning" of copper vessels with an alloy containing at the least 5 to 10, and sometimes 30, 50, or 70 per cent. of lead, he considers a grave error. (A case of lead-poisoning from this cause was recently reported from the Tyrol; see *Medical Times and Gazette*, March 3, 1883). Even the "greening" of vegetables he deems harmless so long as the copper present does not exceed eighteen milligrammes in the kilogramme. On the other hand, the same preserved vegetables often contain as much as two and a half milligrammes of lead in the kilogramme, and sardines, etc., preserved in oil, dissolve from thirty-six to 170 milligrammes, or more if kept any time after the admission of air. In these cases the soldering is the chief source of contamination. In soda-water, etc., he found half a milligramme of lead per litre derived from the pewter fittings of the machines, but he failed to detect any ponderable amount in the drinking-water supplied to Paris, though it had passed through miles of leaden mains. This was satisfactory, for he had been consulted as to the necessity of replacing the 15,000 kilometres of leaden pipes by iron ones, such as are used in England and Germany. M. Gautier would prohibit the use of tinning containing more than 10 per cent. of lead, and even this should not be permitted in vessels employed for acid liquids, as wine, vinegar, pickles, or acid fruits. We believe, however, that the use of lead in any proportion in the tinning of kitchen utensils is quite unnecessary; indeed, it has recently been made illegal in Germany. If the surface be first covered with a thin film of tin by galvanising, any quantity of the metal may be made to cohere by simple heating.

Nickel, too, both as a coating and as the sole material, has been successfully used for cooking utensils of various kinds; and the old metal, unlike iron, always fetches its price.

GENERAL CORRESPONDENCE.

INFORMED *v.* IGNORANT OPINION ON THE CONTAGIOUS DISEASES ACTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—The *Western Daily Mercury* is sent you, containing notices of the action of some public bodies here in regard to the Contagious Diseases Acts.

All classes here, who have had a practical knowledge of their working, regret their suspension; and those "who know" are unanimous that among the lower class of women voluntary treatment or seclusion was not carried out by them before the Contagious Diseases Acts came into force till they were *too bad* to carry on their profession. Shortly after the Contagious Diseases Acts came into action the amount and severity of these diseases were greatly lessened—so much so, that our venereal quacks fled the place, and started for London, their work being so greatly lessened.

Medical men from Liverpool and other large towns who have come here and seen the working of the Acts have much regretted their non-extension to other places, and the con-

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current advantages derivable therefrom. Of course, people living in places where they learn of the action of these Acts through distorted hearsay, may have a prejudice against them as being one-sided and unfair to the female; but here, where their advantages are realised, magistrates, clergy, medical men, and our public men generally, are nearly unanimous in their support.

If men and women will take up an evil course of life they must pay the penalty; and nine-tenths of these women might leave their present vicious mode of life next week if they chose, but, not choosing to do so, there is nothing unfair in placing some legal restraints on them.

Plymouth. I am, &c., MEDICUS.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 2.

Dr. GERVIS, President, in the Chair.

EXTRA-UTERINE FŒTATION.

DR. J. A. MANSELL-MOULLIN showed a specimen of abdominal gestation. The fœtus, of about four months development, was contained in a sac bounded by the Fallopian tube and broad ligament in front, and the intestine above and behind. In its primary stage he thought it had probably been tubo-ovarian. The patient died from internal hæmorrhage from the placental site. The points of interest in the case were—(1) that the patient had recovered from an attack of internal hæmorrhage and peritonitis six weeks previously; and (2) that the intestines were so adherent over the cyst that, had its removal been attempted, it would have been impossible to complete the operation.

Mr. LAWSON TAIT said that in such a case all that was wanted was the removal of the fœtus and drainage of the cyst. He regretted that this had not been done. He had operated on seven such cases, of which six had recovered.

Dr. HEYWOOD SMITH said the patient was admitted in too low a state for operation; and the post-mortem showed that any operation would have failed.

Dr. BRAXTON HICKS said that the treatment advocated by Mr. Tait was not new; and recorded cases showed that it was not so simple or so safe as had been said.

Dr. EDIS thought operation was advisable when the diagnosis was clear; but the difficulty was in diagnosis. He agreed with Mr. Tait that an exploratory incision was justifiable when the symptoms were grave enough.

The PRESIDENT remarked on the comparative safety conferred by antisepticism in peritoneal surgery. He thought that the condition of the patient rather than the presence of adhesions was the bar to operation in this case.

Dr. CARTER said that the patient was in too low a state for operation, and from the post-mortem he thought it would have been unsuccessful.

CYSTIC DEGENERATION OF UTERINE FIBROID.

Dr. CARTER showed a uterine fibroid which had undergone cystic degeneration. It grew from the fundus uteri by a pedicle an inch and a half long and half an inch in diameter. It derived its blood-supply mainly from extensive adhesions. It weighed three pounds and three-quarters, and contained seven pints of fluid; in all weighing about thirteen pounds. The patient from whom he removed it had done well.

CYSTIC DISEASE OF OVARIES.

Dr. CARTER showed two ovaries removed from a patient, and made up of a number of small cysts. They weighed one pound and twelve ounces respectively. They had been jammed down into the pelvis behind the uterus, and had been taken for uterine fibroids. The patient had done well.

Mr. LAWSON TAIT said the ovarian disease was one of a very rare kind described by Rokitansky, Ritchie, and himself.

SUBMUCOUS FIBROIDS.

The PRESIDENT showed three myo-fibromata removed from the interior of the uterus.

FŒTUS ACARDIACUS ACEPHALUS.

Mr. F. E. COCKELL, jun., showed a monstrosity of this kind.

ISCHIOPAGUS PARASITICUS.

Dr. CHALMERS exhibited (for Dr. HURFORD) a monster of this kind.

HYDROSALPINX.

Mr. LAWSON TAIT showed a specimen of hydrosalpinx removed from a patient from whom four years previously an ovarian tumour had been removed.

PYOSALPINX.

Mr. LAWSON TAIT also showed a specimen of pyosalpinx removed from a recently married woman. The symptoms had followed marriage, and he thought the disease due to latent gonorrhœa. He thought there must be hundreds of women in London suffering horribly from this disease, and that this operation was not done half often enough.

SUPPURATING PAROVARIAN CYSTS.

Mr. LAWSON TAIT also showed a suppurating parovarian cyst which he had with much difficulty enucleated. Each of the patients from whom the exhibited specimens were taken had done well.

Dr. EDIS called attention to Dr. Noeggerath's paper on latent gonorrhœa. He (Dr. Edis) thought such cases of frequent occurrence, and that operative treatment offered the only hope of relief.

Dr. FANCOURT BARNES thought the results of Mr. Tait's operations justified their performance.

A CASE OF EXTRA-UTERINE GESTATION SIMULATING SO-CALLED MISSED LABOUR.

This paper, by Dr. RASCH, was then read. The patient, a multipara, aged twenty-nine, ceased to menstruate in March, 1882. In August she thought that she quickened. In October she suffered from pain in the belly, fœtal movements ceased, and there was some hæmorrhage from the vagina. Then followed symptoms said to be due to inflammation of the kidneys and lungs. In December and January a foul vaginal discharge was noticed. At the end of January some fœtal bones came away per vaginam. At this time a sound passed six inches into the uterus, and, on washing out the uterus, a pint and a half of fluid was injected into the organ before any returned. The patient died at the end of February. On autopsy, the fœtus was found in a cyst occupying the lower belly, inseparably connected with the pelvic viscera and abdominal wall, and opening into the sigmoid flexure and the uterus, the latter organ being of normal size. The author remarked on the similarity of the phenomena during life, the history of the case, the distance to which the sound entered, and the quantity of fluid which the uterus apparently retained, to those of so-called missed labour. The autopsy showed that removal of the fœtus by laparotomy would have been easy, and he regretted he had not done it.

Mr. LAWSON TAIT said that the case emphasised the rule, that in obscure cases of abdominal disease, not malignant, the abdomen should be opened.

Dr. GALABIN had met with a case much resembling that of Dr. Rasch, except that the cyst did not open into the bowel. In this case the cervix was dilated with a tent, and then the opening between the cyst and the convexity of the retroflexed uterus could be felt with the finger, thus settling the diagnosis.

Dr. PHILIP JONES had attended the patient before she came under the care of Dr. Rasch. He described more fully the early history of the case.

ON THE BEHAVIOUR OF THE UTERUS IN PUERPERAL ECLAMPSIA AS OBSERVED IN TWO CASES.

This paper, by Dr. BRAXTON HICKS, F.R.S., was then read. The author remarked that the condition of the pregnant uterus during a series of epileptiform attacks had not been very closely observed, the general idea being that the uterus participated in the general excitement of the muscular system. Passages were quoted from different works on the subject in illustration of this. The author then described two cases in which he had carefully noticed the action of the uterus. In each of them, coincidently with a convulsion, a powerful and prolonged contraction of the uterus was observed. Between the convulsions the uterine action was natural. He could not state the exact relationship in point of time between the convulsions and uterine contraction. He did not think that uterine contraction alone caused the convulsion; for in the most severe cases of tonic or clonic contraction of the uterus, convulsions did not

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occur. But there might in these cases be increased excitability. It had been suggested that increased force of pains might result from carbonic acid intoxication due to the convulsions. He thought the immediate supervention of uterine contraction on the convulsive paroxysms, and the quietness of uterine action between them, told against this view. The presence of these contractions, together with the disturbance of the heart and vascular system and the pupil, showed that the muscles of organic life were liberally affected during the paroxysms of eclampsia. These prolonged and powerful uterine contractions, as well as the carbonic acid poisoning of the mother's blood, were a source of danger to the fœtus, and in its interest speedy delivery was called for, if it could be effected without harm to the mother.

Dr. Robert Barnes regarded the paper as of extreme value. He did not doubt that the immediate cause of the uterine contraction was the convulsion. Dr. Hicks's observations would lead him to reconsider the rule which he had adopted, to reject the *accouchement forcé*, from which he had seen disastrous results. With chloroform and improved operative measures, delivery might be effected early and safely; but the mother must be considered first.

Dr. Graily Hewitt thought Dr. Hicks's observations novel and important. He thought the disturbances of the abdominal and renal circulation caused by pressure of the gravid uterus on the renal veins exercised a powerful influence in producing eclampsia. He had found benefit from diminishing this pressure by positional treatment, and by unloading the bowels.

Dr. Routh had seen marvellous benefit in puerperal convulsions from placing the patient on her belly and knees—a confirmation of Dr. Hewitt's views.

Dr. Hicks did not recommend force in the delivery of the child. As to the effect of pressure, there was often no albumen in the urine before the first convulsive seizure.

THE PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, May 15.

Thomas Buzzard, M.D., Vice-President, in the Chair.

Report of Morbid Growths Committee.

Dr. Goodhart read the report on Mr. Lawson's case of recurrent enchondroma of the lower jaw. The Committee found in the more recent growths not much fibrous tissue; the peripheral portions were more cellular than the central; it was a sarcoma, chiefly spindle-celled. He also read the report on Mr. R. Williams's case of growth at the neck of the bladder. The Committee agreed that it was a round-celled sarcoma, which had become somewhat inflamed. These reports were signed by Dr. Goodhart and Mr. Butlin.

Bacilli of Leprosy.

Dr. Thin showed some drawings made from sections taken from material sent him by Dr. Hilles, of Demerara. The material consisted of tubercles that had been excised from patients suffering from tubercular leprosy. Owing to the absence of microscopes he was unable to exhibit the sections themselves, but he spoke warmly of the zeal of Dr. Hilles in sending the material over for exhibition before this Society.

Multiple Growths in Bladder.

Mr. Morgan showed the bladder of a man, aged sixty-five, who had come under his observation at the Charing-cross Hospital during the previous year. He had then had symptoms of vesical irritation for fifteen years, with constant hæmaturia, and pain at the neck of the bladder, aggravated at intervals. After his admission it was ascertained that there was always blood in his urine, though sometimes in too small a quantity to be recognised without the aid of the microscope. He was sounded for stone, but, none being detected, Mr. Morgan had explored the bladder with his finger through a median incision in the perineum, as recommended by Sir Henry Thompson. One tumour was thus detected, and a mass of soft velvety substance felt near the neck of the bladder. The tumour was removed with a lithotrite, and for six or seven weeks the patient experienced great relief, and was able to return home. At the end of this period a return of the vesical troubles occurred, and these continued until his death some few months later. The bladder alone was examined. The prostate was enlarged. Several masses were found at the trigone—large, with a broad base, apparently aggregated tufts of villi. Other similar tumours were found scattered all over the bladder, more or less pedunculated, mostly about the size of a small almond. He thought that these had grown rapidly; probably many of them had been formed since his exploration of the bladder. To the naked eye these tumours presented the characters of papillomata, and this view of their nature had been confirmed by Mr. Stanley Boyd on microscopical examination.

Hydatid Cyst in Lung.

Dr. Curnow exhibited a specimen of this affection taken from the body of a seaman, aged thirty, admitted into the Dreadnought Hospital under his care. Patient had suffered from cough for four months, with frequent attacks of hæmoptysis, and was losing flesh. On examination the upper part of the left chest was flattened, its movement and percussion tone were impaired, and the breathing very weak but intensely bronchial. After his admission it was noted that there was no fever. He had two attacks of hæmoptysis, and one day coughed up about two pints of a colourless fluid. This was followed by an attack of hæmoptysis. A fortnight later he coughed up a piece of membrane, which was recognised to be a portion of the wall of an hydatid cyst. Shortly afterwards he again coughed up some membrane. On each occasion an attack of hæmoptysis ensued, and he died of exhaustion two days after the last attack. Hooklets were recognised in the sputa after the membrane had been seen. At the autopsy there were pleural adhesions on the left side over the upper part of the lung; below, the pleura contained about four pints of pus. There was a large cavity in the apex of the lung, occupied by a loose hydatid cyst containing many secondary cysts. The right lung was natural; there was no hydatid cyst elsewhere. It was not until after the membrane had been seen that the patient told him that he had been for some months a shepherd in Australia; and he supposed that the patient contracted the disease from his dog. The rarity of the case lay in the fact that the cyst was at the apex of the lung. He regretted that the nature of the case had not been suspected at first, for he could not help believing, that if the patient had been treated in Australia he would have been tapped, and would probably have been cured.

Extensive Ulceration of the Intestines.

Dr. Curnow also showed the alimentary canal of a man, aged twenty-six, a Swede by birth, who was employed on board one of the transport ships during the late Egyptian war. On the return voyage from Alexandria he was taken ill, eight days before he came under observation, with rigors, vomiting, and headache. When he came into the Seamen's Hospital the case was found to be one of well-marked enteric fever, with rose spots and diarrhœa. The fever ran a normal course, except that the spleen was unusually enlarged and that the stools were very offensive. The temperature began to subside on the fifteenth day, and by the eighteenth was normal, and he seemed convalescent for four days. On the twenty-third day the fever returned; he had pain in left thigh and calf, and vomiting. Death occurred on the thirty-first day. At the post-mortem examination the jejunum was thin in patches; the mucous membrane was opaque, there were some scattered ulcers in it, increasing in number in the ileum; many of them were longitudinal and in Peyer's patches, with well-defined edges, and some caseous matter at their bases. There was very extensive ulceration just above the valve. The large intestine showed many rounded ulcers, even down to rectum, gradually diminishing in number from above. The mesenteric and mesocolic glands were enlarged. The spleen was enormous, weighing thirty ounces. The other viscera showed no important changes. The external iliac vein was plugged with an adherent clot which spread into both branches. He wished to call attention to the number of the ulcers, and especially to their extent in the large intestine, to the absence of any marked diarrhœa, and to the apparent convalescence.

Mr. Bendall asked whether the patient had bathed in the lake when he was in Egypt, as the water there was highly contaminated with sewage.

Dr. Curnow could not say whether the patient had or had not bathed, but the drinking-water had been taken on board at Alexandria, and several of the ship's company suffered from typhoid fever and allied disorders.

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A Case of Disseminated Cancer.

Dr. Percy Kidd exhibited the organs from a case of cances widely disseminated throughout the body, and also micror scopical preparations from the same case. The new growth had been found in nearly all the abdominal viscera, in the bronchial and mediastinal glands, in the lung, cerebellum, and the subcutaneous tissue of different parts of the body. In the left frontal lobe of the brain there was an old hæmorrhagic cyst. The left arytænoid cartilage was necrosed, but the larynx was not otherwise diseased. The disease probably originated in the abdominal glands, the growths in the liver being multiple and evidently secondary. The root of the right lung was infiltrated by a very hard growth, spreading from the mediastinum. Microscopical examination showed that the growth was carcinomatous. Sections of the right lung showed that the carcinomatous infiltration followed the lines of the bloodvessels and bronchi, with comparatively slight implication of the lung-tissue itself. In a few sections from the head of the pancreas, which was involved in the disease, a curious concentric arrangement was observed. It consisted of series of regularly disposed fibrous rings, in which were numerous thin spindle-celled nuclei. At the centre of this structure was a minute opening, with walls which seemed to be lined by an endothelial membrane. These appearances were thought to suggest a vascular origin. The patient was a man who had died in the Brompton Hospital, after having been for several months previously in a dull mental condition, which deepened some days before death into coma.

The Larynx in Measles and Scarlet Fever.

Dr. Norman Moore exhibited a larynx from a case of measles, showing ulceration of the cords and of the base of the epiglottis. There was no false membrane. The child was a boy, aged five years, who died of abscess of the brain, following necrosis of the temporal bone, six weeks after he was first taken ill.

Dr. Moore also exhibited a larynx from a case of scarlet fever, in which the ulceration was somewhat more extensive. A considerable tract of epithelium was destroyed, but when fresh no false membrane could be detected. There was deep ulceration of the fauces without false membrane. The patient, a boy aged five, was the third case of well-marked scarlet fever occurring in a house in the course of three months. Dr. Moore thought that these cases were of interest in relation to the remark of Rilliet and Barthez, that laryngitis was more frequent in measles than in scarlet fever. It was certainly rare to find ulceration of the larynx in necropsies of either the one or the other in London, and the symptoms of laryngitis frequently observed in measles were rarely severe enough to suggest ulceration.

Two Cases of Gastric Ulcer.

Dr. Norman Moore showed:—1. An ulcer of an oval form, about one inch in diameter, situated on the lesser curvature of the stomach, two inches from the pylorus, taken from the body of a man aged fifty-six. All the arteries of the body were highly atheromatous. The posterior third of the left cerebral hemisphere was softened, and the cerebral arteries were largely calcified. The gastric artery was almost completely calcified. In the base of the ulcer was a small adherent clot, leading into a branch of the pancreatico-duodenal artery; a copious hæmorrhage from this had been the cause of death. 2. A commencing ulcer in the middle part of the greater curve of the stomach. The patient was a woman, aged thirty-four, who died in St. Bartholomew's Hospital of interstitial nephritis associated with atheromatous arteries, and abundant gouty deposits in joints and other parts. The middle part of the ulcer was covered by epithelium, and consisted partly of blood and partly of necrosed mucous membrane. The ulcer was bounded by a distinct edge. Dr. Moore observed that ulcer in the stomach in patients with healthy arteries had been attributed to embolus. It seemed probable from these cases that, in persons with degenerate arteries, gastric ulcer might be due to a thrombus forming in a calcified vessel.

Polypus of the Stomach.

Dr. Moore also exhibited a soft spherical growth from the mucous membrane of the stomach, projecting at the end of the first third of the great curve. The polypus, which was obtained from the body of a man aged sixty-eight who died of bronchitis, had given rise to no symptoms during life. Some specimens of polypi of the small intestine had been shown to the Society during this session, but polypi of the stomach were less frequent. There were three specimens of the kind in the museum of St. Bartholomew's Hospital, but the rarity of the growth was shown by the fact that the present specimen was only the second which had been observed ont of the last three thousand post-mortem examinations.

Acute Atrophy of Liver.

Dr. Cavafy exhibited the liver and sections of the lung showing bacilli, from a case of which he gave the following account. The patient was a man aged twenty-eight, who was admitted into St. George's Hospital in a comatose state and deeply jaundiced. The urine was dark-coloured, containing bile pigment, leucine, and tyrosine. The liver-dulness was diminished in the right hypochondrium, but there was some meteorism. He died the morning after his admission. The only history that could be obtained was that he had come to London three days previously, and seemed somewhat ill, but was able to be about, and could take his food. The day before his admission he was noticed to be jaundiced, and in the morning he vomited some brownish matter. In the course of the day he passed into a state of coma, in which he remained. At the autopsy, hæmorrhages were found into the serous membranes, especially the posterior parts of his pleuræ, the peritoneum, and endocardium. The brain was slightly congested. The liver was much atrophied, weighing thirty-six ounces. It was not soft or doughy, but rather tough, quite smooth, the capsule being shrunken and wrinkled; the surface was of a mottled red colour; and on section it was of a uniform brownish-red. There was no yellow colour, as was usually the case in acute yellow atrophy. The kidneys showed early fatty degeneration. Dr. Klein had been good enough to examine the viscera for bacilli, etc. The liver presented the usual microscopical changes seen in cases of acute atrophy; there were no bacteria in it, and none were found in the kidneys or heart. The lungs were spongy and crepitant, showing numerous patches of hæmorrhage where slight pneumonia had taken place. Bacteria of three kinds were found in the lungs—(1) long bacilli rather exceeding the diameter of a blood corpuscle; (2) short bacilli somewhat less than the diameter of a blood corpuscle; and (3) micrococci either isolated or in pairs (dumb-bell arrangement). The bacilli were found in the alveoli, air-cells, and in the walls of the small bloodvessels (especially the long bacilli). He did not lay any stress whatever on these bacilli, partly because the examination of the body was not made till thirty-four hours after death, and partly because, if they played any essential part in the disease, he thought they would have been found in the liver; other observers had found them in the bile-ducts in cases of acute yellow atrophy.

Vacuolations in the Brain.

Drs. Savage and Hale White had a joint paper on this subject, which was communicated by the latter. It was shown that there were nine causes for holes in the brain. 1. Small processes of sclerosed meninges, in cases of general paralysis, dipped into and excavated minute portions of cerebral tissue. 2. In the same disease the sclerosed neuroglia, by its contraction, might give rise to small cavities. 3. Multiple hydatids of the brain. These three conditions were very rare, the authors having no knowledge of the second, whilst the third was almost confined to animals suffering from "staggers." Several references to continental authors were given, whilst the relation of the muslin appearance to the second of the above was pointed out. 4. Dilatation of the cerebral vessels, giving rise to the "*état criblé*." It was particularly emphasised that this was, in the majority of cases, of no pathological significance. 5. Shrinking of the cerebral convolutions in some cases gave rise to holes in the subjacent cerebral substance (a very good example of this condition was exhibited). 6. Miliary aneurisms, as Charcot had pointed out, might give rise to holes in the brain-substance (some very marked specimens showing this were exhibited). 7. *Dis Porencephalie*. In this condition a large gap existed in the brain-substance. This might communicate either with the exterior or the interior of the brain, or both. 8. The Gruyère cheese condition. This, it was pointed out, was quite different from the *état criblé*, for it was due to a dilatation of the perivascular lymph space of His. Of the causes

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of this dilatation nothing was known. Probably they were local, as the dilatation was saccular. The authors showed an example of this condition in which the whole of the brain, except the lower part of the medulla, was riddled with cavities exactly like those found in cheese, and the microscopical preparations exhibited showed that these holes were produced by that perivascular dilatation. The shape and direction of the cavities also corresponded with that of the vessels. Very few examples of this condition had been carefully described—in England one only, by Lockhart Clarke, who referred it to the same cause. 9. General cystic degeneration of all the viscera. The authors showed specimens from two remarkable cases in which the kidneys, lungs, liver, heart, and brain all contained holes. In the kidney these cysts were due to the dilatation of either the tubules or Malpighian capsules; in the liver they were due to vacuolation of the hepatic cells; in the lungs and brain it was impossible to come to any definite conclusion as to their origin, but in both these viscera the cavities contained a peculiar material, staining deeply with hæmatoxylin. Both the subjects were lunatics. Cases in which there were only a few holes, such as patches of softening hæmorrhage, were not considered to come within the scope of the paper.

Dr. Savage said he was satisfied in his own mind that the appearances described were not due to post-mortem changes. The holes were noticed at the time of making the examination; they were from one-tenth to one-sixth of an inch across. No fluid contents were observed in those in the brain. These holes were clearly visible in all the viscera. Both the patients suffered from general paralysis of the insane; one, however, was a typically chronic case, and the other a very acute one.

Dr. Buzzard said he thought Dr. Lockhart Clarke's case was one of general paralysis also.

Dr. Mahomed and Dr. Hadden made a few observations.

Comminuted Fracture of Right Tibia causing Nipping of Vessels.

Mr. F. S. Edwards narrated this case. The patient, a woman aged sixty-three, was run over, and sustained a fracture of the right tibia at the junction of the lower and middle third; the fracture was set in the usual manner, and the foot was warm. In two days some small bullæ appeared on the foot, which on the fifth day was cold. Amputation was performed just below the knee, and notwithstanding a bedsore for a while the patient went on well, but eventually she died. At the post-mortem examination there was found fatty degeneration of the heart and kidneys, extensive atheroma and calcareous degeneration of the large arteries, there being a large calcareous plate in the descending aorta. The examination of the amputated limb showed that the anterior tibial vessels had been occluded by being nipped between the fragments, and a large blood-clot was found in the calf pressing on the posterior tibial vessels.

Hypertrophy of the Ramus of the Lower Jaw.

Mr. Victor Horsley exhibited a portion of bone removed by Mr. Christopher Heath from the left ramus of the inferior maxilla of a young woman who had been shown to the members at a previous meeting (*vide* page 310). The result of the operation had been perfectly satisfactory, and the symphysis menti was now in the middle line.

Dr. Goodhart handed round on behalf of Mr. Eve (who was to have exhibited the specimen for Mr. Macarthy) the inferior maxilla of a man aged forty, showing hypertrophy of one ramus and internal condyle. He knew nothing of the man's history, but had been told that he had been remarkable for having a very large appetite.

Multiple Exostoses.

Mr. Churchill showed a girl, aged fifteen, with symmetrically placed exostoses on almost all the long bones of the body; they had first appeared eight years ago.

Card Specimens.

Mr. W. J. Roeckel—A piece of the Petrous Portion of the Left Temporal Bone, including part of the external semicircular canal and the roof of the external auditory meatus, which had exfoliated from the ear of a girl, aged seventeen, one year after the removal of a polypus.

Mr. Sutton—1. Encephalocele. 2. A remarkable case of Parasites. 3. Anteflexion of Uterus and Cyst in Right Ovary of a Baboon.

Dr. Samuel West—1. Obliteration of one Coronary Artery. 2. Aneurism of the Heart.

Mr. Bruce Clarke—Hernia Cerebri.

Mr. R. Williams—1. Sarcoma of Bones of the Leg. 2. Miliary Cystic Degeneration of Mucous Membrane of Bladder. 3. Sarcoma of Choroid.

This was the last meeting of the session.

ACADEMY OF MEDICINE IN IRELAND.

SUB-SECTION OF STATE MEDICINE.

Friday, April 12.

Dr. Charles A. Cameron, President of the Sub-section, in the Chair.

A New Test for Organisms in Water.

Dr. Pollock read a communication from Dr. R. Angus Smith, F.R.S., of Manchester, disclosing his newly discovered test of the presence of organisms in water. It consists of rendering the water thick by dissolving gelatine in it. If pure, the gelatine cylinder remained long unaltered; but if the water be impure from the presence of organisms, the gelatine round the organisms becomes liquefied and globular, the organisms remaining solid at the bottom of the spheres.

The President exhibited photographs of test-tubes of water which had been thickened by a solution of the purest fish-gelatine, and then exposed to the action of light. When the water was pure it remained translucent; but when bad, bubbles were rapidly formed, and the bacteria which appeared to be in the water began to act on the gelatine, breaking it up and rendering it soluble. A rapid movement of gas was observable. When the bubbles or balls appeared to be spherical they were aggregations of bacteria. This change took place quickly—almost in twenty-four hours. But a peculiarity of the test was this: that it was only applicable where infusorial animals were present. For instance, peaty water in which there were no animalcules or bacteria would stand without breaking up the gelatine. In order to change the gelatine bacteria must be present. Organic matter that is not putrescent or infective will not do it. This is the first public body to which the test has been communicated.

The thanks of the Sub-section were voted to Dr. Angus Smith.

Result of Consanguineous Marriages.

The President read a paper on consanguineous marriages in relation to deaf-mutism. He described the practices and prejudices in respect of consanguineous marriages amongst ancient and modern nations, civilised, barbarous, and savage. He next reviewed and criticised the memoirs on the subject of the effects produced by the marriage of cousins. On the whole, the evidence seemed to show the effects were somewhat injurious. The statistics in reference to mutes published in the Irish census reports for 1881 and the previous decennial reports were closely examined by the author. It appears that in Ireland, in 1881, there were 5136 mutes, of whom 135 were the children of first cousins. The author endeavoured to ascertain the proportion of the population who were children of first cousins. He ascertained that amongst nearly 8000 persons the proportion was only 0·57 per cent., or less than one-fourth of the rate amongst deaf-mutes. As the statistics were in great part collected amongst Protestants, the author believed that, in all Ireland, not one person in two hundred was the offspring of first cousins, as marriage between persons so related was very rare amongst Catholics, who formed three-fourths of the population of Ireland. The general conclusion arrived at was that consanguineous marriages were a cause of deaf-mutism.

Dr. Fitzpatrick observed that the paper was the most remarkable he had heard at any public meeting for a long period, making it apparently clear to demonstration that the marriage, particularly, of first and second cousins was productive of deaf-mutism. In his own long experience he found almost every case of deaf-mutism to be the result of the intermarriage of near relatives. To take an example, he found not only was one child a deaf-mute and another insane, but the whole family partook of degene-

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ration of the nervous power. They entered early into marriage, and never prospered in society. Scrofula, deaf-mutism, insanity, and other characteristics exhibiting weakness of brain and muscular power resulted from those marriages.

Dr. EUSTACE thought the question must be considered very much from the animal point of view. The human family was at the head of all other animals, so that the question might be elucidated by what took place with other animals, that, according to their anatomy and in many respects, were our relatives. It was well known to all persons who tried to breed first-class animals that close in-and-in breeding resulted in very great deterioration of the species, and also that animals when left to themselves did not select their nearest relations for sexual intercourse. Even that much maligned animal, the female dog, would invariably select, not a dog of her own peculiar breed, but one of a different race altogether, both with regard to size and colour. That intermarriages were productive of many evils as a general result he held to be a fact. With regard to mental disease, he believed the health of the intellect in the human family depended more largely than they were in the habit of considering on the bodily health or physique, although there were exceptional cases in which very poor specimens of humanity were gifted with brilliant intellect. In the treatment of the insane his leading principle was to get up the bodily health, and as it improved the mind improved.

Dr. WRIGHT concurred as to the damage ensuing from the marriage of near relatives, and referred to Darwin's experiment on pigeons, and to the difficulty of keeping a pure breed of poultry, as illustrated by the fate of the bantams brought from the palace of Pekin, and by the destruction of another favourite breed of fowl, the white-crested Polish. He did not believe that female animals selected the male. The converse, he thought was the rule.

The PRESIDENT replied, pointing out that his statistics were necessarily incomplete and restricted. It would be indispensable to ascertain how many of the whole population were the children of first cousins, before drawing a definite conclusion.

Disposal of Sewage in Villages.

Dr. W. M. A. WRIGHT, of Dalkey, read a paper containing suggestions for the better disposal of sewage in Irish country villages. It must be admitted, he contended, that in the better class of Irish villages, where each cottage is provided with a privy and ashpit, a serious nuisance is frequently caused by their faulty construction, and the filthy manner in which they are kept—the receptacle of the privy being generally too large, some too deep below the level of the ground, and communicating with the ashpit, which is also too large, deeply sunk, and uncovered by a roof. Both privy and ashpit being undrained, their contents mix, and form a fœtid, semi-fluid mass of liquid excreta, vegetable refuse, and fine ashes, which is frequently augmented by the surface drainings from the neighbouring pigsty. Such a state of things as this is dangerous to health, both directly from its gaseous emanations, and also indirectly through the soakage into the neighbouring soil; and it is for such cases that the improvement is suggested. The poorer class of Irish village, which consists for the most part of irregular, detached mud-cabins, being quite destitute of any kind of privy or ashpit accommodation, will not be considered, as in their case the nuisance just described does not exist. It must be remembered that any proposed scheme, to be practicable, must be cheap both in construction and working, and simple, as both the rural boards of guardians (who are the sanitary authorities) and the owners of the cottages would be certain to reject any costly plan. The expense of construction would prevent the adoption of either the water-carriage, the dry-earth, the simple pneumatic or Liernur's system; and the trouble and expense of the necessary scavenging put the pail systems out of the question. In fact, the method most likely to be successful in practice is one to improve away the more dangerous properties of the privy and ashpit. The best way to effect this is first to roof over the ashpit, and have no communication between it and the rafters of the privy; next to construct the privy with a small receptacle, the floor of which should be carefully cemented, and sloped towards the back wall, where an open grating is fixed to permit the escape of the urine, and leave the fæces dry. The urine should then pass into a sewer-pipe, which is common to as many cottages as possible—probably to all on one side of the street,—and which also receives the house-slops and the liquid manure from the pig-styes and stables, but no rain-water, and empties into a cemented and well-ventilated cesspool, situated in a grass-field as far as practicable from the village. When the cesspool becomes full it can be readily emptied by means of a pump with a long hose-pipe attached to its nozzle, and its contents distributed by irrigation over the field in which it is sunk. As it is full of a highly concentrated liquid manure, which forms a most valuable application as a fertilising agent, the results to the pasture will be most beneficial, while, owing to the well-known properties of growing vegetation, the sewage will become rapidly deodorised and rendered innocuous. The solid excreta which remained in the privy can, when the ashpit is being cleaned, be mixed with the dry ashes, and so removed without causing any nuisance dangerous to health.

Dr. WILLIS considered the author's proposal impracticable in certain parts of Ireland. He related an instance of a gentleman getting privies built for his tenantry in the county Limerick; but they pulled down the privies, except one man, who got the name of "Jack the Gentleman," and he at length had to make a compromise with local opinion—he let the privy remain up, but did not use it. Farmers even with 200 or 300 acres had not a privy, but simply a causeway extending to a deep ditch.

Dr. POLLOCK said Dr. Wright had no doubt brought forward a practical paper, but his sanitary measures were in great part retrograde, especially in suggesting the introduction of the old cesspool again. Earth was a great deodoriser, but of course its effect was limited to deodorising a certain quantity of matter. As an illustration, he knew of a cesspool at the end of a long garden which had so saturated the clay that a spadeful could not be turned up without producing the most abominable stench. A patient of his had nearly lost her life from the same cause.

Dr. COX did not see any reason, except dietary, why human excrement should be more deleterious than that of other animals, which, when exposed to the atmosphere for a time, became deodorised and practically inoffensive. Hence it was that, having regard to the habits of the peasantry, who went some distance from their dwellings, the excrement was not productive of the danger that might be supposed, but from exposure it became reconverted into its mother earth; indeed, he could conceive that to be less harmful than when the excrement was conveyed in sewers and discharged into the tide, and then washed back again. At the same time he did not wish to defend the habits of the peasantry. He suggested the innocuous disposal of excrement by incineration.

The PRESIDENT would have the whole material collected in one receptacle like an ordinary liquid-manure tank, which was provided in every well-regulated farmyard in Scotland and England, and also in parts of Ireland. He believed the burning of excrement would be the course adopted in future, as was done in Glasgow, Manchester, Bolton, and other towns at present. When incinerated it was reduced to an ash, which was used as a building material. The excrement was collected in pails from the house, the man throwing a pinch of carbolic acid into each pail, and thus preventing any noxious odour. Every town required some system that its local condition rendered more desirable than another. In Dublin he was doing all he could, inducing the people to give up filthy privies. There were 2000 water-closets substituted for privies, while there were 16,500 water-closets as against 11,000 privies, and he hoped there would be no privies worth speaking of in the course of five or six years.

Dr. WRIGHT replied. It was amusing that the first speaker accused him of proposing a scheme too advanced for country villages, while Dr. Pollock told him he was retrogressing. His answer to the first speaker and also to Dr. Cox was that he did not propose to deal with isolated dwellings at all. Instead of the defective system at present existing he would employ a pump with a hose fifty or sixty feet long, and irrigate a field with the sewage, scattering it over a large area, to be absorbed by the grass. He would have the cesspool in such a position that the sewage would flow away from the water-supply, and not towards it. The solid excrement would be pretty well dried by the current of air circulating through the privy, and it could be mixed with ashes when thrown out.

The Sub-section adjourned.

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OBITUARY.

ROBERT DRUITT, M.D., F.R.C.P., F.R.C.S.

For the thirty years preceding the year 1870, Dr. Druitt, of Mayfair, who died on the 15th inst. at his residence in Strathmore-gardens, Kensington, in the sixty-ninth year of his age, was one of the most active and best and most widely known of metropolitan medical practitioners; but in 1867 he was obliged by ill-health to begin to give up public professional work, and in 1872 increasing physical weakness obliged him to retire from all active work; and to men who have since then entered the profession he has been solely, or almost solely, known as the author of the ever-popular "Surgeon's Vade-Mecum." It is no slight distinction to have been the author of a manual of such sterling and lasting value, but to have written it is only one of the many ways in which Dr. Druitt rendered marked service to the profession and the public.

Robert Druitt, who was born in December, 1814, was descended from a family members of which, from father to son, had practised medicine in Wimborne, Dorset, for more than a century; and on his mother's side he was connected with the family to which the late Mr. Charles Mayo, of Winchester, Dr. Charles Mayo, and Mr. Herbert Mayo all belonged. It was natural, therefore, that Robert Druitt, though he lost his father, who was a surgeon, when he himself was only seven years old, should have chosen the practice of medicine for his life-career. He was educated at the old Grammar School of Wimborne, and was made a sound classical scholar. This part of his general education he never allowed to rust; to the last days of his life he read easily and fluently any classic, and it was to him a constant delight and recreation to keep up his acquaintance with Horace in particular. At the age of sixteen, in accordance with the custom in those days, his medical education and instruction commenced by his being received as a pupil by Mr. Charles Mayo, one of the Surgeons of the Winchester Hospital, and there he enjoyed, under exceptionally favourable conditions, all the advantages of the old apprenticeship system of training youths for the profession of medicine. In 1834 he came to London and entered as a medical student at King's College and at the Middlesex Hospital. King's College Hospital had not then been established, and as Mr. Herbert Mayo and Sir Thomas (then Dr.) Watson, who held professorships in the Medical Faculty of King's College, were on the staff of the Middlesex Hospital, Robert Druitt went to that institution for his medical and surgical practice. In 1836 he took the Licence of the Society of Apothecaries of London, and in the following year became a Member of the Royal College of Surgeons of England, and settled in practice in Bruton-street, Berkeley-square. He then began at once to work at the book which has kept his name fresh and green in the minds of medical students and practitioners in every part of the world, and still makes it familiar to fresh generations of students as they pass from our medical schools into practice. Before speaking of this work—"The Surgeon's Vade-Mecum"—more fully, however, it will be well to notice that Dr. Druitt, who was all his life an ardent student, was not long content with his position in Bruton-street or with the qualifications he had obtained. He looked to the higher medical title, and to a higher standing in the profession. In 1845 he became a Fellow, by examination, of the Royal College of Surgeons; and in 1852 a Licentiate of the Royal College of Physicians of London. At that date the College had no direct connexion with the main body of the profession, and had not undertaken to examine and qualify men who intended to be general practitioners, and the Licentiates held in the College the rank now held by the Members. In 1859, when the new order of Licentiates was created, the old Licentiates were offered the then new title of Member; and from the grade of Member, Dr. Druitt was, in 1874, elected to the Fellowship of the College. He thus won the highest qualification obtainable from each of the greatest English medical corporations, and late in life he received the Lambeth degree of Doctor of Medicine. In 1846, Dr. Druitt had moved into Curzon-street, Mayfair; and in 1852 he went to Paris, and studied for a while under Pajot, and afterwards was engaged chiefly in family and obstetric practice of a good class, which steadily increased in extent and value. In 1858 he moved to Hertford-street, where he remained till ill-health compelled him to retire from all active professional work. The first edition of "The Surgeon's Vade-Mecum" appeared in 1839, and the merits of the book were so quickly and heartily appreciated that a second edition had to be brought out in June, 1841. The work is now in its eleventh edition, and the demand for it is still constant and large. The success of the work has indeed been very remarkable: nearly 40,000 copies of it have been sold; it has been reprinted in America, and translated into several foreign languages. And it thoroughly well deserved to command such striking success. In the preface to the second edition, a copy of which is before us, the author says: "The work is meant to afford a short but complete account of modern surgery; to contain everything that is essential to the right understanding of its principles, and to embody the experience of the highest authorities as to the best rules of practice." A task of no mean difficulty that, for even an eminent surgeon, and one to daunt the ambition of most young men; but Druitt understood clearly and well what was wanted, and the result more than justified his belief that he could do it. The work is an admirable model of what a "manual" should be, but so rarely is. Each successive edition of it underwent the most careful and complete revision, and reflected well the incessant advance in the science and art of surgery; and we need not point out how immense that advance has been in the last forty years. Dr. Druitt was a master of the English language, and his style of writing is elegant, simple, and clear, and remarkably free from technicalities of expression; and these characters marked all his writings. He himself said he thought the secret of the success that attended his work lay in the fact that he had tried to write so that all could understand, had written in plain English, had said what he meant, and meant what he said. To this we would add that he wrote with fulness of accurate knowledge and clear and orderly thought. All these excellences are markedly present in the article on "Inflammation," which he contributed to "Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science" (1872). The intention of the essay was to bring the history of the doctrines respecting inflammation down to the latest date; to expound the doctrines of all schools, while condemning none; to trace the history of the treatment of inflammation, especially the rise and fall of blood-letting; and to show the influence of current modes of thought or of received doctrines on the measures adopted to subdue the malady. A task of immense difficulty; but, as has been well said, Dr. Druitt brought to it "rare scholarship, a well-exercised judicial faculty, and a comprehensiveness of grasp rarely equalled"; and the result was a masterpiece of clearness, fairness, and learning. This and the "Vade-Mecum" were the two greatest of Dr. Druitt's professional works, and we must be content to notice very briefly his many other writings. These—pamphlets, addresses, and contributions to journals—were very numerous, and dealt with a great variety of subjects, medical, sanitary, and popular. Among the directly medical of these writings we may mention a "Case of Puerperal Fever, with Diphtheria; Life saved by Sesquichloride of Iron," contributed to *Obstetrical Transactions*, vol. iii.; "On Degeneration of the Placenta at the End of Pregnancy," *Medico-Chirurgical Transactions*, vol. xxxvi.; an account of his "Visit to Amiens during the Cholera Epidemic," *Medical Times and Gazette*, vol. ii. 1866; "On the Use of Raw Meat in Diarrhœa and other Diseased Conditions," *ibid.*, vol. ii. 1870; "On the Varieties of Imperfect Speech in Brain Disease," *ibid.*, vol. i. 1871; and "On Two Cases of Intermittent Hæmaturia," *ibid.*, vol. i. 1873.

In 1873 and 1874, Dr. Druitt contributed to our pages many "Letters from Madras" on subjects that he observed and studied during his residence for health's sake in that city: among these were "Notes on Madras as a Winter Residence"; "Opium Smoking, etc.—Opium *v.* Grog"; on "Leprosy," and "Nerve Influence in Leprosy"; "Dysentery and Ipecacuanha"; "Varicosity of Lymphatics, Chyluria, etc."; "Abscess of the Liver"; "The Medical Institutions of Madras"; "On Burning of the Dead"; "Different Races, and their Modes of Burial"; "On Dancing Girls"; "Prostitution, and Contagious Diseases Acts"; on "The Native Practitioners, Vydians and Hakims"; and some other subjects. He was an earnest and prominent student and teacher of sanitary science, and in 1856 was elected one of the

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Medical Officers of Health to St. George's, Hanover-square, the duties of which important post he discharged with all the industry and fulness that he brought to every office he undertook. This appointment he resigned in 1867. During this time he read a paper at the Royal Institute of British Architects on "The Construction and Management of Human Habitations, considered in relation to the Public Health" (*Transactions of the Royal Institute of British Architects*, 1859-60). In 1864 he was elected President of the Metropolitan Association of Medical Officers of Health, and filled that office until July, 1872, when the Association reluctantly accepted his retirement on the ground of ill-health. During the eight years that he presided over the Society he delivered several valuable and instructive addresses, on "The Influence of Customs, Habits, and Morals on the Health of the Community"; "The Natural History of Intemperance"; "The Position and Duties of Medical Officers of Health"; and on other kindred topics. He had given much careful thought to the subject of intemperance, and, in addition to the address mentioned above, he published, in our pages in 1862, two very instructive papers on "Intemperance and its Prevention." He held and taught that "total abstinence" might be, and doubtless often was, a useful and necessary discipline for desperate and confirmed drunkards—for dipsomaniacs,—but that it was wrong, scientifically and morally, to reject wine, etc., as being *alcoholic*, and *therefore* wicked and an evil; and he would show the fallacy of the total abstinence orators who prate about people drinking "that deadly poison alcohol," by pointing out that people never do take alcohol in its poisonous form, *i.e.*, as anhydrous alcohol; and that you might just as well talk of people eating phosphorus when dining on fish. Holding the views he did on the subject, he set himself the task of finding forms of alcoholic food which should meet and satisfy the just and reasonable appetite. The result was the series of charming reports on "The Cheap Wines from France, Germany, Italy, Hungary, etc.: their Use in Diet and Medicine," which appeared first in our pages in 1864-65, and a much enlarged edition of which was published by Renshaw in 1873. The work contains a very large amount of information—the outcome of practical study and experience—of importance and value to the public, to physicians, and to patients; and has helped largely to make more widely known the excellent qualities of the light and pure wines, and to lead to their displacing the stronger and fortified wines. As regards Dr. Druitt's professional and public life, we only add further that in 1847 he was appointed one of the examiners of the Society of Apothecaries; that he filled the office of Vice-President of the Obstetrical Society; and that for ten years (1862-72), in addition to all his other labours, he was the able, efficient, and courteous editor of this journal.

We will not attempt to describe the man more particularly than to say that he was of good height, and well proportioned; he had a powerful head, his countenance was intellectual and refined, and his manner most courteous. And those who had the good fortune to know him intimately, and see him in his happy, cultured, and artistic domestic circle, were well aware that his professional and public duties did not by any means absorb his energies or satisfy his tastes. His intellect was eminently many-sided, and his tastes led him to study a wide range of subjects. He was an accomplished botanist, had an excellent knowledge of chemistry, both organic and inorganic, and was a good geologist. He was also a great student of languages, and of the manners and customs of men, taking special delight and interest in the study of these if they threw any light upon the Bible. His knowledge of the Scriptures was remarkably deep and large, and we have the assurance of clergymen that he was a theologian of unusual learning and force. He had a thorough knowledge of the art of music, and church music was one of his most cherished studies and delights. Some of our readers are probably acquainted with his pamphlet, "Conversations on the Choral Service," a charming discussion on church music, which appeared first in a periodical called *The Parish Choir*, and when published separately had an extensive circulation. He was transparently straightforward and true, but he was not a man whom it was easy to know well. He certainly did not "wear his heart upon his sleeve," but was extremely reserved as to his own acquirements, his cherished tastes, and his inner life; but those really in earnest in seeking for instruction or advice ever found him an attentive and sympathetic listener, and a clear, sagacious and wise, counsellor and critic.

We will not describe here the illness which, beginning from a severe chill in 1866, when he was suffering from overwork, forced him to retire from all public and active professional work in 1872, and progressed, with unequal steps, but always downwards, till the end came on the 15th of this month. The history of the disease—intermittent hæmatinuria—for the first six years of its duration is graphically and minutely depicted by himself in our pages (vol. i. 1873), and there is nothing really new to be added to it. It is not easy to imagine what a severe and terrible trial it was to such a man to be physically disabled from all his previous occupations while his intellect was as clear, and his interest in science and art as keen, as ever; but the trial was borne with humble resignation and touching patience, for he was not merely a great theologian, but also a devout Christian, and ruled his life by his religious faith.

When he was thus laid aside, those who best knew and could appreciate his life-work determined to give themselves the satisfaction of presenting him with some token of sympathy and friendship, and 107 of the leading members of the profession constituted themselves a general committee for the purpose. Their wish was largely shared by the profession, and the result was the presentation to Dr. Druitt of a cheque for £1215 in a silver cup, given by "370 professional and other friends in evidence of their sympathy with him in a prolonged illness, induced by years of generous and unwearied labours in the cause of humanity, and as a proof of their appreciation of the services rendered by him as an author and sanitary reformer to both the public and the profession."

Dr. Druitt married, in the beginning of 1845, the eldest daughter of William Hopkinson, Esq., of Hamilton-place, Euston-road, and has left a widow, four daughters, and three sons, the youngest of whom follows his father's profession.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 17th inst., viz.:—

Brewster, William, L.S.A., Manchester, student of St. Bartholomew's Hospital.
Cock, Frederick W., L.S.A., Westbourne-park-terrace, of University College Hospital.
Glover, J. Philip, L.R.C.P. Lond., Osborne-terrace, S.W., of St. Thomas's Hospital.
Griffiths, A. P. Henry, Kennington, of Guy's Hospital.
Hicks, G. Beaman, Hackney, of the London Hospital.
Kershaw, J. Edward, Richmond, of St. Thomas's Hospital.
Levi, Reuben, M.D. McGill, Montreal, of the University of McGill.
Mickle, Herbert, M.B. Toronto, of the Toronto School.
Rouse, R. Edward, L.S.A., Worcester-street, S.W., of St. Thomas's Hospital.
Verity, H. W. Steele, L.S.A., Cheltenham, of King's College Hospital.

Three candidates were referred for six months, two for three months, one for nine months, and one for twelve months. The following gentlemen were admitted members on the 18th inst., viz.:—

Batt, R. B. Drury, L.S.A., Camden-road, student of St. Bartholomew's Hospital.
Bindley, E. Norman, L.S.A., New Wandsworth, of the London Hospital.
Buckley, T. William, L.S.A., Betley, near Crewe, of St. Thomas's Hospital.
Collins, E. Treacher, L.S.A., Primrose-hill, of the Middlesex Hospital.
Halpin, R. F. Beetall, Arklow, co. Wicklow, of the Westminster Hospital.
Hart, H. Wheatley, L.S.A. Putney, of the Westminster Hospital.
Jones, Robert, M.B. Lond., Tremadoc, N. Wales, of St. Bartholomew's Hospital.
Mason, A. Henry, L.R.C.P. Lond., Hampstead, of University College Hospital.
Style, Mark, L.R.C.P. Lond., Acton, of St. Mary's Hospital.
Thornton, St. John, L.R.C.P. Lond., Stroud, of the Middlesex Hospital.

Seven candidates passed in Surgery, and when qualified in Medicine will be admitted Members of the College. One candidate was referred to his professional studies for three months, and seven for six months.

The following gentlemen passed their Primary or Anatomical and Physiological Examinations for the Fellowship of the College at the half-yearly meeting of the Board on the 21st inst., viz.:—

Castle, R. Field, student of St. Bartholomew's Hospital.
Flemming, Percy, of University College Hospital.
Howard, R. J. Bliss, of McGill College.
Lewis, Edward J., of the Cambridge School.

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Mayo, F. Herbert, student of the Leeds School.
Platt, W. Brewster, of Harvard University.
Thyne, Thomas, of the Charing-cross Hospital.
Watson, Archibald, of the University of Paris.

Twelve candidates were referred out of the twenty examined. The following gentlemen passed on the 22nd inst., viz.:—

Bowes, W. Henry, student of Guy's Hospital.
Braddon, W. Leonard, of Guy's Hospital.
Clarke, J. Michell, B.A. Cantab., of the Cambridge School.
Edge, Frederick, of the Manchester School.
Hudson, C. Leopold, of the Middlesex Hospital.
Maynard, F. Pinsent, of St. Bartholomew's Hospital.
Pearson, C. Yelverton, of the Cork School.
Reid, E. Waymouth, B.A. Cantab., of the Cambridge School.
Tanner, C. Edward, of St. Bartholomew's Hospital.

Eleven candidates were referred for six months. The following gentlemen passed on the 23rd inst., viz.:—

French, G. W. Henry, student of St. Mary's Hospital.
Gray, J. P. Williams, of King's College Hospital.
Lawrence, L. Asher, of St. Bartholomew's Hospital.
Leech, Priestley, of the Manchester School.
Mead, F. Henry, of St. George's Hospital.
Roughton, J. Paul, of St. Bartholomew's Hospital.
Whishaw, Reginald R., of Cambridge University.

Nine candidates were referred for six months.

Collegiate Examinations.—At the recent pass examinations for the diploma of Membership of the Royal College of Surgeons, which were brought to a close on the 18th inst., there were 124 candidates, as against 96 at the corresponding period last year. Of this number, thirteen having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for three months, twenty-four for six months, one for nine months, and two for twelve months, making a total of forty, as against forty-three rejected at the corresponding period last year.

At the half-yearly *Primary* or Anatomical and Physiological Examination for the Fellowship of the College, the following were the questions submitted to the eighty-six candidates at the written examination on the 18th inst., when they were required to answer at least three out of the four questions on Physiology, from nine to twelve o'clock, viz.:—1. How is carbon dioxide eliminated from the body? What is the average daily quantity excreted? Explain how this may be affected by variations in temperature, quality of food, and amount of work performed. 2. Describe the capillary lymphatics and the methods by which they can be demonstrated. How is the lymph-current maintained in man and other vertebrates? 3. Describe the structure of the canal of the cochlea. Explain how differences of sound are perceived. 4. Describe the sequence of events in the contraction of the heart's cavities. Give the average duration of the different parts of the rhythm. How may both these points be demonstrated? State the exact relation borne by the heart's sounds to the various phases of its action. The following were the questions on Anatomy, to be answered from 1 to 4 p.m., viz:—1. The anterior wall of the abdomen having been removed, describe the dissection required to expose the lumbar arteries and their abdominal branches. 2. The body being placed on its back and the head turned to one side, describe the dissection required to expose the interval between the upper border of the superior constrictor of the pharynx and the base of the skull (sinus of Morgagni). 3. Describe the various inflections of the peritoneum, and trace their formation from early fœtal life to their complete development. 4. Explain the general plan of construction of the human skull. Give the typical component parts of each bone as displayed in the course of development and represented as permanent bones in the skulls of lower animals, and point out the features in man's skull which are essentially human.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 17:—

Bindley, Victor Norman, Southborough-road, South Hackney.
Hearnden, Walter Carrington, Sutton, Surrey.
Jones, David Llewellyn, Llandilo, Carmarthenshire.
Leech, Arthur Herbert, Woolpit, Suffolk.
Sinclair, Robert Duffy, South Wellington-street, Glasgow.
Tuckett, Walter Reginald, Daniel-street, Bath.
Webster, Trevor, High-street, Bewdley.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Benson, Christopher Richmond, St. Bartholomew's Hospital.
Swindlehurst, Thomas Newton, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

LAMBERT, F. J., L.R.C.P. Lond., M.R.C.S.—Resident Medical Officer to the Liverpool Royal Infirmary, *vice* Henry Briggs, M.B., C.M., M.R.C.S., resigned.

BIRTHS.

BRITTAIN.—On May 17, at Gwynfryn, Borth, N. Wales, the wife of P. Brittain, M.D., of a son.

COLEMAN.—On May 20, at Hill View, Streatham Common, the wife of Charles A. Coleman, M.D., of a daughter.

CROWDY.—On May 17, at South-grove, Highgate, N., the wife of F. H. Crowdy, M.B., of a daughter.

GURDEN.—On May 21, at Hopton, Thetford, the wife of Edwin J. Gurden, L.R.C.P., of a daughter.

HEYGATE.—On May 13, at Wellingborough, the wife of F. N. Heygate, M.R.C.S., of a son.

MARRIAGES.

BROTCHIE—TRUMPER.—On April 25, at New York, Theodore R. Brotchie, M.D., of Aberdeen, to Gertrude, second daughter of the late Joseph Trumper, Esq., of Lake End House, near Windsor.

DAVIDSON—MACKAIL.—On May 22, at Ayr, John Davidson, M.B., of Uxbridge, to Anne Aglionby, only daughter of the Rev. John Mackail, of Ayr.

GREEN—MACMURRAY.—On April 21, at Naples, Italy, Alfred Green, fourth son of Henry Thompson Green, M.D., of the Island of Capri, to Mary Jane, eldest daughter of the late James MacMurray, Esq., of Naples.

LOCK—STATHAM.—On May 21, at Wandsworth, John Griffith Lock, M.A., L.R.C.P., M.R.C.S., L.S.A., of South Cliff House, Tenby, to Irene Elizabeth, youngest surviving daughter of the late Rev. Richard Jervis Statham, rector of Tarporley, Cheshire.

MINCHINTON—EVILL.—On May 21, at Kingston, Jamaica, Henry James Minchinton, M.D., M.R.C.S., to Laura Agnes, elder daughter of Henry Evill, Esq., of Ladbroke House, Notting Hill.

PEEK—KIDD.—On May 16, at Lee, Francis Hedley, son of Francis Peek, Esq., of Roby, Sydenham-hill, to Alice, daughter of Joseph Kidd, M.D., Brooklands, Blackheath.

PLUMER—STALLARD.—On May 15, at Worcester, Charles James Plumer, M.D., of Much Birch, Herefordshire, to Sarah Emily Stallard, widow, younger daughter of the late James Cooper, of Redmarley, Worcestershire.

WHITLEY—GILBERTSON.—On May 15, at Plymouth, Alfred William Whitley, M.D., R.N., to Fanny Margaret, elder daughter of Col. C. F. of Gilbertson, late Madras Army.

DEATHS.

ALLATT, CHRISTOPHER JOHN ROBERT, M.D., etc., at 12, Pencester-road, Dover, on May 14, in his 89th year.

CAPON, ETHEL, daughter of Herbert J. Capon, M.D., etc., of 159, Edgware-road, W., on May 20, aged 2.

LIDBETTER, THOMAS GEORGE, M.R.C.S., L.S.A., late of Essex-road, Islington, at 5, Queen's-road, West Worthing, on May 20, aged 35.

MACLEAN, ELIZA ROBERTSON, wife of John Maclean, M.D., at Orbost, Isle of Skye, on May 11.

RENNICK, ROBERT HENRY, Surgeon-General (retired) Madras Army, at La Camusière, Tours, France, on May 14, aged 72.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

CENTRAL LONDON OPHTHALMIC HOSPITAL, GRAY'S-INN-ROAD, W.C.—Assistant-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons of London, Edinburgh, or Dublin, and must produce certificates of having attended the practice of some ophthalmic institution for at least six months. Testimonials to be addressed to the Secretary, on or before June 9.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. Salary £100 per annum, with board and apartments. Candidates must be unmarried and have registered qualifications both in medicine and surgery. Applications, with certificates, to be sent to the Hon. Secretary, on or before June 15.

CITY AND COUNTY LUNATIC ASYLUM, STAPLETON, NEAR BRISTOL.—Assistant Medical Officer. (*For particulars see Advertisement.*)

COUNTY ASYLUM, NEAR DORCHESTER.—Assistant Medical Officer. Salary £140 per annum, with furnished rooms, board, &c. Candidates must be duly qualified to practise, registered, and unmarried. Applications, with testimonials (three or four), to be addressed to the Chairman of the Visitors, under cover to Thos. Coombs, Esq., 8, South-street, Dorchester, by May 28.

DENBIGHSHIRE INFIRMARY, DENBIGH.—House-Surgeon. Salary to commence at £85 per annum, with board, washing, and residence in the house. Candidates must be duly qualified, and conversant with the Welsh language. Applications to be sent to the Secretary, on or before May 26.

DENTAL HOSPITAL OF LONDON, LEICESTER-SQUARE, W.—House-Surgeon. (*For particulars see Advertisement.*)

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. (*For particulars see Advertisement.*)

GLASGOW ROYAL INFIRMARY MEDICAL SCHOOL.—Teachership of Physiology. (*For particulars see Advertisement.*)

GLASGOW ROYAL INFIRMARY MEDICAL SCHOOL.—Teachership of Chemistry. (*For particulars see Advertisement.*)

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET, LONDON, W.C.—Junior Resident Medical Officer. (*For particulars see Advertisement.*)

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ST. BARTHOLOMEW'S HOSPITAL.—Two Casualty Physicians. Particulars of the duties and all necessary information may be obtained by personal application at the Clerk's office. Applications, with testimonials, must be left at the Clerk's office on or before June 8. The attendance of candidates is requested at a meeting of the House Committee to be held at eleven o'clock forenoon on Thursday, June 14, when the appointments will be made.

ST. GEORGE'S HOSPITAL.—Assistant-Physician. (*For particulars see Advertisement.*)

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Birmingham Parish.—Mr. R. C. Cousins has resigned the office of Second Assistant Medical Officer at the Workhouse: salary £150 per annum.

Frome Union.—Mr. E. F. H. Burroughs has resigned the Fourth District: area 13,881: population 2689; salary £77 per annum.

Thorne Union.—Dr. McLeod has resigned the Epworth District: area 11,286; population 2534; salary £20 per annum.

Tisbury Union.—Mr. S. R. Holdsworth has resigned the Hindon District: area 11,527; population 2559; salary £60 per annum.

APPOINTMENTS.

Ampthill Union.—Thomas C. Temple, M.R.C.S., L.S.A., to the Shitlington District.

Langport Union.—Edmund W. Valentine, M.D. St. And., M.R.C.S. Eng., L.S.A. Lond., to the First B District.

Pontefract Union.—Evan W. Pryce, M.R.C.S. Eng., L.S.A., to the Pontefract District and the Workhouse.

Sunderland Union.—John C. Watson, M.D., M.C. Aber., M.R.C.S. Eng., to the Bishopwearmouth East District.

Winchester.—Mr. Arthur Angell as Analyst for the City, *vice* Dr. Earle, resigned.

APPOINTMENTS FOR THE WEEK.

May 26. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Turner, "On Russian Social Life."

28. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

29. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

30. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Mr. Henry Power "On the Lachrymal Apparatus and Accessory Organs of the Eye."

31. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

ROYAL INSTITUTION, 3 p.m. Mr. R. S. Poole, "On Recent Discoveries in Chaldæa and Assyria."

June 1. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Mr. Henry Power, "On the Lachrymal Apparatus and Accessory Organs of the Eye."

PARKES MUSEUM OF HYGIENE, 5 p.m. Professor François de Chaumont will deliver the Introductory Lecture—"A Sketch of the Origin and Development of the Science of Hygiene."

CLINICAL SOCIETY OF LONDON, 8½ p.m. (Extraordinary Meeting.) Mr. R. J. Godlee, "On Cases of Stretching of the Facial Nerve." Mr. Clutton, "On a Case of Spondylitis Derformans." Dr. Lediard (Carlisle), "On a Case of Combined Spondylitis and Osteitis Deformans." Mr. A. T. Norton, "On a Case of Melanotic Sarcoma of Antrum; Excision of Superior Maxilla; Recovery." Mr. G. Lawson, "On Two Cases of Epithelioma occurring on Tight Cicatrices." Dr. Crocker, "On a Case of Multiple Nodes in Congenital Syphilis." Dr. F. Taylor, "On Infantile Hemiplegia with Unusual Reflex."

ROYAL INSTITUTION (Council Meeting, 3 p.m.), 9 p.m. Prof. F. Pollock, "On the Sword: its Forms and its History."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 19, 1883.

BIRTHS.

Births of Boys, 1211; Girls, 1196; Total, 2407.
Corrected weekly average in the 10 years 1873-82, 2529·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	793	737	1530
Weekly average of the ten years 1873-82, corrected to increased population ...	789·5	731·0	1520·5
Deaths of people aged 80 and upwards ...	...	...	54

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	3	2	3	4	...	1		...
North ...	905947	1	14	3	3	6	1	3	2	3
Central ...	262238	...	11	1	1	...	...	1	...	...
East	692739	...	17	9	3	1	...	2	1	1
South	1265927	...	21	14	7	11	...	2	...	8
Total	3816483	1	66	29	17	22	1	9	3	12

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·956 in.
Mean temperature	57·5°
Highest point of thermometer	74·3°
Lowest point of thermometer	43·8°
Mean dew-point temperature	47·7°
General direction of wind	Variable.
Whole amount of rain in the week	0·18 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 19, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending May 19.	Deaths Registered during the week ending May 19.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2407	153	20·2	74·3	43·8	57·5	14·17	0·18	0·46
Brighton	111262	63	36	16·9	70·2	46·5	56·3	13·50	0·17	0·43
Portsmouth ...	131478	100	55	21·8	...	...	...	...	...	...
Norwich	89612	67	24	19·8	...	...	...	...	...	...
Plymouth	74977	31	35	24·4	72·0	46·7	54·5	12·50	0·50	1·27
Bristol	212779	115	60	14·7	70·0	45·8	53·6	12·01	0·17	0·43
Wolverhampton ...	77557	45	32	21·5	69·0	41·4	52·1	11·17	0·12	0·30
Birmingham ...	414846	273	163	20·5	...	...	...	...	...	...
Leicester	129483	91	40	16·1	...	...	...	...	...	...
Nottingham ...	199349	106	76	19·9	73·5	42·0	55·7	13·17	0·11	0·29
Derby	85574	60	31	18·9	...	...	...	...	...	...
Birkenhead ...	88700	72	35	20·6	...	...	...	...	...	...
Liverpool	566753	325	281	25·9	61·8	45·9	51·4	10·78	0·30	0·76
Bolton	107862	53	28	12·6	66·5	42·0	50·6	10·34	0·05	0·13
Manchester ...	339252	162	161	24·8	...	...	...	...	...	...
Salford	190465	100	77	21·1	...	...	...	...	...	...
Oldham	119071	81	69	30·2	...	...	...	...	...	...
Blackburn	108460	75	49	23·6	...	...	...	...	...	...
Preston	98564	57	57	30·2	...	...	...	...	...	...
Huddersfield ...	84701	32	27	16·6	...	...	...	...	...	...
Halifax	75591	44	26	17·9	...	...	...	...	...	...
Bradford	204807	98	78	19·9	68·8	46·0	54·0	12·22	0·02	0·05
Leeds	321611	216	160	26·0	72·0	44·0	54·4	12·44	0·10	0·25
Sheffield	295497	208	116	20·5	70·0	41·0	53·3	11·84	0·05	0·13
Hull	176296	118	106	31·4	68·0	39·0	54·3	12·39	0·10	0·25
Sunderland ...	121117	101	49	21·1	...	...	...	...	...	...
Newcastle	149464	106	71	24·8	...	...	...	...	...	...
Cardiff	90033	40	38	22·0	...	...	...	...	...	...
For 28 towns ...	8620975	5246	3518	21·3	74·3	39·0	54·0	12·22	0·16	0·41
Edinburgh	235946	142	84	18·6	61·0	37·4	51·5	10·84	0·15	0·38
Glasgow	515589	444	347	35·1	61·0	36·0	51·4	10·78	0·00	0·00
Dublin	349·85	158	198	29·5	66·7	34·6	51·1	10·62	0·01	0·03

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·96 in. The lowest reading was 29·72 in. on Sunday evening, and the highest 30·21 in. on Thursday morning.

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NOTES, QUERIES, AND REPLIES.

He that questionsth much shall learn much.—Bacon.

Ethnologist.—Professor Flower will gladly accept such rare skulls for the College Museum. They will be publicly exhibited in the theatre of the College during the annual election of Fellows into the Council.

Accidents on Tramways.—In consequence of the frequent accidents and fatalities on the various tramways in the parish, the Islington Vestry has resolved to memorialise the Board of Trade on the subject, urging on the Board the necessity for something being done to prevent the danger which tramcars are to incautious persons.

Associations of Medical Officers of Health.—A combined meeting of the North-Western and Yorkshire Associations of Medical Officers of Health has been held at Manchester. Mr. R. Angus Smith, of Manchester, read a paper on "Water Analysis"; Mr. F. Vacher, of Birkenhead, contributed a paper suggesting the provision of tenement hospitals for infectious cases; and Mr. S. W. North, of York, spoke of the need for greater detail in the census returns, so as to enable medical officers to ascertain the death-rate for small areas, and upon the necessity of improved supervision over the milk-supply of large towns.

Sanitary Improvements, Wrexham.—The Local Government Board has sanctioned the borrowing by the Town Council of £2250 for sewerage works and sewage disposal. The works in question have been undertaken to avert a threatened action by the Chester Corporation for the alleged pollution of the Dee, and to settle the long-standing dispute between the Wrexham Town Council and the tenant of the sewage farm.

Artisans' Dwellings, Liverpool.—The City Council has resolved to request the Local Government Board to approve of the undertaking by the Council of the rebuilding of the houses on part of the land forming the site of Nash-grove, cleared under the Artisans' and Labourers' Dwellings Improvement Act, 1875.

Incomplete Reports of Medical Officers.—A contemporary states that the Wandsworth and Clapham Board of Guardians have had under discussion the want of completeness in the reports sent in by the district medical officers, and have decided that a letter be sent to all the district medical officers, calling attention to the meagre nature of their reports, and stating that unless the full information deemed necessary be given, the medical officers will be required to attend personally the weekly meetings of the guardians.

M.A. Cantab.—There are two science professorships now vacant; one is the new Chair of Physiology which the University of Cambridge has just established.

Night Nurses at the Holborn Infirmary.—The Board of Guardians have decided that the salaries of all night nurses at the infirmary shall be £20 per annum and the usual rations. The salaries of several of the nurses at present in the infirmary have been increased accordingly.

W. Janson F.—1. The number of persons successfully vaccinated by the public vaccinators of 647 unions in England and Wales during the year ended September 29, 1891, was 533,005. The number of births in the same unions during the year was 874,474. 2. The General Order of the Local Government Board provides that no vaccination officer shall perform the duties of his office by deputy, unless with the permission of the Local Government Board, given on the application of the guardians, he shall be allowed to entrust their performance to some other person approved of by such guardians.

A Vegetarian Supper at Threepence a Head.—Dr. Norman Kerr has entertained a party of nearly one hundred *employés* of the Marylebone Vestry at a vegetarian supper at a coffee tavern in the Marylebone-road. He wished to give a practical "illustration of good and cheap living." The total cost was £1 4s. 10½d., or rather less than 3d. a head. There were three courses, and a cup of cocoa. The courses consisted of soup, savoury pie, and sweets, and the guests seemed to have been well satisfied with the repast.

Poor-law Boards and their Doctors.—At the fifteenth annual Poor-law Conference for the West Midland District, held at Birmingham, Dr. Hickinbotham read a paper "On the Administration of Medical Relief." He said that local Poor-law boards had not succeeded in obtaining their doctors from amongst the most socially distinguished or professionally prominent members of the faculty. The pay was bad, the post involved certain social disabilities, and the "parochial doctor" was, or was supposed to be, exposed to a harassing and almost degrading supervision.

First Aid: Mining Accidents.—Mr. Arthur Pease, M.P., speaking at Marske-by-the-Sea at a distribution of certificates in connexion with the local centre of the St. John Ambulance Association, said, when they observed how many of the accidents in mines could be prevented, it was important that this question should be constantly kept before the attention of both employers and employed. He urged miners to avail themselves of the opportunities afforded them by means of these classes for acquiring practical knowledge.

Mr. Johnson, Birmingham.—There are 621 Fellows of the Royal College of Surgeons by examination, and 565 by election, making a total of 1186.

The Recent Bank Holiday.—It is satisfactory to find, in reference to last week's Bank Holiday, that the holiday charges at the metropolitan police-courts were unusually small. This is the more noteworthy when the unfavourable state of the weather on Whit-Monday is taken into consideration. Many holiday-makers may have had to resort for shelter to the public-houses; but, notwithstanding, the charges at the police-courts were far below the average on similar days. The various temperance organisations are evidently exercising an influence among the industrial orders other than those who are pledged "teetotalers."

Reporting of Infectious Diseases, Perth.—After some discussion, the Police Commission have agreed to approve a minute of the Cleansing and Sanitary Committee, directing payment of two of the city doctors' accounts for notifying cases of fever, on the distinct understanding that no such claims would be admitted in future.

A New Convalescent Home.—This home for children has just been opened at Appleton, near Bolton Percy. It has been established by the Hon. Mrs. Beckett Denison, in memory of her daughter, the late Mrs. Chandos-Pole. The home will accommodate eight children.

Avarice.—The Lambeth Water Company, which about two years ago added upwards of 20 per cent. upon the rentals, with a demand for beforehand payment, has made its officers pay a house-to-house visit in order to see if additional charges cannot be exacted for baths and gardens, and where taps have been carried to bedrooms or to the outsides of houses.

Open Spaces for the East-end of London.—A suggestion has been made to reclaim a portion of the marshy land on the banks of the river Lea, between the East London Waterworks and Bow. At present the land is used as a grazing ground, and it is often under water. The builder is, however, making his advances on it, and in no distant future the requirements of the population will necessitate its drainage for building purposes. In its present unimproved condition it is of little use, and its value in consequence comparatively small. To forestall the speculative builder by acquiring the land for recreation purposes for the people would be a boon to this densely inhabited district, which, it may be hoped, will be secured for it.

Scarlet Fever, Aston.—The Chairman at the last meeting of the Board of Guardians stated that although there had been no fresh cases of small pox reported during the previous few days, scarlet fever of a very bad type had broken out in the district, and a number of children attacked by the disease had died within seven days.

Sheerness.—The Local Board of Health has determined to obtain plans for the application of Shone's pneumatic ejector system to the town, for use in the disposal of the sewage drainage. The members of the Board recently visited Eastbourne and inspected the system, which is working with very successful results there.

Often too True.—A painter made a village chemist's sign read—"Physicians' prescriptions carefully *confounded*."

The Metropolitan Asylums Board and Infectious Cases.—The Board, having undertaken to provide for the removal of infectious cases in future, have written to several of the metropolitan boards of guardians, inquiring whether the guardians had suitable ambulances. In several instances the guardians have offered to sell their ambulances to the Asylums Board.

Students.—The phrase "physician's bill," in the writings of the old authors, does not mean *account*—it denotes a physician's *prescription*. The German beer—lager beer—is so called from being kept in barrels a long time on the "lager," or frame, before it is considered fit for use.

COMMUNICATIONS have been received from—

The Secretary of the Royal Institution, London; Dr. Sibley Coupland, London; The Urban Sanitary Authority, Hastings; Mr. G. J. Symons, London; The Honorary Secretary of the Perthshire Medical Association, Perth; Dr. C. J. Cullingworth, Manchester; The Secretary of the Royal College of Physicians, London; Dr. Thomas Pearce, Plymouth; Mr. W. Blackett, London; Mr. R. Clement Lucas, London; The Director of the Anthropological Institute, London; The Registrar of the Apothecaries' Hall, London; Mr. John Holm, London; The Secretary of the Local Government Board, London; Dr. Horace Dobell, Bournemouth; Mr. J. Chatto, London; The Secretary of the Clinical Society, London; Dr. Rayner, Hadwell; The Sanitary Commissioner of the Punjaub, Lahore; Dr. Julius Althaus, London; The Secretary of the American Laryngological Association, New York; Dr. Braxton Hicks, F.R.S., London; The Registrar-General for Scotland, Edinburgh; The Inspector of the Lunatic Asylum, Victoria; The Registrar-General for Ireland, Dublin; Dr. A. T. Thomson, Glasgow; Mr. Hadley, London.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—Le Progrès Médical—Therapeutic Gazette—Western Daily Mercury, Plymouth, May 17—Revue de Chirurgie—Revue de Médecine—American Journal of Obstetrics—Canada Lancet—Lares de Hipocrates—Glasgow Herald, May 19—Western Daily Mercury, May 22—Boy's own Paper—Girl's Own Paper—Sunday at Home—Friendly Greetings—Leisure Hour—New York Medical Journal—Revue d'Hygiène—Western Medical Reporter—Glasgow Herald, May 19.

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ORIGINAL LECTURES.

CROONIAN LECTURES
ON
MODERN THEORIES AND TREATMENT OF PHTHISIS.

Delivered at the Royal College of Physicians, London.

By JAMES EDWARD POLLOCK, M.D.,
Consulting Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

LECTURE III., PART II.

IN approaching the subject of the rational treatment of phthisis, that is, its management, according to our latest knowledge of its causes and progress, we are met on all sides by problems and difficulties. Our first and most natural division of such a subject is into prevention and cure. But what have we got to treat? A specific disease blocking the lung with nodules? an inflammation? or a parasite? Further consideration would lead us to the question of stages. If we have settled what is the cause, the true *materies morbi*, we shall have to regard it in its receptive or initiative stage, what used to be called the hopeful stage of phthisis, when cure was said to be possible; and secondarily, in its structural change stage, when structural mischief is established and parts of the lung are broken down. In the attempted division lie the difficulties of phthisis, yet in the present day especially they must not be put aside with impatience, nor handed over to empiricism, which is one of our dangers. With new theories there are always waiting men who say, This is the cause of the disease—behold the cure! Yet this complex affection only still more shows its complexity when we come to apply theory of any kind to practice. We are, on approaching it closely and with impartial minds, struck with the fact that its phenomena are of mixed pathological import, and quite other than unique and constant. Let us take the first question. Is it a specific tubercle, or an inflammation, or a parasite? Judged by its pathological and clinical history, it is each and all of these at once. We find a disorder of local irritation and a pyrexial constitutional state; we find a period of quiet invasion, followed by one of much disturbance, and proceeding to recognisable structural destruction: this is the story of inflammation of lung structure, and of the breaking up of the product involving death of surrounding tissues. Yes, but it is the story also of a germ introduced from without, lodging in the lung as a nidus, fructifying and multiplying, and discharging bacilli into the blood and lymphatics. After a while we find perhaps a secondary centre of disease in the opposite lung. It is a second nidus or station of germs, says the parasitic theorist; it is the detritus of caseated material or a fresh miliary eruption, says the tubercle believer; it is a fresh inflammation-product centre, says a third. Anyhow, our patient is fevered and wasted, and physical evidence shows that he has one, if not two, diseased spots in the lungs. The treatment of such a state of things (I mean pyrexia, waste, and physical signs of a solid patch in a lung) used to be local depletion and salines; and we have also seen the dulness over the lung diminish, and the patient relieved from cough and pain and pyrexia, by such means. Whether we were treating a tubercular deposit, or an inflammation, or a nidus of parasites, we were doing good to our patient. My own belief is, that whatever was the primary cause of the lung irritation, we were procuring the absorption of purely inflammatory products in the lung. Practical men will probably agree with me. A study of its phenomena, then, will scarcely assist us in defining its cause, and if it be any of those insisted on by different schools, the practice does not, hitherto has not, varied with advantage to the patient. The believer in parasites will, however, tell his patient to inhale antiseptics, on the theory that their destruction will be accomplished in the lung and their multiplication prevented. However, even the theorist will acknowledge that there are other products in the lung besides bacilli, others even more removable. The introduction of remedies of sufficient power to kill parasitic germs through the blood and the diseased tissues has been, of course, advocated. But it has been well proved that this same cause which has cut off a portion of lung by strangling its vessels, has also rendered it very impervious to remedies approaching it through the circulation.

We fall back, then, on consideration of prevention. If it were possible on the parasite theory to prevent the introduction of germs into the system we should have no phthisis. Sow no seed, and you will have no crops. I suppose that those of us who, like myself, have tried to amuse their leisure with a garden have found less trouble in getting seeds to grow than in exterminating weeds. You dig up, burn, destroy, and after a few years of this preventive work you will have a tolerably clear area, and with excessive care may get on with only ordinary weeding. But still you will find that your soil is peculiarly suited to the production of certain rapidly growing, wide-spreading weeds, which, like the tares in the wheat, choke the healthy plant. The seed-germs, you know, are in the air, sailing on feathered wings, or hidden in the soil till spring comes, growth time; or they are of insect production, and a bird of the air has borne them; or an unseen wind has dropped them on the appropriate spot where their reproduction is certain. Such as this is what farmers call "blight." You sleep, and rise, and your potatoes or hops are covered with germs. There seems to me to be a very close analogy in all this to the germ theory of phthisis. The weed or blight and the germ theory of disease are like living organisms seeking a nidus for multiplication. On the other hand, receptivity of soil is an essential requisite to reproduction. To destroy germs or to prevent their access, and to render the soil unfertile as regards the weed, are the two problems. In an extensive experiment on sweet peas I found that the snails ate up all the seed in the earth. I applied nitrate of soda, when the snails vanished, and a second sowing on the same spot immediately produced the flowering plants. I had destroyed the animal life, but rendered the soil fertile for the vegetable seed.

We have already noticed that all the theorists acknowledge a certain vulnerability of constitution which predisposes to the reception of the germs of disease and to their fructification. This seems essential to the production of tubercle, of specific inflammation, of parasitic bacilli. It is heritable and peculiar to certain ages. A concentrated heredity will invite phthisis at an earlier age than it would otherwise be due, and in a more intense form, as where both parents were consumptive. This constitution or proclivity is a well-recognised and perfectly proved condition; and it stands apart from all theories of the nature and proximate cause of the tubercular disease, and must be considered in every argument on the subject. It forms the receptive soil, without which, in the vast majority of cases, the germs will not take root; for all of us are exposed to germ agents, but few of us get the disease. If, then, we are to begin with prevention, we must counteract the constitution and prevent the vulnerability. The marriage of persons predisposed to phthisis or already phthisical should be forbidden. Where consumption is already in a family, the marriage of cousins would precipitate the malady, and ought not to take place. All that is invigorating in residence, habits of living, and diet should be strictly enjoined, and the open-air life insisted on as far as is possible. A hardening process of the surface of the body should be practised by cold sponging and exercise in the fresh air; and sleeping chambers should be spacious and not overheated. But I need not here dwell on the recognised mode of dealing with those who are delicate but not diseased. If we adopt the parasitic theory—that is, that germs can be introduced from without by contact with a sick person—such contact should be forbidden, especially to occupy the same room or to sleep in the same bed with consumptive persons. I see no less stern an injunction than this to be possible to those who consistently believe in the germ theory. While we cultivate all that encourages the vitality and resistance power which we know to be hostile to the advance of disease, we are bound to protect those most exposed to its ravages. But if we seem to have it proved that we are exposed to a danger little suspected before from contact with the sick, there is a possible compensation to be found in the doctrine of the culture of germs by artificial means. In the experiments with the spirilli of anthrax it was found that by passing them through many animals, thus securing a repeated generation of the parasite, the

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intensity of the poison was greatly increased, so that an infinitesimal quantity sufficed for inoculation. But, again, it was found that by culture and reducing means applied to certain ferments, as those of splenic fever in the lower animals, the intensity of the poison could be reduced, as in the experiments of Büchner, who was able to mitigate the poison of the anthrax to the comparatively harmless "hay bacillus." There is a hope, therefore, in the minds of some that it may be proved possible to reduce the power of tubercle parasites by passing them through lower animals, and so be able to inoculate man with a mild form of tuberculous disease, which, theoretically, might prove to be preventive of other attacks of the same kind. The experiments on the inoculation of syphilis will be in the memory of all of us. The virus had not been reduced by culture, or by passing it through other animals, and it is the opinion of Hutchinson and others that syphilis is not transmissible beyond the third generation. It is a well-known theory of vaccinia that that disease is only variola modified by passing through the system of the cow. We dare not indulge fanciful speculations on the subject, but that there is a future possibly productive of great practical results few can doubt.

The prevention of contagion, by declining to group consumptive people together in large numbers, is one of great national importance. There is no country which has built so large a hospital for consumption as we have. I have stated my own convictions on the question of contagion by personal contact in the ordinary way; but I have always upheld that phthisis would be better treated in separate dwellings, if possible in the country, rather than in cities, on dry soil, and on elevated localities. There can be no excuse for the grouping together of so many persons suffering from one disease, and that, too, productive of copious discharges from the air-passages, except that of convenience. Convenience for treating numbers together implies economy of money and of skill, and of all the appliances for the care of the sick. While acknowledging the necessity, we should exercise the greatest care in ventilation, cleanliness, the frequent removal of sputa, and of what is not often sufficiently attended to—the renewal of underclothing of the sick. Dust should never be allowed to accumulate, and the air-passages of the building should be frequently examined and cleansed.

I have stated the evidence obtainable as to whether the Brompton Hospital has been a spreader of consumption, and I must leave each to form his own conclusions. In doing so two things are to be remembered:—First, that great cleanliness has been always practised; and next, that when the ventilation went wrong the outbreak of sickness which followed was septic, not tubercular. In treating the stage of phthisis in which lung disorganisation is taking place, and according to the new theory a number of material germs are set free and find their way into the blood and lymphatics, there can be no reason why a fair use of antiseptics should not be practised. The germ-destroying properties of many chemicals are now known; but we are yet in the infancy of efficient modes of applying them. Inhalations as now practised are only made use of for short periods; but a long-continued exposure of the air-passages to various vapours capable of being inhaled should surely be had recourse to. Not only should inhalers be used which may alter the septic character of the secretions, but to give the system a fair trial, the patient should be placed in a chamber impregnated with certain vapours, as carbolic acid, sulphurous acid, iodoform, and such like, and allowed to remain for hours exposed to their influence. In the new building at Brompton we have had such chambers constructed, and I trust we may shortly hear details of the results. By all the later theorists the local treatment of the lung has been brought into prominence, and there are other considerations besides the use of antiseptics or germ-destroying local applications which need further investigation. Such are the conditions of altered pressure to which the lung may be subjected. The collapse of its cells may thus be obviated, and the expansion and increased vital energy of alveoli bordering on those already blocked or injured may be promoted. We seem to have been waiting too helplessly for something to guide our treatment before having recourse to methods of altering pressure and increasing the vitality of tissues, of correcting foul secretions or stimulating languid and devitalised products of diseased action, which the surgeon daily applies to outward wounds with advantage, and frequently with success. In the new Brompton Hospital there are air chambers to which diminished or increased pressure can be applied. The results hitherto published at other places have been limited and perhaps somewhat empirical, but no doubt time will develope correct opinions on this important question. We already know that the contraction and even ultimate closure of the cavities in the lung greatly depend on the condition of the surrounding lung tissues, and especially of the neighbouring alveoli. That which Dr. Ewart has called compensatory hypertrophy, and which supplies mechanical extension of the healthy parts of the lung, acts both by improving the general condition of the system by affording more respiratory space, and also by pressure on the cavity walls. The boundary zone of a cavity may be more or less consolidated by fibrous alterations, by pneumonic deposits, and by pleural thickening. It is impervious and tough, and but little vascular. If a cavity were not so surrounded, its collapse and cure would in many instances follow a suspension of the morbid events of which it is the seat—purulent infective secretions, not unfrequently charged with bacilli. The effects of altered atmospheric pressure may be found of the greatest use in furthering the processes of dwindling and contraction.

Let us very briefly consider this cavity stage of phthisis. The possibility of the healing may be regarded as proved. Hertler, of Vienna, in 1880, had collected 780 cases in which cavity of the lung had become obsolescent, and in several of these complete cicatrisation had taken place. There is no doubt that the physical signs of cavity often disappear, although it is likely that this is due rather to collapse than to obliteration. First, the reparative change appears to be governed by the cessation of morbid action and the disappearance of bacilli, and the lessened secretion in the cavity itself; secondly, by the facility with which its contents can be emptied into a neighbouring bronchus; thirdly, by the mechanical conditions of its situation, and the state of the surrounding tissues. Apex cavities are unfavourably placed for contraction, owing to the surrounding thickening and adhesion of the pleura, through which the resistance of the ribs is conveyed. They are also by position removed from the closing-up influence of pressure from the surrounding alveoli becoming enlarged; so that compensatory hypertrophy is not available. Nevertheless, deducting these mechanical difficulties in the way of closure, there is no reason to doubt that morbid actions may be sufficiently arrested in a cavity to permit of its healing. If these conditions are due to bacilli, they are then more locally within reach than in the earlier stages, when they are embedded in a tubercular nodule or in the walls of the alveoli. If the conditions are those of simple chronic abscess, whose contents may become putrid by the access of septic germs from the atmosphere, they are again accessible to remedies of the antiseptic class directly applied. If an ordinary wound be capable of setting up septic actions by exposure to the atmosphere, surely the lung cavity is equally, if not more exposed, and should be guarded and treated in a like manner to that in which a surgeon acts towards an external abscess. As a matter of fact, septic phenomena are by no means an infrequent sequence of lung cavities, and are shown in secondary and distant pyæmic deposits. Therefore we should strongly advocate the local medication of cavities in the lung by direct antiseptic, stimulant, and other treatment calculated to kill parasites and restore a healthy state of secretion.

The surgical treatment of certain cavities by tapping has been practised in this and other countries with a considerable amount of success. The ordinary apex cavity, with a free opening into a bronchus, and with moderate daily secretion, not of a fœtid character, is not likely to be much benefited by tapping, as, for the mechanical reasons we have given, it is not easy for it to collapse and become closed, the adhesions and condition of the surrounding parts of the lung forbidding such results. On the other hand, cavities with a less free opening into a bronchus, and situated near the middle or base of the lung, possess characters which do not forbid their relief, nor even their closure. Their secretion is apt to accumulate from gravitation, having to find its way upwards into a bronchus, and fœtor ensues, the cavity being never fully emptied. The mechanical difficulty is here considerable, as the secretions must be projected upwards, and the surrounding tissue of the lung, generally indurated, cannot contract on its contents. In phthisis a large proper-

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tion of the expectoration comes from bronchial irritation, the lining membranes of the tubes, in the neighbourhood of such cavities, being irritated by the passage of fœtid secre*tions* over it. It is often found stripped of its epithelium, and even ulcerated in the neighbourhood of the cavity—conditions which can never be remedied so long as the bron*chial* tube is the only exit for foul discharges. It is most natural to apply surgical principles to such cases, and by a free drainage to carry off septic matters. I may briefly *allude* to the conditions requisite to justify operation. The signs of cavity should be unmistakable, and should all be present. And the existence of adhesions of the lung to the *pleura* should be proved at the point at which it is proposed to operate. In acute gangrenous cases, or hæmorrhagic cases where the lung is in a vascular spongy state, where *little* fibroid change has taken place, and adhesions of the pleura are not evident, the operation should not be performed; the trocar would not enter a defined cavity, but a broken-up lung and hæmorrhage must occur, or the contents might escape into the pleura. But there are many cases met with in practice where tapping may prove highly beneficial and prolong life, by lessening copious suppurations, by altering the fœtid character of the discharges and so relieving fever and preventing septic infection. I have witnessed several such cases, and there are now a considerable number on record. After the review which we have taken of the various *forms* and assumed causes of phthisis, we can have little hesitation in laying down one or two axioms to guide us in selecting the most suitable climate in which persons may reside who are either threatened with phthisis or inherit a proclivity to be counteracted. It should undoubtedly be of the bracing character, dry in soil and elevated. Starting *from* the supposition that a vulnerability is to be counteracted, which the best observers consider to consist in feeble circulation and tendency to stagnation and the pulmonary *changes*, and an undrained condition of the lymphatic system, which may give rise to exudations of low vitality, we ought to prescribe exercises and air, which give tone to *the vessels*. The whole state appears to be passive—a stagnation, a lowness, a want of contractile power in tissues, and this is not to be encouraged by placing its subject in relaxing *heats*, or permitting him to neglect exercise in fresh air of invigorating degrees. There is no doubt that the plan has been overdone by exporting such persons to a rigorous *climate*, but there is a just medium from which the benefits of pure and bracing air may be obtained without exposure to severities, for which these delicate frames and feeble circulations are not adapted by either their nerve-power or the tone of their bloodvessels. It is also to be remembered that hæmoptysis is more frequent, and often to a dangerous extent, on these alpine heights; and it is evident that persons liable to such congestions should not reside there. *The* purity of air and constant change of a sea-voyage are often preferable for invigorating purposes to a residence in winter in "upland valleys," where most of the day must *be passed* in poorly furnished apartments artificially heated by stoves.

In the stage of cavity, if it be single, and if febrile symp*toms be absent*, I have observed most benefit from a fre*quent change* of locality, and from being much in the open air, if possible on horseback. The best reason for selecting *a southern* climate is undoubtedly that it affords facilities for open-air exercise. In searching for it, unfortunately, invalids have to travel far, for there is not much of a fixed *and stable* character to be found on this side of the Mediterranean. On reviewing the cases I have met with in practice, I find that those which survived longest were persons who *travelled about* in moderate climates, and who, some of them, had a rough life occasionally in our colonies or in South *America*. A rule for our guidance, which I have always inserted on, I may be pardoned repeating here. Patients with a high temperature should not be advised or permitted *to travel far*, and those with much fever should not be moved at all. I care not whether the local disorder be inflammatory, *tubercular*, or parasitic; that which is proceeding in the *lung is an active* condition of irritation, the blood is loaded with inflamunatory products or bacilli, and rest is indicated before all things.

Let me say a word for those unblessed by riches who are unable to travel for their health, who either have not the means or decline to be a burden to richer friends, or to spend their *last penny* which may be wrung from the necessities of wife or children in a pursuit of health in a distant land. Well, I have had a great deal to do with the poor in this country, and I may console many by saying how well I have found numbers of patients go on in London—in London, under the unfavourable conditions of climate so well known to all of us. I believe I was one of the first to note the great longevity of many cases of phthisis, and my statistics were gathered in the out-patient department of Brompton Hospital.

I had proposed to consider the use of nutrients in the treatment of phthisis, but time warns me that I must omit more than the bare mention of the fact that no parasitic theory can lessen the importance of the use of tonics and cod-liver oil. I must also apologise for the omission of a more detailed account of germicides. I would just remark that supposing we possessed a local remedy of sufficient power to insure the destruction of such bacilli as are met with in the secretions, their rapid reproduction would soon overtake our treatment. I fear that in this direction we may have much empiricism and many disappointments.

Finally, to sum up the brief review which we have been able to make of these new doctrines, it would appear that while some facts, such as the presence of bacilli in all cases of phthisis, and their absence in other affections of the lungs and air-passages, are fully proved, there are some assertions of those who hold that such appearances in the lungs and its secretions are the proximate and invariable cause of the disease, which we must for the present hold to be *sub judice*. Among these doubtful theories are those which concern the production of the parasites. Whether they be endogenous or introduced from without, whether they may not find their birth in certain blood-changes which are the outcome of pyrexial action in the system; or whether they are the product of a like morbid condition in other animal bodies, and from them introduced into other organisms by contact or infection, must remain for the investigation of later pathology. We may safely relegate these interesting questions to the ardent students who are now everywhere carrying on new observations. And for ourselves, knowing well that all pathology is progressive, and that we see but a portion of truth at any time, be content to await the result.

HEREDITARY BALDNESS.—Dr. Bouchacourt related to the Société de Médecine de Lyon (*Lyon Medical*, April 1) a case of a child brought to him having the scalp entirely smooth. The father of this child was bald at twenty-four, and several of its paternal uncles had become so at the same age, as also had the grandfather and great-grandfather. The family to which this child belongs consists of ten children, and all the boys are, like their father, disposed to baldness. Dr. Bouchacourt also alluded to a rare form of heredity existing in a family at Lyons, in which a lock of white hair had been transmitted from generation to generation, the hereditary character manifesting itself at a greater or less time after birth. Sometimes a generation had been passed over without the production of the white lock, which then reappeared in the next generation.

SANDY SOILS AND THE PHYLLOXERA.—On the occasion of a paper being read at the Académie des Sciences concerning the phylloxera, the Secretary (M. Dumas) called attention to various communications which he had received on the cultivation of the vine in Algeria, where a sandy area of 6000 hectares, formerly sterile, has been most profitably planted with vines. Wine is imported into France, M. Dumas stated, to the amount of a million (bottles?) per day, and if that continues for some ten years three or four milliard francs will have been handed over to the foreigner in exchange for a fluid which has become an imperious necessity in France. M. Blanchard observed that experience had amply proved that the phylloxera cannot live in sand, the kind of sand exerting no influence in the matter—the physical condition of pulverulence being that which is adverse to the life of this pest. M. Dumas added that the only fact actually established is that a sandy soil is fatal to the phylloxera; but we must not jump to the conclusion that all sandy soils are alike favourable to the culture of the vine. The contrary has been proved by the failure of some trials in the Landes. Climatic conditions, the exposure, hygrometric qualities, etc., of the different localities have also to be taken into account.—*Union Méd.*, May 19.

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ORIGINAL COMMUNICATIONS.

ON THE

DIAGNOSIS BETWEEN MALIGNANT TUMOURS AND CERTAIN TUBERCULOUS AFFECTIONS OF THE TESTIS.

By HENRY T. BUTLIN,
Assistant-Surgeon and Demonstrator of Surgery, St. Bartholomew's Hospital.

ALTHOUGH the diagnosis of malignant tumours of the testis is admitted to be, in some instances, one of the most difficult tasks in surgery, it will hardly be imagined that some of the most difficult cases are those in which the diagnosis lies between malignant disease and tubercle. For malignant disease almost invariably originates in the body of the testis; tubercle generally attacks the epididymis: malignant disease usually forms a smooth ovoid tumour with low fluctuating bosses; tubercle early produces a tuberous tumour: malignant disease rarely becomes adherent to the scrotum or produces thickening of the cord until the disease is far advanced; tubercle is usually associated with both these conditions at a very early period. There are, however, certain anomalous cases in which tubercle attacks the body of the testis, either sparing the epididymis or moulding the body and epididymis into one smooth ovoid tumour in which no separate parts can be distinguished, and which presents none of the distinctive features of tuberculous disease. One case of this kind occurred some time ago in my own practice at St. Bartholomew's Hospital; and a second case has lately been observed in the practice of one of my colleagues.

The first patient was a young man twenty years old, whose testis had been enlarging during six weeks, and now measured about three inches in length. It was oval, quite smooth, very firm, not tuberous or bossed, and exhibited no line of demarcation between the testicle and epididymis. The tumour was neither painful nor tender. There was a total absence of any of the signs of inflammation, and the cord was very slightly thickened. The swelling had been noticed after a jumping exercise, and had at first been slightly painful, but the pain had soon ceased, while the tumour had steadily increased. With a trocar and canula, pure blood was drawn off. After a consultation with my colleagues, I removed the testicle in June, 1880, when it proved, much to our surprise, to be a tuberculous testis, about two-thirds of which was caseous. In looking back on this case I came to the conclusion that there were several features which might have led me to believe the affection was not cancerous, although I confess I should not readily have suspected tubercle. The tumour was not merely very firm, but was *very inelastic;* the scrotum was not hot or reddened, but was *slightly adherent* to the tumour at the upper part. Pure blood flowed through the canula, but the hæmorrhage *very quickly ceased*, and was not renewed. These three circumstances, together with the age of the patient, ought to have thrown grave doubts on the diagnosis of carcinoma or sarcoma

The second case was very similar to the first in some respects, but the patient was an older man, rather over forty years, and the tumour was of three months' duration. It was quite smooth, without either boss or tuber, almost hard, free from all sign of inflammation, nowhere adherent, and the epididymis could not be distinguished as a separate body. The cord was a little thickened. I was not present at the consultation on this case, but saw the patient afterwards in the ward, and formed the opinion that the tumour was not malignant on the ground that although the oval shape of the tumour and its size (about that of a goose-egg), with many other symptoms, were indicative of cancer, yet the perfect smoothness of the organ, the equal consistence, and the *absence of elasticity* were sufficient to justify a contrary opinion. A few days later, castration was performed, and the testicle proved to be tuberculous, resembling very closely in all its characters the caseous testis in the last case. I then learned that the bleeding which had taken place through the canula when the testicle was tapped had ceased, as in my case, almost immediately.

These two cases are worthy to be recorded, were it merely to show that tubercle may produce, in rare cases, a rapid enlargement of the body of the testis, perfectly smooth, oval, and firm, without any sign of inflammation.

In these two cases the question lay between malignant disease on the one hand, and some form of chronic inflammation on the other hand; and it is in such cases that the greatest difficulty exists in arriving at a correct diagnosis at an early period of the disease. Between hydrocele or hæmatocele and malignant disease there ought not to be any real difficulty, for the slightest suspicion of fluid should at once be set at rest by the introduction of a trocar. Nor is the diagnosis between malignant disease and innocent tumour of the testis so important, since castration is indicated in both cases, and should be as early as possible performed. Nor, again, is the diagnosis difficult between typical examples of malignant disease and typical examples of strumous or syphilitic testicle; but it is in the discrimination of the atypical examples of these several diseases that the real difficulty of diagnosis rests.

In working out such cases, many of the points on which we are recommended chiefly to rely are absolutely worthless. Thus, the *weight* of a malignant testis is not greater than that of a testis of equal size which is the seat of chronic inflammation; nor ought it to be greater, for the material of which the tumour is composed is, in many cases, as nearly as possible the same. Some enlargement—often, indeed, considerable enlargement—of the cord is associated with almost every case of inflammatory swelling of the testicle; and, so far from regarding early enlargement of the cord as an indication of malignant disease, I am much more disposed to regard it as a contra-indication. Adherence of the tumour to the scrotum, again, is rare, not only in the early, but even in the late stages of malignant disease; so that early adhesion between an enlarged testis and the scrotum, whether accompanied by the signs of inflammation or not, is absolutely a contra-indication of malignancy.

A malignant tumour in its earlier stages is almost always of oval or ovoid shape and flattened at the sides. The body of the testis is almost invariably affected, and at a very early period the epididymis ceases to be distinguishable as a separate body. It is very rare to observe nodules or distinct tubers or bosses on the surface of the tumour, which, on the other hand, usually presents one or more low and large prominences. The consistence of the tumour is always unequal; the prominences are the softest parts, and may exhibit fluctuation; the intervening parts are often very firm, sometimes even hard, but, whatever else they be, are, I believe, always elastic. On the *inequality of consistence* and the *elasticity* of the tumour it is difficult to lay too much stress. In such doubtful cases as those described above the absence of elasticity was a prominent and very important symptom—the symptom, above all others, which led me in the second case to decide against malignant tumour. There is no redness or adhesion of the scrotum, but the tumour may be both painful and tender. The cord is scarcely at all enlarged. The tunica vaginalis may contain fluid, and this should be removed that the characters of the tumour may be more readily ascertained. There is no cachexy, unless the patient be out of health from other causes. Lastly, puncture of the tumour with a hydrocele trocar yields bright blood, often in considerable quantity, but the tumour is not sensibly diminished by the hæmorrhage, nor does the flow of blood immediately cease and remain arrested. The sudden cessation of the bleeding in the cases mentioned above was almost surely due to the introduction of the canula into the middle of the caseous matter.

Of course it will always be understood that a correct diagnosis cannot be made by attention to a single symptom, however valuable, but must rest on a combination of symptoms, and that the age and general history of the disease and of the patient must be carefully considered. Yet the diagnosis in a difficult case will often rest chiefly on the importance attached to one or two symptoms, among which sufficient weight has not been given to the unequal consistence, and especially to the elasticity, of the tumour.

WHAT BECOMES OF DEAD ANIMALS?—Prof. Nordenskjöld, during his arctic voyage, was perplexed by the question, "What becomes of the bodies of animals who die a natural death?" He very seldom found such remains, and declared that on Spitzbergen it was easier to find vertebræ of monster extinct reptiles than the bones of the seal, walrus, or bird of the present day. The problem is yet unsolved.—*Boston Medical Journal*, May 10.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CHARING-CROSS HOSPITAL.

CASE OF HYDATID OF THE LIVER—ASPIRATION—RECOVERY.

(Under the care of Dr. BRUCE.)

[Reported by Mr. W. B. C. TREASURE, Resident Medical Officer.]

E.H., aged twenty-nine, cook, was admitted December 29, 1882, complaining of intermittent pains over the front of the abdomen, aggravated by movement; of a prominence on the left side of the abdomen; and of shooting pains running from the right hip to the chest.

Family History.—Father died when she was eleven months old; mother alive and healthy; other members of family healthy.

Previous History.—Had typhoid fever at twenty-one, measles at twenty-seven, sore-throat without other symptoms of specific disease at twenty-five. She has never resided out of England.

Present Illness.—Patient attributes the commencement of her present trouble to a fall across a block of wood in May, 1881. After the fall her attention was called to a prominence on the left side; this, however, caused her little inconvenience, and continued to get larger, but without pain. In April, 1882, the onset of some slight pain, and the increase in size of the tumour, led her to seek advice at another metropolitan hospital. Here, she states, she was thought to have an aneurism; and, deriving no special benefit from treatment, she left the hospital. She was again admitted into the same hospital last August, when an exploratory puncture was made without any definite result. The tumour continued to increase in size with slight pain at times until the end of December, when she sought admission into the Charing-cross Hospital.

Condition on Admission.—Patient appeared fairly healthy and well-nourished, but somewhat anæmic; skin clear but rather dry; no jaundice; no œdema of any part; appetite and digestion fair; bowels rather costive; tongue flabby and cracked in the centre; urine normal; menses regular. She complained of occasional slight pain in the left hypochondrium.

Physical Examination of Abdomen.—The abdomen presented the marks of previous distension, but was then not distended. Decided local fulness was visible in the left hypochondriac region, extending as far as the median line; on deep inspiration this fulness developed into a well-defined localised, smooth tumour, with a rounded outline, occupying the left hypochondrium. On palpation this tumour was found to be quite smooth, elastic, and regular in outline, and connected with the margin of the liver, which could be very distinctly felt running across the abdomen horizontally, about three fingers' breadth below the ensiform cartilage. The edge of the liver was smooth, rounded, and thick on the left side, becoming thinner and less distinctly felt towards the right side; it descended one inch and a half on deep inspiration. The spleen was not palpable; nor was there anything abnormal over the rest of the abdomen discoverable to palpation, or any ascites. The surface of the tumour and the liver were not tender. On percussion, the liver dulness extended from two inches below nipple in right vertical nipple-line to one inch below the cartilage of the tenth rib; in mid-sternal line it descended to the same level; but in left nipple-line it did not reach so low by about half an inch. The upper border of dulness was horizontal. On deep inspiration, dulness was correspondingly displaced. No fluctuation could be felt, nor could Piorry's hydatid fremitus be obtained. The heart and lungs were healthy, and the pulse was regular in force and rhythm.

Treatment.—The patient was kept quiet for the first few days after admission, with a simple tonic mixture. Meanwhile, the case being considered to be one of hydatid of the liver, it was determined to puncture the tumour with the aspirator.

January 9.—The tumour was aspirated by Mr. Barwell, and five ounces of clear, colourless fluid removed. The patient was somewhat collapsed after the operation. She was kept quiet, with ice to suck and low diet, and was ordered: ℞. Liq. morph. hydrochlor. ℥xx., aq. camph. ℥j., m., quartis horis. Chemical examination showed the fluid to be neutral, slightly albuminous, containing abundance of chloride of sodium. Microscopic examination revealed hooklets of the tænia echinococcus.

10th.—Patient had recovered from her collapse. Temperature 99·4°, pulse 92; tongue coated and rather dry; slight hiccough, thirst, and anorexia; no vomiting; a little pain over the abdomen; pupils not contracted.

12th.—Patient decidedly better. Temperature 98·7°; pulse normal; tongue moist and cleaner; no pain, sickness, or hiccough. The liver much less easily palpable, and the prominence of the tumour considerably diminished. Morphia to be given three times a day only.

From this time the patient experienced no bad symptoms, but continued to improve. She was kept in bed until January 20, when she was allowed to sit up a little while; but the onset of slight pain led to a further period of rest for three weeks; she then got up, and was ordered a ferruginous tonic.

February 23.—Physical examination to-day shows the liver to have become smaller, the inferior border of dulness having risen one inch. There is still some fulness in the left hypochondrium, but diffused and hard in character; not tender, although there has been an occasional slight pain over the tumour. The general condition of the patient is good; tongue clean, and less flabby; bowels still rather costive.

28th.—Sent to a convalescent home.

Remarks (by Dr. Bruce).—The interest of this case was chiefly therapeutical, the diagnosis being extremely easy. Simple aspiration was preferred to injection of the cyst after removal of the fluid; and the wisdom of this course appears to have been proved, both by the amount of collapse which followed the less severe operation, and by the successful result. No special difficulty attended the operation of aspiration: the patient had been well trained to fix the diaphragm after deep inspiration, and the tumour was thus brought and kept perfectly within reach of the hand. The collapse and the associated sickness, the movements connected with which threatened to have an unfavourable influence upon the liver, were easily controlled by morphia, and they shortly subsided. Beyond these there was no bad symptom of any kind. The attention of the students was directed to the necessity of keeping the patient quietly in bed for several weeks after the disease appeared to be cured. The hydatid cyst had been emptied, and the walls had so far collapsed; but inasmuch as the disease implicated the substance of the liver, and was not simply attached to it, the process of cure obviously involved inflammatory disturbance of a considerable area of the hepatic substance, and was attended by constant danger of suppuration. The pain which persists in connexion with the seat of operation in this class of cases is so far a fortunate indication of the condition of parts, and of the necessity to insure rest. The same consideration prevented the disappointment which might have been felt at the apparent failure of the operation to dispel the tumour quickly. It was clear that the inflammatory swelling in connexion with the process of healing was bound to prevent the subsidence of the local enlargement, or even to increase it for a time. Before the patient left the hospital it was satisfactory to have determined that the seat of disease, although still somewhat full, presented only a diffused resistent enlargement, and was perfectly free from tenderness.

QUEEN'S HOSPITAL, BIRMINGHAM.

NOTES ON THREE CASES OF POISONING BY STRONG HYDROCHLORIC ACID.

(Under the care of Dr. HUNT.)

[Reported by LESLIE PHILLIPS, M.D., late House-Physician Queen's Hospital, Birmingham.]

THE following cases may prove an acceptable contribution to the literature of corrosive acid poisoning, since they show how serious these cases are, both in their immediate results and in their later sequelæ. In each of the cases it will be seen that striking clinical phenomena presented themselves, and that, notwithstanding active treatment and skilled nursing, they all, sooner or later, ended fatally.

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Case 1.—W. W., a boy aged four years, was admitted into Queen's Hospital under Dr. Hunt at 8.30 p.m. on August 15, 1882. He had drunk an unknown quantity of commercial hydrochloric acid about a quarter of an hour before admission. The child was in pain. The lips and tongue were white as from the action of a corrosive acid. Swallowing was difficult. A soft catheter was passed through the nose into the œsophagus, and chalk mixture was thus injected into the stomach. An hour after admission inspiration became noisy and difficult, the sternum sinking in deeply during the act. Respirations 48. Tracheotomy was performed at 11.30 p.m., and the breathing immediately became easy. The patient was ordered to be fed with pancreatised enemata containing brandy every four hours. The next morning the temperature rose to 100° Fahr.; the respirations were 50. He lay quietly sleeping during the day, but towards evening became restless, and died suddenly early next morning. At the post-mortem the tongue was corroded, the œsophagus was congested and corroded, and the parts about the upper opening of the larynx were in part hyperæmic and in part corroded, the latter being the colour of fat. The stomach showed no perforation, but there was a black patch of charred mucous membrane at the lower border of the organ, opposite the opening of the œsophagus. The other organs were healthy, and the suddenness of the death suggested syncope.

Case 2.—S. D., a strongly built carter, was admitted into the Queen's Hospital on July 18, 1882, having taken with suicidal intent an unknown quantity of strong hydrochloric acid. He was evidently very ill, but had been drinking, and it was therefore difficult to properly estimate the symptoms. Chalk was given. He vomited blood and altered blood ("coffee-grounds"). He could not project the tongue, but the parts of the mouth that could be seen were white. During the day he was totally unable to swallow, but vomited dark stuff repeatedly. There was tenderness at the epigastrium and in the throat. He could not talk. During the next few days he had constant bilious vomiting of everything he swallowed, and it was noticed that the bulk of the vomit far exceeded the bulk of the fluid swallowed. He was treated with morphia injections and nutrient enemata. Salivation appeared. He rapidly emaciated, suffered much pain behind the sternum and epigastrium, and died exhausted on the 29th. After death the interior of the stomach presented a remarkable appearance. The mucous membrane was entirely destroyed in the whole of its extent, and seemed to be healing over in parts. The first part of the duodenum was affected in the same way. I have never seen such rapid emaciation as was present in this case, and the total destruction of the gastric follicles clearly indicated the cause.

Case 3.—D. R., a man, aged thirty-seven, admitted July, 8, 1882, had accidentally taken two ounces of commercial hydrochloric acid. He had vomited. The tongue was raw. There was œsophageal and epigastric pain and tenderness. Treatment consisted in the administration of chalk, morphia, oil, and milk. For a week he vomited constantly; at first dark-coloured matter, and later bilious, sour-smelling stuff. Four days after the accident he was free from pain, but he vomited dark thick fluid, with fæcal look and odour; again, three days later the vomit was bilious, green, thick, tenacious matter, with fæcal odour. After this he improved, and left the hospital by his own desire on the 21st. He was readmitted into the surgical wards, under Mr. Furneaux Jordan, on September 1 of the same year, with symptoms of pyloric obstruction. He was extremely emaciated, and died in a few days. The results of the autopsy are of importance as showing the condition of the viscera two months after poisoning by a corrosive acid. The mucous membrane of the œsophagus was irregular and altered in texture; in parts it was eroded. The walls of the stomach were thin; the mucous membrane was much altered, numerous white fibrous lines like cicatrices occupying the usual situation of some of the rugæ. The membrane appeared to be quite destroyed in places. There was a fibrous stricture of the pylorus, hard and suggestive of scirrhus. The greater part of the pancreas was gangrenous, forming a black oblong mass surrounded by a cavity containing six ounces of pus. There was no adhesion of the stomach to the parts behind it. The other viscera had shared in the general emaciation, and were atrophied. The heart weighed six ounces and a half, and the spleen an ounce and three-quarters. This case is interesting as being an example of, as far as I know, a previously undescribed condition. There can be no doubt that the greater part of the pancreas had sloughed, a little of the head and of the tail of the viscus alone presenting the characters of health. The probable cause of this condition was thrombosis of the splenic artery occurring in a cachectic subject; the parts of the pancreas supplied by the pancreatico-duodenal artery, and that supplied by the splenic branches beyond the left gastro-epiploic anastomosis, alone maintaining their vitality. The small condition of the spleen would seem to lend weight to this theory.

I must acknowledge the kindness of Dr. Hunt in allowing me to use these cases for this report.

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Medical Times and Gazette.

SATURDAY, JUNE 2, 1883.

REPORT OF THE COMMITTEE ON HOSPITAL MANAGEMENT IN THE FIELD.

It will be seen, by our Parliamentary report, that the circumstances in which extracts from the Report of the Army Medical Inquiry, and from the evidence, were published in the *Times* before the papers were in the hands of the members of the House of Commons, formed the subject of several questions in the House on Thursday last week. The Secretary of State for War explained how the mistake had occurred, and stated that he extremely regretted it; and he had the courage and honesty to add that one of the reasons why he regretted the publication was that "the papers had been published, not only without authority, but, in his opinion, in a manner altogether calculated to mislead the public." The Report, and the evidence given before the Committee of Inquiry, have now been published, and amply justify Lord Hartington's remark. It is, indeed, very difficult to account for the spirit in which these papers were dealt with by the *Times*, or the tone of the articles on the subject, unless by the supposition that that paper is, for some reason, hostile to the Army Medical Department; and consequently resolved at the expense of the medical officers to acquit all other de-

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partments of the War Office of any responsibility for the shortcomings and defects that have been complained of as regards hospital management in the field, and the sea transport of the sick and wounded. "If the Medical Staff is acquitted," said the *Times*, "the blame must fall on the Commissariat Service; nor can the general administration of the War Office be freed from responsibility for its failure to organise a system capable of bearing the strain of active service." Hence, perhaps, the tone adopted towards the Medical Staff.

The Report of the Committee occupies nearly fifty-three folio pages. The Report signed by the whole Committee takes up thirty-six of these pages, and is divided into three parts: 1. A general account of the organisation of the Army Medical Service in peace and war. 2. The provisions made for the treatment of the sick and wounded in the Egyptian expedition are described in detail. 3. The defects which appeared to the Committee to exist in the system generally are described in detail, and suggestions are made for their amendment. Then follow—a Minute, signed by Major-General Hawley, Sir Robert Loyd-Lindsay, and Colonel Redvers Buller, dissenting from one of the paragraphs of the Report; another, from the two first mentioned members of the Committee, dissenting from another paragraph; and third, a long and valuable paper of remarks by Sir William Mac Cormac, on the Report and evidence. A "Digest" of the evidence takes up sixty-two, and the Minutes of evidence extend over 590 pages. An Appendix containing many valuable and instructive returns and statements and three maps, and a copious index, bring the volume up to 771 pages.

The Committee examined 140 witnesses, 120 of whom had been connected with the Egyptian campaign. By far the greater number of them gave direct evidence of their personal experience, though the statements of some of them were largely based on second-hand evidence of a more or less trustworthy character. The Committee observe that in considering the evidence the exceptional character of the campaign should be borne in mind. Ismailia was destined from the first to be the point from which the advance upon Cairo should be made, but up to the very day of its occupation it was in the hands of the enemy. No previous arrangements for organising military or medical depôts at the place were possible. On landing, the troops were at once engaged, and an immediate advance was made to Kassassin, where the advanced force stayed from August 28 to September 13. Sir John Adye, in his evidence, states: "We were, owing to military exigencies, far in advance of where we should have been if we could possibly have avoided going there; and the men had to suffer, not only from perhaps a deficiency of medical requirements, but they had to undergo certain privations as regards food." The Committee point out that these facts must be constantly borne in mind, for they account for many of the shortcomings and privations of which witnesses complained during the tension which lasted from August 22 to the end of the month. The Report then treats of the Army Hospital Corps, which is not, the Committee consider, in a satisfactory condition. The orderlies are not sufficiently trained in nursing the sick, in preparing their food, or in the details of hospital administration generally; they have no opportunities in peace for becoming acquainted with the organisation and working of a field hospital, or of performing their duties under conditions similar to those which exist in war. Moreover, they were greatly overworked, especially during the first ten days or so after the occupation of Ismailia: no native labour was available, and, consequently, the men of the Army Hospital Corps, in addition to their duties in the wards, were employed in fatigue duties outside the hospital; and were also constantly called upon at all hours of the night to provide stretcher parties to bring into hospital large numbers of invalids from the canal or railway station. Before dealing with the administration of the hospitals of Ismailia and Cairo, the Committee state: "It is due to the medical officers to remark that witnesses who severally criticised the medical arrangements generally, testified to the zeal and devotion with which they performed their professional duties. This evidence is confirmed by many officers and men who were patients in the hospitals." Statements were made by seven officers and eighteen men admitted to the hospital before September 1, and one officer and twenty-eight men admitted later. The former severely criticised the administration. The latter complained of the carelessness and inefficiency of the hospital orderlies; but in other respects, with one or two exceptions, expressed themselves as fairly well satisfied with the treatment they had received. From the evidence of the medical officers successively in charge of the hospital, it appeared that the complaints referred to had not been made at the time when they could have been investigated, and that, consequently, they, the medical officers, were not aware of the defects since complained of. The palace taken over to be used as the hospital was entirely denuded of furniture, and wanting in many sanitary arrangements considered indispensable in Western Europe; the field hospital, which temporarily occupied it, had only the equipment of a field hospital; no transport animals were available for its use; there were no native labourers or regimental fatigue parties available; and the disembarkation of men and stores was conducted under very unfavourable conditions. The late arrival of the *Carthage*, which was due to causes beyond the control of the Medical Department, caused yet further inconvenience, not only because she had on board the stores and the stationary field hospitals destined for the base, but also because, on her arrival, the staff of the hospital had to be changed, and there was a repetition of the confusion that unavoidably attends the establishment of a hospital. As to complaints about the nursing, it has been already stated that the hospital orderlies were not sufficiently trained. As to bedding, etc., in accordance with arrangements made in England, the equipment for general hospitals was provided on board the hospital ships, and had been sent to Alexandria, Cairo, and Gozo. Field hospitals are not provided with bedsteads, but with palliasse cases, which were supplied. Stretchers on short legs, which had been provided for the purpose, were used as beds for the more serious cases, and answered remarkably well. Many of the patients, not suffering from severe wounds, were laid on the floor; "but," it is stated, "the wards had parquet floors, and in the hot season the absence of beds was, probably, not the cause of so much discomfort as might at first sight appear."

As to the alleged deficiency of medicines, the Report says: "The evidence gives no support whatever to the allegations that there was a deficiency of medical stores at Ismailia, or that there were difficulties in disembarking those stores in consequence of the manner in which they were stowed on board ship." All the reports of "correspondents" about the Life Guards having been embarked on board the *Calabria* "without the smallest supply of drugs, plasters, or other medical paraphernalia," about amputation without chloroform, etc., were absolutely disproved. The Committee say, "We have been unable to discover a single case in which chloroform was not used when it was required and could be administered without danger to the patient." There was at all times an abundant supply of anæsthetics both at the base and at the front. Even the amusing word-picture of the medical officer going round the wards "administering to each of the patients, quite irrespective

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of their various ailments, the same description of pill," is lost to us. "The box referred to is a part of the regular equipment of the field companions, and is divided into compartments containing medicines suitable to the different cases to be dealt with." Then, as regards food, the Report states that the following facts were undisputed:—There was an abundant supply of fresh meat, biscuit, and medical comforts at Ismailia from the time of the landing. Frozen meat was supplied on August 23, and after that there was an abundant supply of fresh meat, either frozen or from live stock. The meat was tough, because of the impossibility in the hot season of keeping it by any means for more than twenty-four hours; but the supply was so abundant that large quantities had to be buried, as it was impossible to consume it sufficiently rapidly. "The cooking was not so good as it ought to have been. . . . The officers, in accordance with the present regulations, shared the same cooking arrangements as the men, and appear to have felt the roughness of the diet more than the men did." The bread issued by the Commissariat was bad. "Biscuit was issued for the first few days. Bread was first baked on August 27, and then, in consequence of the badness of the flour, it was unfit for food, and so-called French bread was issued from the local bakeries." It is stated that flour is a cargo which it is extremely difficult to keep good in hot climates, and its rapid deterioration on this occasion—which began on board ship—is suggested to have been due to its being shipped in sacks. Many of the patients, especially the officers, complained they could not obtain enough food, and that on the day following their admission they were in several cases without any nourishment for many hours. It appeared in evidence that in some of these cases a beef-tea and milk diet had been ordered for the patients suffering from wounds, or from dysentery, diarrhœa, or enteric fever. Some patients did not consider beef-tea and milk to be food (as happens not seldom in civil hospitals); and others admitted having refused it when offered them. But some of the complaints of deficient supply of nourishment remained unexplained, and this seems to have been due to the fact that the Palace Hospital was "non-dieted." Under this system the patients are supposed to bring their rations for the day of admission from their regiments. This it was impossible for them to do at Ismailia, and the special arrangements described as having been made for the admission of patients appear to have not invariably been carried out.

With regard to the Citadel Hospital at Cairo, established on September 18, the chief complaints were about the cooking, and that for a considerable time after the establishment of the Hospital, bedsteads, mosquito-curtains, and other furniture required for a station hospital there were wanting, while they might have been supplied from local sources. The medical officers stated that they made frequent demands on the ordnance store officer for the equipment, which were not complied with, as his stores had not arrived; that seventy or eighty bedsteads had been provided by the end of September; that the whole of the hospital equipment which had been sent from England to Cyprus had been ordered to Cairo, and was daily expected; and that large quantities of stores were in the store-ship *Irthington*, which, on October 2, was approaching Alexandria from Ismailia. "Having this prospect of immediately obtaining all the necessary stores which had been sent from England, the Surgeon-General did not consider it expedient to purchase these articles in the local markets." As to the cooking, the defect at Cairo, as well as elsewhere, was due to want of training on the part of the cooks of the Army Hospital Corps. A civilian cook was eventually employed for the Citadel Hospital, with good results.

With regard to the means for treating the sick and wounded at the front, the Committee state: "It appears to us, after carefully sifting the evidence, that the officers and men of the Medical Department at the front performed their trying duties with zeal and success." The field hospital and bearer companies were embarrassed by want of transport, for which they cannot be held responsible; they advanced as rapidly as these difficulties would allow, and at Tel-el-Kebir the bearer companies were supplemented by a detachment of the Indian dhoolie column. The arrangements for the removal and treatment of the wounded are admitted to have been well conceived and efficiently carried into effect. We doubt whether on any previous occasion the wounded were so quickly collected from the field of battle, so well treated in the field hospitals, or removed to the rear with so little suffering."

Lord Wolseley, in his dispatch dated Cairo, September 24, 1882, said: "The Medical Department, under Surgeon-General Hanbury, C.B., have done everything that could possibly be done for the care and comfort of the sick and wounded." We have amply shown, we think, from the Report of the Committee of Inquiry that the praise then given to the Department by the Commander-in-Chief of Her Majesty's Forces in Egypt was thoroughly well deserved and represented the services rendered by the Medical Staff much more accurately than did the evidence given before the Committee by Lord Wolseley on December 12, 1882, when he stated that he was "immensely disappointed with the condition of the hospital at Ismailia," found "very great fault indeed" with the hospital at Cairo, and complained of the medical officers as being "wanting in initiation." Sir William Mac Cormac, who has had large experience of surgical work in time of war, supplements the Report with a very valuable paper of "Remarks on the Proceedings of the Committee," and states some of the conclusions at which he had independently arrived. We should be glad to place the whole of the paper before our readers, but we must be content, at present at any rate, to quote the concluding paragraphs. He says: "So far as the merits of the case can be tested by practical outcome with regard to the welfare of the sick and wounded in Egypt, it deserves to be noted that the results of the campaign were perhaps better than those of any previous war, and probably at least as good as in our civil hospitals with all their means and appliances. At the outset there was, without doubt, a period of some confusion and shortcoming. Such ever has been, and ever must be the case, however complete the preliminary arrangements are. This period was, however, of the shortest practicable duration, and entailed no serious consequences on anyone. In my opinion, the medical officers engaged in the recent campaign displayed the most self-denying devotion to the sick and wounded. The duties and responsibilities imposed on them probably exceeded those of any other branch of the service, and the duties were most ably carried out under very trying circumstances, and in a manner which, if we may judge by accomplished results, could scarcely have been better. Notwithstanding their untiring efforts, the medical officers have been singled out for severely hostile criticism. If this be ill-founded, as in many instances it has been proved to be; if accusations, based on mere hearsay, and not even purporting to have been verified by those who make them, are to be urged against a body of honourable men; and if difficulties arising from causes beyond control be not fully recognised, then the position of medical officers will become intolerable; and there can be little doubt that the Medical Service of the Army, at present much sought after and highly esteemed by the younger members of the medical profession, will cease to possess the attractions it has hitherto held out."

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THE PATHOLOGICAL SOCIETY.

The work of the Society for the session being now concluded, it will be not inopportune to briefly review the results of their labours, and endeavour to point out the advances that have been made, as well as to inquire whether any hints for improvement in the method of work or otherwise can be gleaned for future guidance.

If we may use a somewhat hackneyed expression, we should say that the past session has been characterised by a new departure in the recognition of, and importance attached to, the study of comparative pathology. Acting upon the suggestion of a former President of the Society, Mr. Jonathan Hutchinson, the Council nominated a standing committee for the purpose of obtaining, exhibiting, and reporting on specimens of diseases and injuries in the lower animals, and especially to make use of the material available at the Zoological Gardens, kindly placed at the disposal of the Society by Professor Flower. For many years the late Mr. Edwards Crisp endeavoured to bring to the notice of the members the immense amount of valuable knowledge that would be gained by such a study, and the appointment of the committee above alluded to forms a just, if somewhat tardy, tribute to his life-long labours. The specimens exhibited during the past session by Mr. J. B. Sutton have been examined by the members with at least as keen an interest as any that have been brought forward. We can only at present notice those relating to rickets in the lower animals. The most interesting of these perhaps was the skeleton of a West African baboon, which presented the characteristic changes of rickets in the epiphyses of its long bones. Marked specimens of rickets were also shown in the bones of a lizard, a rhea, and some monkeys on a subsequent occasion, and in one of the monkeys there was well-marked and even extreme craniotabes—a fact of great importance when we consider that some of the most acute and careful observers in this country have expressed the opinion that this (except in the very slightest degree) is the result of congenital syphilis, and not a sign of pure rickets. It is evident that some very valuable information is in store for us from this quarter.

The discussion on Diabetes, to which two evenings were devoted, has been so recently alluded to in our columns that we may pass it over now, the more so as the direct positive gain to our store of knowledge was very scanty indeed. But indirectly it has already produced some fruit, for it led to a valuable communication at the last meeting of the Society on the subject of vacuolations in the cerebral hemispheres, by Drs. G. H. Savage and Hale White, which was illustrated by some very rare specimens of the condition in question. In another direction a good result seems likely to be attained as the outcome of the debate; Dr. Dickinson, at the close of his speech, suggested that his specimens should be referred to a special committee for independent investigation and report. This idea was taken up by Dr. Douglas Powell, and somewhat expanded, for he proposed the appointment of a standing committee to report upon any specimens of disease of the nerve-centres referred to them, much in the same way as the Morbid Growths Committee do at present. These suggestions seem to have met with a favourable reception from the members of the Society, and it is to be hoped that the Council will take an early opportunity of giving effect to them. A new theory of the causation of cerebral softening was brought forward by Dr. Handfield Jones, who, in a case of thrombosis of the minute cerebral arteries, attributed their plugging to the presence of oil and fatty *débris* resulting from the disintegration of atheromatous and other degenerative changes in the coats of the vessels. Should Dr. Jones's views be confirmed by the committee to whom the specimens have been referred, an important addition to our knowledge of cerebral pathology will have been gained. Tubercle-bacilli did not occupy such a large share of the time and attention of the Society as might have been expected; and we do not know that this is to be regretted—the subject had been so fully discussed in the journals and elsewhere, that nothing fresh could have been said about it. A beautiful series of preparations of tubercle-bacilli, however,—probably the best yet exhibited in this country,—were shown by Mr. Watson Cheyne in illustration of his report on the subject to the Association for the Advancement of Medicine by Research, an abstract of which has already appeared in our pages. Bacilli from cases of charbon were also exhibited by Messrs. Bryant and Davies-Colley, both cases presenting features of unusual interest; in Mr. Davies-Colley's case bacilli were found in the portion of cheek excised, and in the sputa, urine, fæces, and sweat, but they could not be recognised in the blood. The patient recovered. Mr. Bryant's case proved fatal, and lesions were found in the stomach, intestine, and lungs exactly analogous to those existing in the skin; in the masses in the lungs small hæmorrhagic nodules of bacillus growths were recognised; bacilli had been detected in the urine during life. A certain number of specimens of rare diseases are sure to be brought forward every year, and of this kind during the past session we might instance a femur from a case of osteitis deformans shown by Mr. Bowlby, and some curious and as yet unclassified cases of ulcerating tumours of the skin shown by Mr. Davies-Colley and Dr. Frederick Taylor; but Dr. Southey has the credit of having shown the most remarkable specimen during the present session. The case was one of symmetrical gangrene occurring in a child aged two years and a half. Both legs and the backs of the thighs were of a deep purple, the calves black. On each buttock was a purple patch, black in the centre, and a similar patch of discolouration existed on the back of each arm. The affection was absolutely symmetrical. The whole duration of the child's illness was only thirty-two hours. No cause could be suggested for it, and nothing was found on autopsy to explain the symptoms. Dr. Southey followed M. Raynaud in attributing the condition to spasm of the minute arterioles. The symmetry of the affection certainly suggests a connexion with the nervous system, and the rapidly fatal course recalls to one's mind the influence of some toxic agent on the nerve-centres, and raises the question whether some similar agency might not have been at work in this case.

The Pathological Society is in a very flourishing condition: the number of its members is steadily increasing; its meetings are, as a general rule, more numerously attended than are those of any of the sister societies; and, probably, more work has been got through, if we judge merely by the number of specimens brought forward, than has ever been previously accomplished in the same time. But we fear that in this increased quantity of work done by the members there is an ever-growing tendency to deterioration in its quality. In the first place, many specimens are shown, and much time wasted in a description of them, by junior members, who are not conversant with the work that has already been done by the Society, and who think that anything that they have not observed during their hitherto brief career must be unusual, and proportionately interesting to pathologists in general; and in the next place many members bring their specimens forward without adequate preparation. There is no reason why papers read before the Pathological Society should not be as well worked up as those which are taken to the other societies: there is no question that at present they are not. To remedy these defects it is essential that a committee be appointed to determine

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whether a specimen is of sufficient importance or a paper of sufficient merit to be brought forward, and we would give such a committee power to assign any particular case to the list of card specimens, should they think fit. For some reason, which we cannot divine, members seem very unwilling to avail themselves of the opportunity of this mode of exhibition. We should be loth to believe that it was from any love of hearing his own voice that a member elected to make his communication orally. By these changes sufficient time would probably be gained to permit of the discussion of important specimens, and this would be much facilitated if the committee we have suggested were to group the subjects as far as possible; at any rate, they might put a stop to a practice which has lately sprung up, and has hitherto been almost unchecked—we allude to the habit of bringing down perhaps four specimens of diseases totally unconnected, and of showing them one after another. So long as this mode of procedure is permitted it will be impossible for specimens thus shown to receive that consideration or discussion to which their merits might perhaps otherwise entitle them.

In conclusion, we are pleased to notice the continued financial prosperity of the Society, and we would wish to point out a means by which a small portion of their balance might from time to time be employed in promoting the interests of pathology. Sir James Paget so ably advocated the cause of museums in his Bradshawe Lecture, that their utility must now be admitted by all. We believe that two of the metropolitan schools are contemplating publishing catalogues of their museums, but are somewhat deterred by the probable expense, and we know of more than one museum where a small donation towards the expenses of putting up fresh specimens would be very acceptable. It seems to us that the Pathological Society might occasionally lend a helping hand in such cases as these, and we would fain hope that if there were some such proposal made by the Council it would receive the general support of the members.

THE WEEK.

TOPICS OF THE DAY.

In order to settle the question of the validity of the present method of making distraints in the case of enforcing vaccination penalties, a test case was recently heard by the Judge of the Leicester County Court. A tradesman named Pratt sued four police officers for damages for excessive distraint under the following circumstances:—Pratt objected to have his child vaccinated, and was summoned before the magistrates and fined ten shillings and costs; this he declined to pay, and the defendants, in pursuance of a magistrate's order, seized his goods to the value of over £12. All the goods were sold by auction, and, after paying expenses, £3 3s. was handed back to the plaintiff as the balance. A solicitor on behalf of the plaintiff called witnesses who proved the value of the goods seized, and he submitted that the seizure was excessive, and damages ought to be awarded. For the defendants it was contended that there was always a riot at such sales, and twenty policemen could not protect the auctioneer from personal violence; consequently, the goods had always to be sold at considerably less than their value. His Honour, in giving judgment, said if twenty policemen were not sufficient to keep order at these sales, they ought to get a hundred. He deeply regretted to find that persons were insensible to the great blessings which vaccination had conferred on the country, and that they paid heed to agitators who went up and down for the purpose of making political capital out of the agitation. Still, however misguided these persons were, that did not justify the police in seizing £12 worth of goods, or even £2 or £3 worth, to cover a fine of a few shillings. He therefore gave judgment for the plaintiff, damages £7, and costs. It is stated that this decision is of much importance, because many other actions in various parts of the country, involving the same principle, may be guided by it.

The local committee appointed in connexion with the meeting of the Sanitary Institute of Great Britain, which commences in Glasgow on September 25 next, recently met to report progress. The Executive Committee reported that the arrangements for the meeting are being rapidly matured. The president has not yet been chosen, but the presidents of sections have been appointed as follows:—Sanitary Science and Preventive Medicine—Professor Gairdner, Glasgow; Engineering and Architecture—Professor Thomas Rogers Smith; Chemistry, Meteorology, and Geology—Dr. R. Angus Smith, Manchester. Vice-presidents and honorary secretaries of sections have also been appointed. In addition to the opening and sectional meetings, a popular lecture will be delivered by Dr. Carpenter, and a *conversazione* will be given to the members by the Corporation of Glasgow. As usual, an exhibition of sanitary appliances is to be held in connexion with the congress, and this will remain open until the middle of October. It is estimated that about £1500 will be required to defray the expenses attending the meeting, of which sum about £500 has been already subscribed by the members of the Committee.

In accordance with an intention previously expressed, a large and influential deputation from Chatham, accompanied by sympathisers from Portsmouth, Plymouth, and Devonport, last week waited upon the Home Secretary, to urge upon the Government the advisability of continuing at the naval and military towns the metropolitan police charged with the duty of carrying out the Contagious Diseases Acts, instead of withdrawing them, as had been partially done. The deputation was introduced by Mr. Gorst, M.P., and several other members of Parliament, who explained that the condition of the towns now moving in this matter was, before the passing of the Acts, deplorable, and that they would revert to that condition if these powers were withdrawn, as nothing less than compulsory examination would tend to check disease. In reply, Sir William Harcourt announced himself an advocate for the retention of the Acts, and he fully recognised the favour with which they were regarded in the towns where they were in operation. The Government, however, could not dictate to the House of Commons, and as the Acts had been condemned by that body (for the vote on that subject would not be regarded in any other light), they had felt themselves bound to give effect to such a decision by suspending the operation of the Acts. With the view of inflicting as little injury as possible on the communities concerned, the assistance afforded by the metropolitan police had not been entirely withdrawn. The real question was, what could be done for these communities short of continuing compulsory examination, to which the recent decision of the House was solely directed; and up to that point the Government would be glad to receive any practical suggestion for the preservation of the health and well-being of the places concerned. Much good had been done to the females when in hospital, and many had been reclaimed, and had become respectable members of society; and it was now said that by the decision of the House of Commons all these advantages would be lost, as the authorities would have no power to take women to the hospitals compulsorily, or to retain them. He asked whether the benefits thus derived would not be preserved if power were given to compulsorily retain in hospital until their health was re-established, all those who came there voluntarily. He would not, however, for a moment countenance the system of local

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option in adopting the Acts. Several members of the deputation expressed their belief that compulsory examination was the only remedy; but under existing circumstances, even if the Home Secretary has the will, he has not the power to undo the mischief which the "open-minded" members of the present Government have brought about.

While on the subject of deputations, it should be noted that a deputation from the Society of Apothecaries last week waited upon Mr. Mundella at the Privy Council Office, for the purpose of urging that they should be represented on the Medical Board for England, to be formed under the Medical Act Amendment Bill, now before the House of Commons. It was represented to Mr. Mundella that the Bill, as originally framed, allowed for the representation of the Apothecaries' Society on the Divisional Board; but the Society had been struck out on the third reading of the Bill in the House of Lords. The object sought was to have the Society reinstated as a part of the Board. In reply, Mr. Mundella said the fact that the Society of Apothecaries had been included in the number of representative bodies that would form the Medical Council showed the opinion of the Government upon the subject. However, in its passage through the Lords the Bill underwent several important modifications, and Lord Salisbury moved to omit the name of the Society, and if the Government had not accepted this the Bill would have been thrown out. Nevertheless, that arrangement was not binding on the House of Commons. He would consult his colleagues on the matter, and see what could be done. The Government were anxious to do justice to those who had done good service in the past, and to take care that the medical education of the future should be worthy of the country.

An inquest which was recently held at Bridgwater illustrates a want of system and an amount of carelessness existing in the local workhouse hospital which demands serious attention at the hands of the authorities. It appears that a dose of carbolic acid was administered to a patient in mistake for house mixture, or black draught, resulting in his death within half an hour. The evidence showed that a pauper wardsman informed the newly appointed nurse that the stone jar from which the carbolic acid was taken contained black draught, and the man became unconscious shortly after the dose was given. The nurse was about to prepare a dose for another patient, but, becoming suspicious, she asked another wardsman to taste and see whether it was the right mixture. It burnt the man's tongue, but the discovery of the mistake came too late to prevent the effects of the administration of the first dose. A verdict of "Homicide by misadventure" was returned, and it is to be presumed that the nursing arrangements of the Bridgwater Workhouse infirmary will now undergo some revision.

In his monthly return of births and deaths for March last the Registrar-General for Scotland reports that, during the period in question, there were registered in the eight principal towns of North Britain the births of 3540 children, of whom 3278 were legitimate and 262 illegitimate. The deaths during the same period numbered 2908 persons, or 19 above the average for March during the last ten years, increase of population being allowed for. A comparison of the deaths registered in the eight towns shows that the mortality was at the annual rate of 20 deaths per 1000 persons in Edinburgh and in Aberdeen, 22 in Perth, 24 in Paisley, 26 in Greenock, 29 in Leith, 30 in Dundee, and 33 in Glasgow. Of the 2908 deaths, 1196, or 41·1 per cent., were those of children under five years of age. The miasmatic order of the zymotic class of diseases proved fatal to 516 persons, and constituted 17·7 per cent. of the whole mortality; this rate was, however, exceeded in Glasgow and in Dundee. Fever caused 53 deaths, of which 15 were tabulated as typhus, 35 as enteric, and 3 as simple continued fever. Measles caused 83 deaths, of which number 74 were registered in Glasgow alone. The deaths from inflammatory affections of the respiratory organs (not including consumption, whooping-cough, or croup) amounted to 755, or 26·0 per cent. Those from consumption alone numbered 306, or 10·5 per cent. Seven females were aged ninety years and upwards, the oldest of whom was a widow aged ninety-six years.

At the last meeting of the Metropolitan Board of Works a report was presented from the Parliamentary Committee, stating that they had considered the letters from the Home Office, recently referred by the Board, transmitting provisional orders made by the Secretary of State, confirming the three schemes made by the Board under the Artisans' and Labourers' Dwellings Improvement Acts for the improvement of areas in Windmill-row, Lambeth; Brook-street, Lambeth; and Tench-street, St. George's-in-the-East. The solicitor had called attention to the fact that by the provisional orders the scheme, as proposed by the Board, had been modified by the omission of certain property which the Board proposed to acquire. In the Windmill-row scheme the exemption of some of the houses which the Board thought it necessary to purchase would probably have the effect of subjecting the Board to claims which, in the interest of the ratepayers, they wished to avoid. It appeared to the Committee a matter of regret that power to acquire these houses should be withheld, and they recommended that a communication should be addressed to the Secretary of State, pointing out the reasons why the Board thought it expedient to acquire these houses, and the prejudicial effect which would result from their omission from the scheme. The adoption of this report was, after some discussion, agreed to.

THE NATIONAL BOARD OF HEALTH, U.S., ON WATER ANALYSIS.

THE National Board of Health, whose labours have been suddenly brought to a close by the parsimony of the central Government in withdrawing the very moderate subsidies just when the absence of any serious epidemic had given them leisure to turn their attention to several questions of the highest scientific importance, publish in their last report the general conclusions arrived at by a committee appointed by them to investigate the merits of Frankland's, Wanklyn's, and Tidy's methods of water analysis, otherwise known as the combustion, albuminoid, and permanganate processes, and also to examine the physiological action of animal and vegetable organic impurity. The full report of their proceedings they cannot at present give to the world for want of funds, but it is to be hoped that private generosity may supply what official meanness has refused. The inquiry was directed by Professor Mallet, F.R.S., the several processes conducted by Mr. W. A. Noyes, Dr. C. Smart, U.S. Army, and Dr. J. A. Tanner, U.S. Navy, and the physiological part by Professor Newell Martin, D.Sc. Lond., M.A., M.B. Cantab., who injected concentrated residues of various waters beneath the skins of rabbits. The several processes were practised on waters of known sanitary or insanitary characters, and also on pure distilled water to which known amounts of organic matters had been added, and among the results obtained were the following:—1. Clear proof that in Frankland's process loss of organic matter does occur during the evaporation of a water prior to the combustion of the residue, contrary to which Dr. Frankland has always maintained. 2. Evidence of a source of serious error in the estimation of nitrogen by

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the same process in a notable gain of nitrogen from the atmosphere. 3. Proof of the error of Wanklyn's assertion that urea is not decomposed by alkaline permanganate, so as to yield the so-called "albuminoid ammonia." 4. Much fuller information than has hitherto been obtained as to the extent to which definite substances belonging to various chemical classes, and including some of the known products of putrefaction, are attacked by potassium permanganate in acid and in alkaline solutions. 5. Dr. Newell Martin found that the physiological effects of the injection of the residues obtained by the evaporation of water at *very low* temperatures did not always stand in direct ratio with the amount even of the *same* organic matter present—an apparent anomaly, lending support to the idea that it is not so much the quantity of organic matter as the presence of organisms which renders certain waters unwholesome. 6. Waters containing large amounts of nitrates and nitrites were found to exert specially injurious effects on the rabbits experimented on; and these results, together with medical testimony as to the unwholesomeness of the same waters, suggest that these salts indicate not merely "previous sewage contamination," but the presence of noxious organisms—probably those to which the very process of nitrification has recently been attributed,—thus attaching special importance to these salts in water analysis. 7. So far as the results of observation on *concentrated* waters go, they tend to show that in some cases at least, contrary to the usual belief, vegetable impurities, particularly those derived from decaying woody fibre, were even more dangerous than those of animal origin, and in those found to be most pernicious the amount of organic carbon was relatively higher than that of organic nitrogen. Dr. Mallet has satisfied himself that some of the errors inherent in Dr. Frankland's process may be obviated by conducting the evaporation in a partial vacuum, and that hypophosphorous acid, proposed as the means of reducing the nitrates and nitrites, may be employed with insignificant injury to the organic matter present. Dr. Smart has also suggested certain improvements in the "albuminoid ammonia" process, evolving the ammonia under diminished pressure, condensing it by cold, and absorbing it by acid.

ACADÉMIE DE MÉDECINE.

At the last meeting of the Académie an election took place into the Section of Public Hygiene, Legal Medicine, and Medical Police, to fill the vacancy caused by the death of M. Hillairet. Of the list of candidates presented, M. Lunier was chosen by the votes of fifty-six of the seventy-four Academicians who were present.

THE PARKES MUSEUM OF HYGIENE.

On Saturday last His Royal Highness the Duke of Albany opened the new home of the Parkes Museum of Hygiene, of which he is President. Captain Douglas Galton having, as Chairman of the Council, read a report, giving some account of the work already done by the institution, and stating what it is meant for and hopes to do in the future, Sir Charles Dilke moved, and Professor Tyndall in a speech of some length seconded, the resolution—"That, in the opinion of this meeting, the report of the Council of the Parkes Museum of Hygiene affords conclusive evidence that the Museum is meeting a great educational want of the time, and is eminently worthy of public support." The resolution was supported by the Archbishop of York, and unanimously adopted. The Duke of Albany formally declared the Museum open, and then delivered an address on the objects of the institution, in the course of which he dwelt on the character and the life-work of Dr. Parkes; and in conclusion said, "Our endeavour will be to make the Parkes Museum in every way worthy of the man whose name it bears. To do this, we look for the ungrudging and cordial support of all who are interested in sanitary progress. If such support be accorded us, we may fairly hope that the Museum will help materially in the dissemination of that branch of knowledge, which, in the words of Dr. Parkes, aims at rendering 'growth more perfect, decay less rapid, life more vigorous, and death more remote.'" Dr. Vivian Poore, to whose energy and labours as, till very lately, Honorary Secretary the progress of the Institution is largely owing, read a telegram from Professor Virchow, expressing his warmest wishes for the growth of the Parkes Museum.

THE LOCALISATION OF MOTOR AREAS IN THE BRAIN.

In no department of medicine, probably, has so much advance been made during the last ten years as in the functions of the brain. It is but a short while ago that little more was known than that each hemisphere corresponded to the opposite side of the body; now, thanks to the careful clinical observation and accurate pathological study of such men as Broca, Charcot, Flechsig, and others, we are beginning to see that each convolution has its special function, and no other. In the *Revue de Médecine* for May, MM. Charcot and Pitres have commenced a further study of the motor areas in the cortex of the brain, by analysing all recorded cases that bear on the question. In the present article they deal solely with the non-motor region, this comprising the sphenoidal and occipital lobes, the superior parietal lobule, the lobule of the *pli courbe*, the lobule of the island of Reil, the cuneus and præcuneus, the orbital lobule, and the anterior part of the first, second, and third frontal convolutions. Since their paper on this subject in 1878, forty-four cases have been recorded of damage to these areas either by softening, hæmorrhage, compression, or irritation, no matter how caused, without any permanent disturbance of motor function being produced. The only point on which any doubt could be permitted is as to whether the lobule of the *pli courbe* is concerned in raising of the upper lid: M. Charcot and Pitres think not, and they emphasise the fact that lesion of this area is *sometimes, but not always*, followed by ptosis. They conclude that when a lesion of the brain does not involve, either by compression or irritation or directly, the ascending frontal or parietal convolutions or the paracentral lobule, it will not give rise to any disturbance of movement. Their next communication will contain an analysis of the recent cases of damage to the motor area itself.

CO-OPERATIVE HOUSE ACCOMMODATION.

The idea of co-operative houses was hailed with great approval in New York a few years ago, and became very popular. It was clearly proved by figures, at the outset, that a pleasant and permanent home might be secured for an original outlay of about $5000, with a current annual expenditure of from $250 to $350. As a consequence, from the beginning of 1880 a number of co-operative houses were built, and very many are still in course of building; but, the *New York Tribune* states, all of them have greatly exceeded the cost primarily contemplated, and are likely to continue to exceed it. Co-operative apartments, it was said at the outset, were to be within the reach of the financial lower middle class; but this has proved to be fallacious, principally on account of the elaboration and extravagance which is now the distinguishing feature of the American metropolis; and co-operation, which should mean economy, has in this instance resulted in monetary excess. As an illustration, it is stated that about a year ago it was proposed to erect a co-operative apartment house in Madison-avenue for the sum of $100,000. This amount

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was from time to time increased until it reached nearly four times that sum, thus becoming so expensive that nearly all the original owners, who were persons of modest means, were compelled to sell out. In New York, it appears, there is at present no prospect of the erection of cheap or reasons able houses of the co-operative kind. We have alluded to this subject because the development of "flat" accommodation in London is daily progressing; but it is also only fair to add that while up to the present time the rent for thit description of apartments is by no means cheap, the errors of our cousins on the other side of the Atlantic have not been copied to any great extent.

AN ARMY MEDICAL QUESTION.

THE question as to what ought to be done with recruits suffering from various forms of ophthalmia is debated at some length in the *Berliner Klinische Wochen.*, No. 22. Professor Jacobson gives his conclusions in the following manner:—In the first division are placed those forms of ocular inflammation which ought to prevent the admission of men as recruits: acute blenorrhœa, diphtheritis, croupous conjunctivitis, chronic blenorrhœa, severe chronic catarrh with swelling and much secretion, follicular conjunctivitis of long duration and severe intensity, some cases of ectropion and granular lids. Recruiting may be permitted in the cases of men suffering from acute and chronic catarrh with moderate discharge, so-called primary granulations, follicular hypertrophy having the appearance of frog's spawn, slight prominences of the external commissures, and slight cases of follicular conjunctivitis. The cases of the first group are either so contagious or so difficult of cure, or are rendered so much worse by aggregation in barracks, that the sufferers ought not to be accepted as recruits. The affections of the second class are less severe, and are either not at all or slightly contagious, and may be treated with success. No doubt the general indication here afforded is right, but it may be questioned whether the surgeons engaged in the work of inspecting recruits in our army would, as a rule, be capable of drawing the lines at the proper places between the numerous and seemingly various sorts of ophthalmia above mentioned. The general principles laid down may perhaps be accepted; but are not the Professor's distinctions between the conjunctivitis granulosa, follicular hypertrophy, and so forth, rather over-fine for practical work?

THE METROPOLITAN WATER-SUPPLY FOR APRIL, 1883.

THE report of the official examiners on the quality of the water supplied by the metropolitan water companies during the month of April last may, taken as a whole, be regarded as satisfactory. The state of the water in the Thames at Hampton, Molesey, and Sunbury, where the intakes of several of the companies are situated, was good in quality during the whole of the month. Colonel Bolton considers it expedient again to remark that, although the exercise of Government supervision tends materially to the effectual filtration and delivery of good water by the companies to their respective districts, from many causes the supply frequently deteriorates after having been delivered by the companies into the cisterns of the consumers. An inspection of these cisterns often shows their neglected condition, and a state of foulness altogether unsuspected, due sometimes to the position of the cistern, the absence of any proper covering, and other local defects. It is, he adds, of the utmost importance that the cisterns should from time to time be cleansed and flushed, and that the overflow and waste-pipes should not, in any case, be in direct communication with the house-drains. The purity of the water cannot, of course, be preserved if these precautions be neglected. In dealing with the quality of the water after filtration, Dr. Frankland reports that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies, was, for river water, unusually free from organic matter. The supplies were also in every case delivered in an efficiently filtered condition. The water drawn from the Lea and distributed by the New River and East London Companies also showed the same marked improvement in quality as the Thames waters, the New River Company's supply containing even a still smaller proportion of organic matter.

THE APOTHECARIES' HALL OF IRELAND AND THE MEDICAL BILL.

ON May 23, a numerous meeting of Licentiates of the Apothecaries' Hall of Ireland was held for the purpose of asserting the claim of the Hall to appoint a representative on the proposed Medical Board for Ireland under the Medical Act Amendment Bill, as one of the existing medical authorities for Ireland. Dr. Lyons, M.P., was present, and the chair was taken by Dr. Thomas Collins, Governor of the Hall. The following resolution was unanimously passed:—"That this meeting having considered the Medical Act Amendment Bill at present before Parliament, are filled with consternation by the discovery that the claim of their branch of the profession is entirely ignored by the Bill, and that this act of injustice has been committed notwithstanding that their claim has been fully recognised in the first copy of the Bill introduced in the House of Lords." As also was a resolution declaring that the omission from the Bill of the right of the Apothecaries' Hall to return a member to the Divisional Medical Board would be attended with disastrous results to the public health, and with degradation and loss to the licentiate apothecaries of Ireland. A resolution, the object of which was to amend a particular clause in the Bill by introducing the words "supplied to his patients," so as to restrict general practitioners to the supplying of medicine to their own patients, was also agreed to. Dr. Lyons, M.P., spoke, quoting Chaucer to prove the antiquity of the apothecaries. The poet's description of the Doctor of Physic in the "Canterbury Tales," namely—

> "Full ready had he his apothecaries
> To send him drugs and eke lectuaries,
> For each of hem makes other for to win,
> Their friendship was not new to begin"—

seems to us, however, to tell decidedly against the position at present assumed by the Apothecaries' Hall of Ireland. They desire to be a licensing body of medical practitioners rather than of pharmaceutists, as apothecaries certainly were in Chaucer's time. Had the Apothecaries not yielded to ambition, we venture to think a Pharmaceutical Society for Ireland would not have been necessary or have been called into existence, as it was some years ago owing to the default of the "Hall" in not providing Ireland with pharmaceutical chemists.

COLLEGIATE LECTURES.

MR. HENRY POWER, F.R.C.S., commenced his annual course of lectures, "On the Protective and Lacrimal Apparatus of the Eye," in the theatre of the Royal College of Surgeons on Wednesday last. The following is the syllabus of his lectures of this day (Friday) and Monday next, viz.:—"Lecture II. (June 1).—The disposition of the protective and lacrimal apparatus in mammalia; special characters of the Harderian glands of rodents; the Meibomian follicles; the lacrimal bone and naso-lacrimal passages in various animals; disposition of the parts in man; relative and minute anatomy of the lacrimal gland; form and structure of the canaliculi, lacrimal sac, and nasal duct; attachments

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of ciliary portion of the orbicularis muscle and of Horner's muscle. Lecture III. (June 4).—Nervous and vascular supply of the lacrimal gland; effects of direct stimulation of the gland through fifth nerve and through sympathetic nerve; reflex stimulation of the gland; influence of blood-pressure and of poisons; chemical composition of the Harderian and lacrimal secretions; mechanism by which the tears are caused to flow from the conjunctival sac into the nose; total quantity and uses of the tears; development of the glands and naso-lacrimal duct." Mr. Frederic S. Eve, F.R.C.S., the "Erasmus Wilson Lecturer," will commence his course of three lectures, "On the Pathology of Cysts and Cystic Tumours," on the 6th inst. The following is his programme, viz.:—"Lecture I. (June 6).—Classification of cysts; description of different varieties in various organs and structures. Lecture II. (June 8).—Cysts of misplaced or persistent fœtal structures: dermoid and allied cysts—relation to teratomata; congenital sacral tumours; congenital serous cysts; cysts of the urachus, omphalo-mesaraic duct, great omentum, etc.; of remains of Wolffian duct and body in male and female, and of Müller's duct in male; cystic tumours of ovary. Lecture III. (June 11).—Cystic tumours of the breast and testicle." The lectures will be illustrated by specimens from the museum, and by diagrams; and microscopic specimens will be demonstrated after each lecture. On the conclusion of this course Professor Hutchinson, F.R.S., will deliver six lectures, "On Certain Diseases of the Tongue," commencing on the 13th inst.

THE PARIS WEEKLY RETURN.

The number of deaths for the twentieth week of 1883, terminating May 17, was 1206 (640 males and 566 females), and of these there were from typhoid fever 48, small-pox 19, measles 33, scarlatina 1, pertussis 19, diphtheria and croup 47, dysentery 1, erysipelas 8, and puerperal infections 2. There were also 68 deaths from tubercular and acute meningitis, 225 from phthisis, 36 from acute bronchitis, 94 from pneumonia, 72 from infantile athrepsia (23 of the infants having been wholly or partially suckled), and 31 violent deaths (21 males and 10 females). The number of deaths registered is considerably less than the mean of the last four weeks, which was 1293. With a slight increase of deaths from small-pox, measles, and diphtheria, those from typhoid fever have diminished from 57 to 48, and the number of admissions into the hospitals has been 85 instead of 129. The births for the week amount to 1188, viz., 605 males (471 legitimate and 134 illegitimate) and 583 females (454 legitimate and 129 illegitimate): 116 infants were born dead or died within twenty-four hours, viz., 65 males (40 legitimate and 25 illegitimate) and 51 females (38 legitimate and 13 illegitimate).

THE FINANCIAL POSITION OF ST. GEORGE'S HOSPITAL.

The most recent illustration of the very unsatisfactory financial position of some of our great metropolitan hospitals is given by the condition of St. George's, which, in the 150th year of its existence, has been compelled to make a special appeal to its supporters. During the past year the total expenditure of the Hospital was £26,000, whilst the income amounted to only £22,680, the difference having been supplied by the expenditure of capital. It has, in fact, been necessary during the last three years to sacrifice capital to the extent of £21,000, and also to use as income all legacies, which have amounted to £9680, so that the Hospital is poorer by £31,000 than it was three years ago, and no possible method of retrenchment can be devised, it is said, short of curtailing the usefulness of the charity by closing some of its wards. In these circumstances a special meeting has been held in Grosvenor House in order to bring before the inhabitants of the West of London especially the wants of the Hospital, and the serious falling off in late years in the support originally provided for its maintenance. The Duke of Cambridge presided on the occasion, and it is scarcely necessary to add that the meeting was influentially attended. His Royal Highness congratulated all those who had the interests of the sick poor at heart on the fact that St. George's Hospital was at the present time flourishing to the fullest extent in the objects of its founders—namely, in the treatment of disease, and in the advance of medical science. But he regretted to have to remark that the financial position of the institution was not equal to the demands upon it, and that although surrounded by a wealthy population it was nevertheless in sore need of assistance. At the conclusion of a long and earnest speech, the Duke called upon Lord Shaftesbury to move the first resolution, which ran as follows:—"That St. George's Hospital, established in 1733 for the benefit of the deserving poor, has, for 150 years, rendered invaluable services, and is deserving of increased support, and that any diminution in its work would be a serious calamity." His Lordship, after advocating the cause of the charity, remarked that a small contribution yearly from each of the wealthy houses in its neighbourhood would place the Hospital far above the need of appealing for help, and it would be a positive dishonour to the holders of great wealth, who dwelt in the West of London, if the institution were to continue to lack support. The resolution was seconded by Mr. Prescott Hewett, and carried unanimously; as was also a resolution moved by Mr. W. H. Smith, M.P., to the effect "That the constantly increasing demands on the part of the Hospital have caused the expenditure within the last three years considerably to exceed the income. That every exertion be therefore made to stimulate public liberality, especially in the matter of annual subscriptions." Mr. Smith pointed out that the advances in medical science and the public demands for improved treatment of the sick had added to the costs of these large establishments, and he enlarged upon the necessity of maintaining the cordial relations between class and class by the liberal support of institutions which gave such beneficial help to the sick poor as that afforded annually by St. George's to many hundreds." The resolution was seconded and earnestly enforced by the Rev. E. Capel Cure, the Rector of St. George's, Hanover-square.

THE METROPOLITAN ASYLUMS BOARD.

The usual fortnightly meeting of the Metropolitan Asylums Board was held on Saturday last, when, from the returns of the numbers of patients now in the various hospitals under the control of the Board, it appeared that in those devoted to small-pox 24 cases had been admitted, 2 had died, 22 had been discharged, 74 remained under treatment, and there were 148 beds available. Compared with the previous fortnight there was an increase of six in the number of cases admitted, and five in those discharged. Of fever cases, which had decreased by 15, 67 had been admitted, 5 had died, 77 had been discharged, 279 remained under treatment, and 596 beds were available. Referring to a statement which had been published, that the committee of Hampstead residents would only discontinue the agitation on the condition that the Board abandoned altogether a hospital at Hampstead, the Chairman said that the Board would not, at present, at any rate, agree to any such unconditional surrender. A lengthened discussion then ensued on the recommendation of the General Purposes Committee, that the offer of the Thames Iron Shipbuilding Company to sell to the Managers the twin-ship *Castalia*, as an addi-

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tional floating hospital for small-pox patients, at the sum of £5500, be accepted, upon condition that the vessel be found to be in a satisfactory condition. Sir E. H. Currie, speaking in support of the purchase, said that among the advantages to be obtained they would, if they accepted the offer, get a hospital that would cost them £150 per bed less than it would cost on land.

THE HEALTH OF FOREIGN AND COLONIAL CITIES.

In his report on the first quarter of the present year, the Registrar-General for England shows that the average annual death-rate during that period in thirty colonial and foreign cities, having an aggregate population of about fourteen and a half millions of persons, was equal to 29·5 per 1000. The average rate in the twenty-three European cities was 29·5 per 1000, against 23·8 in twenty-eight of the largest English towns. The lowest death-rates were 16·8 in Christiania, 22·7 in Geneva, 23·1 in Philadelphia, and 23·6 in Brooklyn; the rates ranged upwards in the other towns to 35·4 in Venice, 35·6 in Prague, 40·4 in Madras, and 40·9 in St. Petersburg. The deaths referred to small-pox in Paris, which had declined from 248 to 101 in the three preceding quarters, rose again to 154 in the first three months of the present year; the deaths from measles and diphtheria in this capital also showed a considerable increase upon those returned in the previous quarter. The deaths referred to small-pox in St. Petersburg, which had been 173, 162, and 279 in the three preceding quarters, declined to 232 last quarter. In Baltimore, small-pox was severely epidemic during the greater part of the quarter, and caused no fewer than 588 deaths, against numbers increasing from 45 to 374 in the three preceding quarters. Diphtheria caused 369 deaths in St. Petersburg, 570 in Berlin, 288 in New York, and 267 in Philadelphia. Typhus fever mortality showed an increase in St. Petersburg, and typhoid fever was largely present in Prague, Buda-Pesth, and Philadelphia.

A MONUMENT FOR FABRICIUS DE ACQUAPENDENTE.

The city of Acquapendente, in Italy, has issued invitations to the other municipalities of Italy and to the cultivators and friends of medical science, to subscribe to a fund now being collected in order to raise a monument to the great anatomist, Girolamo Fabrizio, in the place of his nativity, whence he has received his cognomen.

SYPHILIS IN ANIMALS.

A subject of interest and importance, which has more than once been the topic of discussion at the meetings of the Pathological Society of London, is that of the occurrence in and communicability of syphilis to animals. Professor Neumann a while ago spoke on the point before the Medical Society of Vienna (*Wiener Mediz. Woch.*, No. 2, 1883). The conclusion at which he arrived was that syphilis was *in toto* a disease of the genus *homo*. The animals experimented on by him were three apes, two horses, a hare, a rabbit, a guinea-pig, a marten, a rat, and a cat. Inoculations on these animals were made in one or more places, and in some cases at different times, with the discharge of indurated syphilitic sores or of syphilitic papules, or the hard sore itself was cut out and straightway inserted in the subcutaneous tissue of an animal. Some experiments were also made with the pus from a soft chancre. Every precaution necessary to prevent putrefaction and ulceration was carried out by the use of clean instruments and by the performance of immediate inoculation from the patient to the animal. The time during which the animals continued under observation varied considerably, but the exact duration is not mentioned in all cases. It is sufficient to say that, notwithstanding an energetic system of inoculation, no other local signs than those of an apparently ordinary inflammation were produced, and in many instances no result whatever occurred. A lively discussion ensued, in the course of which Dr. Auspitz said that he had injected some pus taken from a true Hunterian sore into the crural vein of a dog; an induration developed at the site of inoculation, but no further symptoms appeared, and the primary sore healed. It would appear that soft sores are communicable to animals. Dr. Mracek mentioned an experiment performed by Hänsell, in which the anterior chamber of the eye of a rabbit was inoculated with some material from a broken-down gumma. At the autopsy the lungs and liver as well as the iris and ciliary body were studded with small hard knots; at the point of infection a fatty abscess had arisen, which, however, had not completely destroyed the cornea. Neumann remarked that these phenomena had not, in his opinion, the appearance of the products of syphilitic disease. The exanthem described by Klebs in a monkey was probably of a hæmorrhagic nature, and Neumann had been unable to obtain a positive result in experiments conducted in a similar manner to those of Klebs. Professor Müller, of the Veterinary College, had seen dogs affected with condylomatous growths on the penis, which sometimes were transmitted by copulation. A disease resembling syphilis had been described in hares. The alleged venereal disease of pigeons is really a tuberculous affection of the joints. In horses a "chancre" epidemic is not unfrequently observed—minute vesicles form and burst, on the penis and prepuce; sometimes abscesses form in the testes, and much debility, with formation of gummata, are met with. Professor Kaposi, we think, expressed the true state of our knowledge on the subject when he said that we had, as yet, no proof of the transmission of syphilis to animals.

It is decided that the *conversazione* to be given by the Royal College of Physicians shall take place at the College on Wednesday, July 4, at nine o'clock.

The Harveian Oration of the Royal College of Physicians will be delivered at the College by Dr. Habershon on the afternoon of Wednesday, June 27, at four o'clock.

The Director-General of the Army Medical Department will preside at the inaugural lecture at the Parkes Museum, to-day (Friday), at 5 p.m. Professor De Chaumont, F.R.S., will give a sketch of the origin and development of the science of hygiene.

We are asked to remind our readers that an extraordinary meeting of the Clinical Society will be held this evening (Friday, June 1).

The annual general meeting of the Epidemiological Society of London will be held in the Council Room of University College on Wednesday, June 6, at 8 p.m. A paper will be read on "The History of Fever in the Royal Navy," by Sir William R. E. Smart, K.C.B., M.D.

The third International Otological Congress will be held at Basle during the first week of September, 1884.

The twelfth annual meeting of the French Association for the Advancement of Science will be held at Rouen from August 16 to 23 of the present year.

The Executive Committee of the Worcester Infirmary announce that a lady has placed £3000 in the Old Bank to the credit of the institution.

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The Treasurer of the British Medical Benevolent Fund begs to acknowledge with most sincere thanks a second donation of £100 from the Honourable James George Beaney, M.D., of Melbourne. Dr. Beaney has been elected a member of Her Majesty's Legislative Council of Victoria.

The Ascham Society, at its meeting yesterday, unanimously resolved that the science of hygiene is one that might with advantage to the public be added to the list of subjects on which grants by the Science and Art Department are allowed; and that a copy of this resolution should be sent to the Vice-President of the Council and to the Science and Art Department.

MEDICAL MATTERS IN PARLIAMENT.

House of Lords—Thursday, May 24.

Medical Act (1858) *Amendment Bill.*—This Bill, which provides for the representation of the Royal University of Ireland on the General Medical Council, passed through Committee without any amendment.

House of Commons—Thursday, May 24.

The Army Medical Inquiry.—Sir W. Barttelot asked the Secretary of State for War by whose authority a full report of this inquiry was sent to the newspapers before that Report had been communicated to the House; and, if sent without authority, what steps had been taken to find out who had furnished to the papers a copy of that report.—The Marquis of Hartington, in reply, stated that he extremely regretted what had occurred. The *Times* had for some time past devoted considerably more space and attention to the discussion of military matters than had any other morning paper. Regard having been had to that circumstance, and also to the fact that from time to time unauthorised and incorrect statements had, somehow or other, got out from the War Office, and considering also that it was desirable that questions of that kind, if discussed in the newspapers, should be discussed in a deliberate and careful, and not in a hurried manner, it had for some time past been the practice to allow gentlemen connected with the *Times* newspaper to have an early proof of papers which it was intended to present to Parliament and to publish. The department had, or was supposed to have, with regard to the gentlemen to whom the documents were committed, satisfactory proofs of the good faith and discretion with which the documents should be used, and a clear understanding that nothing should be published till the papers were in the hands of members. Acting on that practice, Lord Morley, the chairman of the Committee of Inquiry, gave to some gentlemen on the *Times* his own proof of the Report and of the evidence taken by the Committee, immediately before the Whitsuntide holidays, in the belief that they would be in the hands of members by the time that Parliament re-assembled, and that they would not be published until they had been distributed. He was therefore surprised to find that the Report and extracts from the evidence were published at great length in the *Times* of Saturday and subsequent days; and he had communicated with the editor of the *Times*, who had expressed his regret at the premature publication of the articles. Looking at what had occurred, he himself thought the practice had better be abandoned. But no blame whatever rested on any person in the department. He added that one of the reasons why he regretted the publication was that the papers had been published, not only without authority, but, in his opinion, in a manner altogether calculated to mislead the public.—Dr. Cameron gave notice that, as some of the statements published seemed unfair to the medical officers, he should next day ask questions as to their accuracy, and as to whether they had not been contradicted by other parts of the evidence.

House of Lords—Friday, May 25.

Medical Act (1858) *Amendment Bill.*—This was read a third time, and passed.

House of Commons—Friday, May 25.

Army Medical Department.—Dr. Cameron rose to put the questions of which he had given notice, when Sir A. Hayter appealed to him to postpone them on the ground that they will be answered by the Report itself. That Report, and the evidence, would, he hoped, be in the hands of the members on Tuesday next. But he was in a position to state that there was evidence in conflict with the extracts already published; and he hoped that meantime the public would suspend their judgment.

The Case of Hugh Flannagan.—Mr. W. Corbet again put a very compound question with reference to this case.—Mr. Trevelyan replied that he had already answered the more important part of the question; that he was informed that it was not true that the murdered man went three days in succession to try and get his son committed as a dangerous lunatic. On the occasion when such an application was made, the magistrates fully investigated the case, and refused the application. Viewed in the light of subsequent events, their decision was an unfortunate one; but as neither they, nor the doctor who examined the man before them, believed that he was insane, it was difficult to see how they could have acted otherwise than they did.

Monday, May 28.

The Indian Medical Service.—In reply to a question put by Mr. Leamy, Mr. Cross said the attention of the Secretary of State for India had been drawn to the exceptionally large number of junior medical officers in the Indian Service drawing "unemployed pay." This was due partly to the unusually small number of medical officers at present absent from India on furlough, partly to the large number of young officers admitted to the Service after the Afghan war, and partly to the recent reduction of twenty-two native regiments, with the consequent reduction of the medical staff attached to regiments. The unemployed pay of a surgeon in the Indian Medical Service was not the lowest awarded to any covenanted or commissioned officer in the Indian Service. An unemployed lieutenant would draw 256 rupees a month, while an unemployed surgeon, if under five years' service, would draw 286 rupees, or if over five years' service, 304 rupees a month. The difficulty was being met by a large decrease in the number of appointments. The published conditions under which officers accepted appointments in the Indian Medical Service were accurately fulfilled.

The Legion of Honour.—In spite of our general decrease of population, there is happily one category of French citizens which compensates for those losses, namely, the members of the Legion of Honour. Among the benefits derived from the red ribbon, the favourable influence which it exerts upon the prolongation of human life has not been hitherto remarked upon. The fact, however, is proved; for the Government, having ascertained that the legionaries do not die in sufficient numbers to furnish places for postulants, proposes to increase the number of crosses to be disposed of each year. The Chambers are to be consulted on this point, doubly flattering as it is to our national self-esteem; for it results on the one hand that the Legion of Honour is almost a step towards immortality, and on the other that those deserving of recompense are besieging the doors of the Chancery of the Legion in such numbers. It is quite certain that when Napoleon I. attached this cross to the breasts of the great soldiers whom he thus consoled for the probability of soon being killed on the field of battle, he little thought that the same emblem would, at a later epoch, serve as an assurance of conservation.—Dr. Lubanski, in *Union Méd.*, May 19.

Substitute for Mother's Milk.—In the March number of the *American Journal of Obstetrics*, Dr. Sharry writes:—"I have tried the following mixture as a substitute for mother's milk in a number of cases, and it has always proved very successful:—I direct the nurse to add a pint of barley-water to an ounce of pearl barley, and allow it to cool, and then strain. One-third of this barley-water and two-thirds of fresh undiluted cow's milk are mixed, and sweetened with a teaspoonful of milk-sugar. It is very important that common sugar be not used. We have here a mixture very closely resembling human milk in colour, taste, and consistence, and I have learned to rely on it with great confidence."—*New York Med. Jour.*, May 5.

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THE MEDICAL ACT AMENDMENT BILL.

WHAT between the lowering of the representation on the Medical Board for Ireland of the King and Queen's College of Physicians, and the exclusion from that Board of a representative of the Apothecaries' Hall, Dublin, the Medical Bill is not likely to sail over smooth waters in its passage through the House of Commons, so far, at all events, as Ireland is concerned. The King and Queen's College of Physicians have addressed the following petition to the House of Commons:—

"To the Honourable the Knights, Citizens, and Burgesses of the United Kingdom of Great Britain and Ireland in Parliament assembled,—The petition of the President and Fellows of the King and Queen's College of Physicians in Ireland humbly showeth: That the King and Queen's College of Physicians in Ireland have, since their incorporation in the year 1667, possessed the right of granting licences to practise medicine, and have exercised this privilege with fidelity and discretion, and for the public good. They—the oldest medical corporation in Ireland—have aimed at a high standard of examination in both medicine and midwifery, and have placed on the Medical Register a large number of medical practitioners; the yearly average of Licentiates in Medicine, in the ten years ending with and including 1882, having been eighty-nine. That, as regards medical education, the College have a just claim to be considered a teaching body, inasmuch as the 'School of Physic in Ireland' is a medical school formed by an amalgamation of the schools of the College of Physicians and of Trinity College, in conformity with the 'School of Physic Act' (40 George III., cap. 84), and subsequent Acts of Parliament. The School is governed jointly by the Provost and Senior Fellows of Trinity College, and by the President and Fellows of the College of Physicians. The teaching staff of the School consists of five professors appointed by the College, and four professors and one lecturer appointed by Trinity College. That of the five professors in the School of Physic appointed by the College of Physicians, four King's Professors are, by virtue of their office, clinical teachers in Sir Patrick Dun's Hospital, Dublin, of which the President and four Censors of the College are *ex officio* governors, and have a voice in all matters connected therewith. That the College are trustees for estates left by Sir Patrick Dun, Kt., in 1714, towards founding a school of medicine under the control of the College; the proceeds of which estates are mainly devoted to the support of the Hospital aforesaid, and to the endowment of the King's Professorships in the School of Physic. That, by the statute 31 George III., the College of Physicians were constituted a court of appeal in regard to the examinations of the Apothecaries' Company of Ireland. That, under the provisions of the 'Sale of Poisons (Ireland) Act, 1870' (33 and 34 Vict., cap. 26), the important function was entrusted to the College of Physicians of declaring, by resolution, that any article, other than those mentioned as poisons in the schedule to the Act, should be deemed a poison within the meaning of the Act. That, of the medical corporations in the United Kingdom, the King and Queen's College of Physicians were among the first to institute a certificate in sanitary science, to be granted to Licentiates in Medicine of the College after a comprehensive and practical examination, conducted by specially qualified extern examiners as well as by Fellows of the College. That the College of Physicians were the first medical college in the United Kingdom to admit women to examination on like terms with men—a privilege which has been largely availed of. That in the year 1874 the College established an examination for the purpose of licensing females to practise as midwives and nursetenders. That the College of Physicians, as well as the sister corporation, the Royal College of Surgeons in Ireland, have ever fostered the scientific medical societies of Dublin, which, now amalgamated under the title of the 'Academy of Medicine in Ireland,' hold their meetings alternately in each College. That the importance of the King and Queen's College of Physicians was duly recognised in the 'Medical Act Amendment Bill, 1883,' as originally presented to the House of Lords, for in it three representatives on the proposed Medical Board for Ireland were granted to this College. But subsequently the representation of the College was reduced to two members on the Medical Board, while that of the Universities was increased from two to three members each. That this alteration in representation places the College of Physicians in a position inferior to any of the other medical authorities constituting the proposed Medical Board for Ireland, and is thus calculated to inflict a serious injury on this College, and to lower the status of the Fellows, Members, and Licentiates of the same. That, while the King and Queen's College of Physicians occupy a position in Ireland relatively similar to that of the Royal College of Physicians of London, the Bill allots to the latter body four out of the sixteen representatives on the Medical Board for England, the representation of the Irish College of Physicians being only two out of eleven. Finally, that this College, having at all times sought to enforce a high standard of education, and having led the way in the improvement of examinations, consider that the examination schemes, proposed to be framed in each part of the United Kingdom under the Bill, should represent equality as regards curriculum of study, standard of examinations (both previous and final), and fees. Wherefore your petitioners humbly pray that your honourable House will be pleased to amend Clause 9 of the 'Medical Act Amendment Bill, 1883,' so as to restore to the College of Physicians a third representative on the Medical Board for Ireland. Your petitioners further pray that strict equality in curriculum of study, standard of examinations (both previous and final), and fees to be charged, under the Medical Boards in the several parts of the United Kingdom, shall be specially provided for in the Bill."

FROM ABROAD.

FREQUENT REPETITION OF DOSES.

UNDER this title, Dr. A. A. Smith, Professor of Materia Medica and Therapeutics at the Bellevue Hospital Medical College, delivered an interesting lecture, which is reported in the *New York Medical Journal* for February 10. In chronic diseases, he observed, when treatment has to be continued for a long time, giving large doses at intervals of five or six hours is probably the best plan; but when, in other cases, as in reducing temperature by quinine, it is not sought to produce a full effect at a single dose, and it is desired to keep up a continued effect, the question arises whether this cannot be better done by giving smaller doses at shorter intervals than by larger doses at much longer intervals—the total amount being perhaps the same in either case. It is well known that some drugs are absorbed and produce their effect in a very short time, and are rapidly eliminated, while others are slower in their action.

Treating the subject only from a clinical point of view, Dr. Smith first alludes to *chlorate of potash*. As Dr. Jacobi and others have shown, this drug, when administered in large doses, may give rise to dangerous inflammation of the kidney, which may be avoided by prescribing small and frequent doses. Thus, grain doses, given every half-hour in scarlet fever, diphtheria, tonsillitis, etc., will produce the same (or even better in throat inflammations) effects without incurring any danger. In the treatment of neuralgia, *croton chloral* has for a long time been given in large doses, as from five to eight grains every two hours until fifteen have been taken; but it is preferable to give only a grain every half-hour until the neuralgia is relieved. A solution, of which a teaspoonful contains one grain, has scarcely any of the bad taste which exists in the larger doses; and it is an important advantage of this mode of administration that the medicines may be so diluted with water as to become comparatively tasteless, and also harmless to the mucous membrane of the stomach. In the treatment of urticaria, the *salicylate of soda*, two grains every hour or half-hour (which is almost tasteless in a teaspoonful of water), is preferable to the alkalies usually given, and does not disturb digestion. "Urticaria is often caused by full doses of balsam of copaiba, and it may seem strange to you when I make the statement that a single drop of the same drug given every half-hour will sometimes control the

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urticaria; but I make the statement not alone upon the authority of others,—I have often observed the efficacy of this treatment, although not so frequently as in that by the salicylate of soda. The *liquor potassæ arsenitis*, half a drop every half-hour for six or eight doses, will often relieve vomiting which occurs after a debauch, as also the morning vomiting of drunkards, and is of decided benefit in the sympathetic nausea and vomiting of pregnancy. *Jaborandi* given in large doses in Bright's disease sometimes produces a dangerous, or even a fatal, depression of the heart's action; but from five- to ten-minim doses of the fluid extract given every half-hour or hour will produce marked sweating without causing any unpleasant effects on the heart. "I sometimes combine with the jaborandi, tincture of digitalis, with a view to counteract any possible evil influence on the heart. So dangerous do I consider large doses of jaborandi that I often hesitate long before administering it, especially in the uræmia of the puerperal state."

"The next preparation of which I shall speak is a solution of the *sulphate of atropia*, one one-hundredth of a grain in a goblet of water, a teaspoonful of which shall constitute a dose—amounting in all to about sixty doses. Now, you will often be called to see cases of supposed croup, but which, in the majority of instances, prove to be cases of croup of reflex origin; ordinarily, you will be able to relieve these patients by giving them a teaspoonful of this every hour. It is possible that the remedy acts slightly as a stimulant of the respiratory centre, and that it has some influence upon muscular contraction or relaxation. At all events, clinical experience proves that it is of benefit in these cases. The dose may be repeated every hour or half-hour, according to the severity of the attack. If the child's face begins to flush, the dose can be reduced in frequency. It should be remembered that when thus administered the equivalent of a full dose of the drug will soon be reached. Do not forget in these cases to give an emetic if there is anything in the stomach which may be causing the spasm, or a cathartic if there be reason to suspect intestinal disturbance as the cause."

The *bromides* are largely used in the treatment of nervous and febrile diseases of children, but they are not taken readily owing to their taste. This objection is obviated by giving small doses. Thus a few grains of bromide of sodium may be so dissolved that a teaspoonful will represent a half-grain or grain, which may be given every ten or fifteen minutes. It is, when so given, of great benefit in the nervous disturbance from dentition, and in relieving the fever which in children usually attends slight excitement of any kind. In children of a nervous, excitable frame of mind, and who are perhaps naturally of a sensitive, nervous temperament, who are disturbed by the slightest noise, and are unable to go to sleep before ten or eleven, a nervous sedative is necessary; and an excellent effect will be produced by *chamomilla* in some of its forms, as the tincture in minim doses every fifteen or twenty minutes. It is a better sedative than chloral, which is liable to disturb digestion, and it is also a tonic. A teaspoonful may be put into a half-tumbler of water, and the child allowed to drink it freely. An important remedy administered in small doses is *ipecac*. One drop of the wine given every ten or fifteen minutes will often arrest obstinate vomiting from various causes, among which are pregnancy, subacute gastritis, and the vomiting of children. Dr. Smith's experience has proved the accuracy of Trousseau's statement that minute doses of *calomel* (one-sixtieth of a grain taken for ten or twelve hours in succession) will relieve the nocturnal headache of syphilis. He has as yet only given it in doses of one-fortieth of a grain, but the efficacy was very marked by the second or third night. The vomiting or regurgitation of the milk by nursing infants also may be effectually treated by giving every ten or fifteen minutes a teaspoonful of a solution of one grain of calomel in a pint of water. The calomel should be first put into an ounce of lime-water, and then added to the pint of water. In the vomiting and non-inflammatory diarrhœa of children, one-twenty-fourth of a grain of *hydrargyri cum cretâ* is often of great benefit; and when the diarrhœa is accompanied by the passage of mucus, indicative of inflammatory action, a teaspoonful of a solution of one grain of corrosive sublimate in a quart of water, given every hour, will prove of service. *Digitalis* in heart disease is usually given in considerable doses only, three or four times a day; but the repetition of smaller doses produces much more benefit. A single drop of the tincture, when it is indicated in organic disease of the organ, administered at intervals of an hour or half an hour, according to the severity of the symptoms, will often give great relief without being liable to produce ill-effects. *Aconite* has for long been used in small doses, but not repeated frequently enough. "There are many cases of febrile movement, with dry, hot skin, a full, bounding pulse, the mucous membrane of the nose and mouth probably dry—cases in which the febrile movement is not the commencement of one of the continued fevers. The tincture, one-third to one-half a minim given every fifteen minutes, will be found of decided benefit. Visiting the patient shortly after the commencement of this treatment, you will often find him in a little perspiration; the medicine may then be administered at longer intervals, according to the indications. The tincture thus given is also useful in cases of commencing so-called cold in the head. It is likewise useful in cardiac hypertrophy with palpitation, severe headache, and disturbance of the nervous system due to increased force of the heart-beat."

Among other remedies which exhibit their effects in this mode of dosing, Dr. Smith mentions the following:—Teaspoonful doses, given every half-hour, of a solution of one grain of tartar emetic in a quart of water, relieve wheezing and cough accompanying slight bronchitis in children. A single drop of tincture of nux vomica given every ten minutes will often produce most marked relief in sick headache not of a neurotic origin. It should be given immediately or soon after meals. A single drop of tincture of cantharides every hour will in many cases relieve vesical catarrh. For the diarrhœa of children, accompanied with slight inflammation, straining, and the passage of jelly-looking matters, but not true dysentery, five drops of castor oil given every hour in water with sugar and gum is an excellent remedy. Two-minim doses of tincture of pulsatilla every hour give great relief in cases of orchitis and epididymitis, as also in dysmenorrhœa not of a membranous, obstructive, or neuralgic character. The distressing flatulence with a sense of palpitation at the epigastrium, which many women suffer from at the menopause, is effectually treated by the extract of Calabar bean in one-fiftieth grain doses, repeated every half-hour for six or eight doses, and resumed after stopping it for three hours. In amenorrhœa not dependent upon anæmia, benefit is derived from minim doses of fluid extract of ergot every half-hour for five or six hours the day before the flow should begin, and again on the day when it should occur. The ergot is also of benefit in excessive menstruation. Hæmorrhages may be often controlled by two-minim doses of tincture of hamamelis every half-hour. Tincture of belladonna in minim doses every half-hour is a good remedy in cases of nasal catarrh and bronchitis accompanied by free secretion, suspending it after eight or ten doses, as it is not quickly eliminated. In cases of pulmonary œdema with failure of heart-power it is of benefit by retarding the exudation of serum, and in overcoming the failure of heart-power. In the headache of migraine one grain of the citrate of cafein every half-hour will often produce most marked relief. In neuralgias about the head or face three-minim doses every half-hour of the tincture of gelseminum will often act almost miraculously and leave no ill effects. For certain headaches (especially those which are periodical and not malarial) fifteen-minim doses of fluid extract of guarana every fifteen minutes will very often relieve; if it does not do so in four doses, the dose may be doubled.

SUBCUTANEOUS NERVE-STRETCHING IN SCIATICA.—At the eighty-fifth annual meeting of the Maryland Medical and Surgical Faculty (*Phil. Med. News*, May 5), Dr. W. Chambers comes to the following conclusions, from observation of cases in his own practice and in that of others:—1. That in obstinate cases of sciatic neuralgia the subcutaneous stretching of the sciatic nerve is highly satisfactory. 2. That from effects produced by the subcutaneous method it is highly probable that all required force can be obtained. This he had also proved by experiments on the dead subject. 3. The sciatic nerve can by this method be sufficiently stretched to produce anæsthesia. 4. That moderate elongation of a nerve impairs its sensory, and but little, if at all, its motor functions. 5. That considerable force may be applied to a nerve-trunk without seriously impairing its motor functions. 6. That it is not necessary or justifiable to employ more force than just enough to produce anæsthesia.

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REVIEWS.

How to Examine the Chest. A Practical Guide for the use of Students. By SAMUEL WEST, M.D., M.R.C.P., Physician to the City of London Hospital for Diseases of the Chest, Victoria-park. London: J. and A. Churchill. 1883. Pp. 200.

Of all the various groups of disease with which the modern student has to make himself familiar, there is none in the study of which he requires more guidance and assistance than in that of chest diseases. It may be said, with equal truth, that there is none in which such guidance and assistance is less easily afforded by handbooks and diagrams. Many excellent guides to physical diagnosis have from time to time appeared, most of them, however, dealing more especially with the theoretical interpretation of physical signs than with the practical methods of distinguishing the signs themselves. The latest work on the subject, which we have now to discuss, claims for itself a practical character, and, on perusal of it, the validity of that claim must fairly be allowed. Written to meet the wants of beginners in the study of clinical medicine, the book is kept as free as possible of theory and argument, and is divided into sections dealing with the chest as a whole, with the heart, and with the lungs, etc., separately, and the method of examining each is in turn described and discussed. Each section is concluded by a useful summary. The subject of percussion of the lungs in health and disease is dealt with very fully, and is illustrated by numerous diagrams, which add greatly to the value of the chapter. Dr. West does good service in clearly pointing out the variations which may be observed in healthy chests on percussion. The failure so to recognise them is a fertile source of error, and is not confined to commencing students alone. In his chapter on auscultation he describes with admirable clearness the manner in which voice- and breath-sounds respectively are produced and modified in health and disease; and, wisely refraining from any attempts at description of the characters of chest-sounds, he teaches from the point of view that "the sounds of disease are for the most part not so much abnormal sounds as normal sounds heard in abnormal places." It may perhaps be regretted that this part of the subject has not been more fully dealt with. The subject of bronchial and tubular breathing is always one of difficulty with students, and it is, as a rule, not sufficiently recognised that every individual presents "bronchial breathing" normally over the trachea and larger tubes, which in pitch and character is *peculiar to himself*, and so forms a standard of comparison for determining the variety of abnormal breathing heard in other parts of his chest. In dealing with the subject of examination of the heart, the author has enriched his text with numerous graphic representations of murmurs, and of the alterations in the heart's shape and position in disease, which are for the most part of great service in illustrating the various points discussed. To one of these, however, exception must be taken—viz., the representation of dulness in pericardial effusion,—the area given, although doubtless taken from a clinical case, cannot be said to be the typical form. Chapters on the examination of the pulse and the mediastinum conclude the work.

Being obviously well acquainted with the more immediate wants of junior students, the author's style is characterised by conciseness, clearness, and simplicity, and the matter is judiciously arranged. The employment here and there of some rather misleading descriptive terms is unfortunate, though of no great importance; a learner might, however, find some difficulty in recognising the "jangling" character of a cracked-pot sound, or in conceiving the condition of the right apex when it is "stumpier" than the left. Upon one or two points a little more information might with advantage be added, as, for instance, with respect to the use of the binaural stethoscope, which has of late become very general amongst students. A short description, too, of the ordinary methods of examining the upper respiratory passages—viz., the mouth, nose, and larynx—would seem as worthy of a place in the book as the detailed description of the use and teachings of the sphygmograph which is already appended.

Dr. West's book deserves, and will doubtless meet with, the recognition from those to whom it is specially addressed, and may be read with advantage by those students "of a larger growth" who no longer labour under the incubus of examinations looming in the distance.

Auscultation and Percussion. By SAMUEL GEE, M.D. Third Edition. London: Smith, Elder, and Co. 1883.

DR. GEE deserves the thanks of all students for having maintained the size of his book within reasonable limits. About thirteen years have elapsed since the appearance of the first edition; yet though the present volume is brought quite up to date, it has hardly been altered in size at all.

The second part of the volume has undergone less change than the first part, as might have been expected, seeing that the physical signs of the more ordinary diseases of the heart and lungs had been fairly made out by previous workers. Dr. Gee sums up very well the advantages and disadvantages of the various forms of stethoscopes when he says, "A binaural flexible stethoscope conducts all sounds more loudly, but many sounds less truly; a solid stethoscope conducts all sounds less loudly, but many sounds more truly; a rigid tubular stethoscope stands, as it were, midway between the two." We think that his remark, that a physician should use a stethoscope as a staff, and not as a crutch, is much more applicable to the binaural stethoscope than the wooden one.

The section on puncture of the chest, which is placed at the end of the first part of the book, is certainly the most important practical addition to the volume. No hard and fast lines are laid down as to where the puncture is to be made in cases of pleural effusion,—"the puncture should be made where the signs of disease are most marked." We are quite sure that if this very simple rule were more universally kept than it is, there would not be so many instances where a chest containing fluid was unsuccessfully punctured—a result which always, to our mind, reflects a certain amount of discredit on the physician. The dangers of the operation are thus alluded to: "To pierce the lung with a fine needle is harmless; indeed, I may say, as the outcome of a very large experience, that I do not remember a single instance of a patient having been left the worse for an exploratory puncture." We cannot too strongly exhort students to master this book. If at first they find it a very hard subject, we would recommend them to commence with the second part, and to refer to the first part for the interpretation of the various physical signs which they find mentioned.

GENERAL CORRESPONDENCE.

JOHN HUNTER.

[To the Editor of the Medical Times and Gazette.]

SIR,—In Mr. Jeaffreson's very able and interesting work, "The Real Lord Byron," there occurs the following passage:—". . . . conclusive evidence exists that the birth took place in London, and that Mrs. Byron was attended at her accouchement by the famous surgeon John Hunter, who, before her departure from London for Aberdeenshire, gave the young mother instructions respecting the kind of shoe her child should wear on coming to need shoes." Byron was born in 1788, at which time Hunter had already been twenty years Surgeon to St. George's Hospital. Would a hospital surgeon in those days attend a case of midwifery *as the accoucheur?* It was likely that Hunter should have been called in to examine the child's feet, and to give advice as to their treatment; but the Surgeon to St. George's acting as an accoucheur I cannot understand.

Will some one better versed than I am in the history of the profession enlighten me as to this matter?

May 29. I am, &c., J. D.

INSPECTION OF THE THROAT WITHOUT INSTRUMENTS.—Dr. Francis, of Newport, R.I., writes that very often it is difficult to depress the tongue of a patient who is suffering from sore-throat, diphtheria, follicular tonsillitis, etc. He suggests that the patient be told to open his mouth, in front of a good light, and simply, but with force, say—*Arh! Barrh! Varrrst!* LIFE!—enunciating each word for some few seconds. Dr. Francis has tried this, and not only obtained an excellent view, but the different positions of the uvula and surrounding parts greatly assisted the diagnosis and treatment of the disease.—*New York Medical Record*, May 5.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 22.

JOHN MARSHALL, F.R.S., President, in the Chair.

FOUR papers, of which the following are abstracts, were read and discussed :—

A CASE IN WHICH CYSTS IN CONNEXION WITH BOTH KIDNEYS WERE OPENED AND DRAINED, AND A TUMOUR OF THE RIGHT OVARY REMOVED, THE PATIENT REMAINING IN GOOD HEALTH. BY J. KNOWSLEY THORNTON, M.B., C.M.

E. M., a single woman, aged twenty-seven, was admitted into the Samaritan Hospital in November, 1877, under the care of Mr. Spencer Wells. She had had a child born alive at full term when she was only fifteen. When seventeen she had inflammation of both kidneys, and from that time had been failing in health, and had been unable to lie on her right side for fully a year. When admitted she had a fluctuant tumour of considerable size in the right side of the abdomen, with a red, tender, and pointing swelling in the right loin behind this tumour. There was a smaller tumour in the left side of the abdomen, which occupied an exactly similar position to that in the right side, but did not distinctly fluctuate. There was nothing wrong with the urine and no trouble with bladder or kidneys, except pain across the loins and in the lower abdomen, which was not, however, constant. Menstruation was regular. The swelling in the right loin was freely incised by Mr. Wells under Listerian management, but nothing to account for its presence was found, and no communication appeared to exist between it and the kidney or ureter. It contained fluid very like that from an ovarian cyst, with an immense quantity of cholesterine. It was dressed antiseptically and drained, and in six weeks the patient went home well, all trace of the cyst having disappeared. Six or eight weeks afterwards she had an attack of gout in both feet; then the wound opened, and a large discharge of fluid with much cholesterine took place, and the wound gradually healed up again. In January, 1880, she was readmitted under the author's care, with a tumour of the right ovary, for which he performed ovariotomy. While the abdomen was open he examined the kidneys and ureters. The right kidney was large and sacculated and its ureter was much enlarged, especially at the pelvic brim. The left kidney and ureter appeared quite normal. The recovery after the ovariotomy was rapid, but soon after getting up the swelling in the right loin reappeared, with fever, etc., and she was obliged to return to bed. It was poulticed antiseptically until it broke, and then drained as before, and she left the hospital apparently well in three weeks from the time it burst, and about six weeks from the ovariotomy. In six weeks she returned with a swelling in the left iliac region in the situation of the left ureter; this was opened and drained antiseptically, and again in about six weeks she went home well. Fifteen months later the wound in the right side again opened, and discharge went on for fourteen months without apparently affecting her health at all. It has now closed again for two months, and she is in excellent health. The left side has not given any further trouble. After detailing the case the author makes remarks and suggestions as to the probable pathology of these various lesions, and invites suggestions from the Fellows as to this very curious case, and reports of any others at all like it.

A CASE OF NEPHRECTOMY FOR RUPTURE OF THE KIDNEY WHERE LATERAL CYSTOTOMY WAS ALSO SUBSEQUENTLY PERFORMED FOR THE RELIEF OF CYSTITIS CAUSED BY RETAINED BLOOD-CLOTS. BY HENRY G. RAWDON, M.D. (COMMUNICATED BY MR. REGINALD HARRISON.)

Charles M., aged twelve, was admitted into the Liverpool Infirmary for Children on December 7, 1882. The previous day he had fallen into a stone basement, a distance of about eight feet. On admission, he was found to be passing blood in his urine. He complained of some pain in his right side. The only other evidence of an injury was a small bruise mark over the crest of the ilium. The diagnosis was that rupture of the right kidney had been caused by the injury. The hæmaturia for the first few days diminished, but it subsequently increased, and was followed by acute cystitis. With the object of preventing blood entering the bladder, on the seventeenth day after the injury the kidney was removed by a lumbar incision, when it was found to have been torn nearly completely across. Relief followed the operation. Subsequently symptoms of acute cystitis again showed themselves. On the twenty-first day after the injury, and four days after the nephrectomy, lateral cystotomy was performed, when fœtid blood-clots were removed, and a free drain for the urine was established. Relief was afforded by the cystotomy, so far as the symptoms directly traceable to the bladder were concerned. The patient died on the fortieth day after the injury. The cause of death appears to have been due to pyelitis and circumscribed suppuration of the left kidney—effects probably traceable to an extension of the cystitis which had been occasioned, partly by the presence of decomposing clots, and partly by attacks of retention of urine. It was suggested that if cystotomy had been performed earlier the latter consequences might have been averted.

CASE OF EXCISION OF AN ENLARGED CANCEROUS KIDNEY. BY SIR T. SPENCER WELLS, BART.

The author narrates the case of a gentleman, aged fifty-eight, whose left kidney he removed last December. It measured six inches by four, and was the seat of soft cancer. The patient died on the fifth day. The operative procedure is described, and the author urges the importance of uniting, in all cases of nephrectomy by abdominal section, not only the divided peritoneal coat of the anterior abdominal wall, but also the divided peritoneal covering of the kidney. In this case he was content with letting the two edges fall together, and he thinks that blood or serum exuding from the tissues behind the peritoneum may have passed into the peritoneal cavity, or that some portion of intestine may have adhered there. This might have been prevented by a few sutures. He has not seen this detail in the operative proceeding referred to in any previously recorded case of nephrectomy.

A CASE OF TRAUMATIC SUPPURATING HÆMATOMA, CONNECTED WITH THE LEFT KIDNEY, TREATED BY PUNCTURE AND DRAINAGE. BY JOHN MARSHALL, F.R.S., PRESIDENT OF THE SOCIETY.

Alice M., aged three years, was admitted into University College Hospital, December 30, 1882. She had been knocked down by a spring cart, one wheel of which is said to have passed over her abdomen. She was unable to stand, and experienced a severe pain, passing down towards the umbilicus and backwards towards the spine. She was carried home, and had to keep her bed about a month. She gradually got better, so that five months after the accident she resumed school attendance. After an interval the pain returned in all its severity, and she came under the author's care. When first seen she looked ill and jaded. There was a swelling in the left lumbar region, so tender to the touch as to interfere with careful examination. After anæsthesia the tumour was found dull on percussion and fluctuating. An aspirator needle was introduced, and five ounces of yellow-brown odourless fluid were drawn off. It gave no bile reaction; but, when heated, a strong urinous odour was perceptible, and on further examination it was found to contain 5·5 per cent. of urea. The tumour was again punctured with a large trocar and canula under antiseptic precautions, and a drainage-tube was subsequently introduced through the canula. Thirty-six ounces of fluid were evacuated. The child gradually recovered. The interesting points in the case were—the diagnosis of the exact lesion; the absence of hæmaturia if the kidney were ruptured; the presence of urea in the fluid surrounding the kidney if the organ were not ruptured.

The PRESIDENT briefly summarised the chief points brought forward in the papers. He considered the cases, taken together, as a very important contribution to the department of renal surgery, and one which could hardly fail to be of interest and instructive to every Fellow present, old or young; he also drew attention to a number of specimens in the room, illustrating various diseases of the kidneys, most of which had been dealt with during life by surgical means.

Mr. REGINALD HARRISON had not much to add to the discussion which was novel; he had been present at Mr.

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Rawdon's operation, and confirmed all the details; he considered the operation as fully justified. Indeed, in all the cases related he saw some good. It was regrettable that the diagnosis was not abreast of the surgical and operative proceedings which were now available for various diseases of the kidney. He believed that good would result from the discussion of these papers, by teaching us something further concerning the differential diagnosis of the cases.

Mr. ALBAN DORAN, speaking of one of the specimens in the room—an enormously distended cystic kidney,—said the patient from whom it was removed did not live very long; post-mortem examination revealed the fact that the other kidney was likewise the seat of cystic degeneration.

Dr. W. H. DICKINSON had heard only a portion of the first paper, and was therefore unable to speak on that case, but as regards Sir Spencer Wells's case, he would venture on some remarks. It was obvious that the patient had had the advantage of the highest surgical skill attainable, and the fatal result, therefore, could in no way be attributed to any lack in this direction. Death, no doubt, was due to the effect of the disease itself. He felt that malignant disease was hardly within the bounds of surgical aid; there was one fact which came prominently forward—the amount of secondary disease which was to be expected. Out of nineteen personal cases, he found that there were secondary deposits in not less than sixteen cases; in three only was the disease limited to the one organ. It was true that the cases had all arrived at their ultimate stage, for in none had operative interference been attempted, and though it might be urged that early interference would possibly prevent secondary deposits, he still thought that this form of sarcoma was so malignant as to preclude hope of a really satisfactory result.

Mr. BARWELL said that Mr. Thornton's case was so rare that it was quite beyond discussion. As regarded the other cases, he said that the opening in the loin would not permit of the removal of some tumours without excision of the last rib. Thus, while he would prefer the lumbar incision, yet there were cases in which an abdominal incision would be the better. As to the closing of the peritoneum after removal of the tumour, he thought it might lead to the accumulation of fluids which later on might percolate into the peritoneal cavity. He proposed to make an opening near the border of the quadratus, and drain through the loin.

Mr. TAIT agreed with Dr. Dickinson that the surgeon ought not to attempt to remove malignant tumours; but he asked how they were to know whether a tumour was malignant or otherwise. It was necessary to cut down on the organ in order to arrive at a diagnosis in some cases. He did not approve of sewing the peritoneal edges together, any more than of Mr. Barwell's proposal to drain through the loin. The best plan, he believed, was to put in a drainage-tube through the abdominal wound. An exploratory abdominal incision would often be of use, as permitting the surgeon not only to make a certain diagnosis of any tumour, but also to see the condition of the opposite kidney. He considered Mr. Rawdon's case as a brilliant surgical proceeding, and regretted that the result had not been more satisfactory.

Mr. THORNTON was, on the whole, inclined to prefer nephrectomy to nephrotomy in cases of cystic kidney. Nephrotomy, however, by diverting the urine of that kidney through the loin, allowed the secreting power of the opposite organ to be made out. He rather differed with Sir Spencer Wells as to sewing together the peritoneum after removing the kidney. If the fluids were thoroughly aseptic they would do no harm to the peritoneal cavity; indeed, that was the best mode of securing their absorption. As to the diagnosis, he agreed about the difficulties in many cases. He thought an exploratory operation was called for. If the disease appeared to be localised, then it might be dealt with, but if disseminated it could be left alone. As the result of his own experience, he inclined to the abdominal incision.

Sir SPENCER WELLS agreed with everything that had fallen from Dr. Dickinson. But, in his own case, the diagnosis was very doubtful. It had been seen by one of the most experienced physicians in London, who said the disease was splenic. At any rate the patient was dying of hæmorrhage, and just the same as if it had been from the thigh, he as a surgeon felt it necessary to make an effort to save his patient. There was no evidence of any secondary deposits elsewhere, and from its duration there was room to doubt its malignant nature. He should be inclined to adopt Mr. Barwell's suggestion of drainage through the loin. He regretted now that he cut away any of the peritoneum; it was very vascular and gave him a great deal of trouble. It would have been better to have simply sewn the edges together. He had selected the abdominal incision in his present case, because it was the most familiar to himself, and partly because of Mr. Thornton's successes.

The PRESIDENT remarked that it was not yet possible to lay down any absolute rules for dealing with these cases, because our methods of diagnosis were still imperfect. A case was related from America in which the kidney—that proved to be a solitary one—was removed.

Dr. SOUTHEY referred to the importance of estimating the amount of urea which was passed. With a normal amount present in the urine, a normal amount of kidney-substance might fairly be inferred.

Mr. BARKER said that a German author who had collected 120 cases had arrived at an exactly opposite conclusion to that of Dr. Dickinson, as to the frequency of the dissemination of renal sarcoma. In a case of his own he had only found one or two small nodules in the lung, and none elsewhere.

Mr. BERKELEY HILL exhibited a patient from whom he had removed a Renal Calculus—a female aged twenty-six, who had been under Dr. Poore in University College Hospital a few weeks ago. She had suffered for some years from renal colic. When examined, there was a fluctuating swelling in the loin. After an aspiration it rapidly increased in size, and it was therefore freely incised. It proved to be a kidney which was distended by purulent urine. A calculus was found, and removed. The patient recovered. She still passes some pus in the urine.

The Society then adjourned.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, APRIL 20.

DR. TRIPE, President, in the Chair.

TENEMENT DWELLINGS.

MR. A. W. BLYTH read this paper. He remarked that the subject had so often been discussed in that room, that he could not hope to bring forward anything really new, but the amount of public attention that had been recently directed to it in consequence of Miss Octavia Hill's paper read at the Charity Organisation Society, was, he held, sufficient cause for recurring to it; he would, however, especially insist on one aspect of the question which had been hitherto almost or entirely overlooked, viz., the conditions under which the labouring population of our large cities, and especially of London, habitually live—conditions which can scarcely be considered natural, and the effects of which on their constitution, and still more on that of their progeny, must be of national importance. At best their lot is a hard one, even those who are fortunate enough to live in Peabody's buildings, and therefore amid the best sanitary surroundings. Mr. Blyth had ascertained from the manager of one of these buildings that the average wages of the occupants were £1 3s. 4d. per week. Let us take the case of a man with wife and three children, occupying two rooms. For these he will pay on an average 4s. 4d. per week, and allowing 3s. per week per head as the cost of feeding himself and family (it costs 2s. 11d. per head for our workhouse population), he will have but £11 for clothing, firing, education—in fact, for all expenses except rent and the barest food; therefore, if provident, he must content himself with one room, and the inconveniences it entails: his life is cheerless, his amusements few. But we find harder lives than these, especially among the self-supporting female population, and in each lower grade down to those dens where, as one of themselves told a medical officer of health, who inquired as to their occupations, "The men are thieves, the women whores." Two social phenomena, one political the other religious—Socialism or Nihilism in its various forms, and the hysterical excitement known as Salvationism,—widely different as they may seem, are alike the outcome of, and could exist only amid, unhealthy mental

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conditions, for which some remedy must be found. It is not, however, the occupants of model lodging-houses who are a trouble and a danger to society, but a class as yet untouched by Artisans' Dwellings and Sanitary Acts, degraded and brutalised, simioid and microcephalic, not low enough in cerebral development to be shut up in asylums for idiots, but having just brain enough to steal, or worse. They are, for the most part, bred in large towns, but not exclusively, for Mr. Blyth knew an instance in Devonshire of a family living on their own farm who relapsed into savagery, discarding the conveniences and habits of civilised life, indulging in promiscuous intercourse, and altogether in a state in no way above that of beasts. But they were not physically inferior to the agricultural labourers around, and when at length broken up and dispersed they had multiplied into a numerous tribe. For this class legislation has done little but providing prisons. Model lodgings will not receive them, and they would not brook the moral restraint these impose; they would prefer their dens, even at a higher rent. They are of a lower grade, of limited cerebral development, and capable of education only up to a certain point, but not further, like the various classes of idiots in an asylum. Such are the inhabitants of slums and "tenement dwellings." Humanitarians weep over the high mortality (40 per 1000 or more) which prevails among these people, but Mr. Blyth looks on it as due not so much to the insanitary conditions under which they live as to an unhealthy organisation tending to its own extinction, and it is well for the rest of society that they should die out. If the courts in which they congregate are condemned, they simply remove *en masse* to some similar quarter where they will be surrounded by others of congenial habits. Frequent removals are rather for the benefit of others than of themselves, and they will never take to the improved dwellings erected on the site of those condemned. The practical question of affording better accommodation for the working classes has been solved by the clearing of unhealthy sites, and the erection by the Peabody Trustees, the Improved Industrial Dwellings Company, and others. of large blocks, at rentals of 2s. 6d. to 5s. per room, with rules as to cleanliness, decency, notification of infectious diseases, etc., with the best results, especially in proving that 1000 persons can be packed on an acre without detriment to health, although such aggregations are not altogether free from objection. But the plea put forward for setting the Act in motion and removing large numbers of houses is the provision of more healthy and decent dwellings for the persons thus dispossessed; and the Act always fails to accomplish this end: a new class of persons is introduced, the old inhabitants are simply shifted, probably to crowd still closer elsewhere under conditions in no way better than before. If we would raise the character of the class under consideration we must improve and regulate existing dwellings by availing ourselves of Section 16 of the Public Health Act of 1866. Tenement dwellings should be inspected, and no private houses turned into tenements without adequate alterations. A register of such dwellings should be kept, defining the number of persons who may be permitted; and one person on the ground floor should be paid a trifle to act as *concierge*.

Dr. TRIPE assured Mr. Blyth that Section 16 had been in operation in his district ever since the passing of the Act. All such houses, 1500 in number, are registered with the cubic contents of each room, and in any case of overcrowding, where there is more than one family in a house—not, as some imagine necessary, in a room,—a notice is served on the owner and the occupier, a fine of 20s. per day being imposed if the notice be disregarded. The space per head allowed is 300 cubic feet, if the room be employed for sleeping only, and 400 if for living and sleeping. Dr. Tripe maintains that the keeping of a lodging-house is a trade carried on at all hours, and that consequently the inspector may enter by day or night. No legal objection has ever been made to this practice. In Hackney, the "wild classes" consist, as elsewhere, mainly of Irish, and are mostly immigrants driven from other haunts by "metropolitan improvements." As illustrating their habits, Dr. Tripe said that he had known the water-closets unused, and the whole of the court covered with fæcal deposits.

Mr. LOVATT, referring to the question of open doors, stated his opinion that it would be useless to fix locks, for they would soon be burst if any of the occupants were to attempt to keep the door closed. Persons who lived by begging, selling matches or flowers, and otherwise picking up a precarious livelihood in the streets by day, slept at night on the stairs and in the cellars with the connivance of the regular tenants. Once the dead body of a woman had been found in a cellar, another in a closet, and a third in the cistern; its presence being discovered only after some time by the water becoming undrinkable. The stairs and passages were also resorted to for immoral purposes.

Mr. CORNER referred with approval to Miss O. Hill's proposal that tenements should be bought up by local companies and put into decent repair and sanitary order, believing that a moderate dividend might thus be realised, and the social and moral condition of the people improved, which is not the case when they are merely unhoused to make way for a better class. At present the tenants are afraid to complain, knowing that such a course will be visited by ejection, and when improvements are enforced by the vestries the landlords raise the rents out of all proportion to the outlay required of them.

Dr. EDMONDS said that in his district there were whole streets so let out; but the bulk of them are the fag ends of leases, purchased by unscrupulous speculators, tenement-mongers, whose case cannot be provided against by the ground landlords as had been suggested. But he must take this opportunity of calling attention to the success of the Queen's-park Estate, Harrow-road, where comfortable cottages, with gardens and perfect sanitary arrangements, can be had for 6s. or 7s. per week; but this company have a capital of a million sterling, and are the largest buyers of timber, etc., in the country. They purchase extensive suburban estates, and defy competition. At present they are building 5000 houses at once at Hornsey, and the prospective improvement in their property is such, that fifty years hence it will pay them to pull down the whole, replacing them by a different class of houses, and seeking fresh fields for their operations.

Mr. MURPHY had heard from Dr. Russel that at Glasgow they had found it pay to build lofty tenements, with shops on the ground-floor, and dwellings above at rents graduated down to one shilling and sixpence per room on the highest storey, so as to meet the requirements even of the very poorest.

Dr. CORFIELD, as chairman of two building societies—one of which bought sites as cheaply as possible, covering them with buildings of as high and costly a character as the neighbourhood allowed of, and paying a dividend of 7½ or more per cent.; the other, philanthropic rather than commercial, following the opposite course, and promising a dividend of 2 or 3 per cent. only, if any—could confirm all that Dr. Edmonds had said as to the impossibility of any company undertaking the work of providing dwellings for the really poor with financial success. The case of the company owning Queen's-park, etc., was exceptional and due to the vast scale of their operations.

The CHAIRMAN, in summing up, said that the unanimous feeling of the meeting seemed to be that the only remedy for the evils under consideration would be found in—1. Such alterations in the law as shall enable the reconstruction of existing tenement dwellings to be undertaken profitably, so as to avoid displacement of the present inhabitants. 2. Police inspection at all hours of day and night. 3. Registration of such houses, with particulars as to cubic space, etc., and sanitary regulations. 4. And the engagement of one responsible tenant as *concierge* in each. 5. Small local associations to co-operate with the sanitary authorities in each district in carrying out these undertakings.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 2.

G. BUCHANAN, M.D., F.R.S., President, in the Chair.

A PAPER was read by Dr. JOSEPH EWART, of Brighton, on "The Causes of the Excessive Mortality among the Women and Children of the European Soldiers serving in India," of which the following is an abstract. The subject was treated in two sections—the first embraced considerations relating to the high mortality among women; the second, the still greater mortality among children; and, in both

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cases, the hygienic and sanitary measures required to effect a material reduction of the existing death-rates were indicated. The average death-rate among the women of the European forces in India, during the ten years ending 1880, amounted to 24·527 per mille—ranging from 20·83 in 1876 to 36·54 in 1872—in Bengal, from 18·16 in 1877 to 46·12 in 1872; in Madras, from 14·72 in 1872 to 26·95 in 1878; and in Bombay, from 14·6 in 1874 to 33·41 in 1872. By the kind assistance of Surgeon-General Marston, the author has been enabled to give, side by side, the death-rate of the women belonging to the European troops serving in the United Kingdom and in India during a period of four years. Thus it was, in 1877, 22·50 in India and 8·59 in the United Kingdom; in 1878, 29·20 and 8·65 respectively; in 1879, 25·00 and 7·75; and in 1880, 21·05 and 8·37. More than half of the average mortality of the decennial period, or about 12·667 per 1000, was caused by a few diseases peculiar to hot climates. Intermittent fever accounted for 0·103; remittent and continued fever for 3·038; dysentery, 2·143; diarrhœa, 1·442; cholera, 3·467; splenitis, 0·0017; hepatitis, 1·424; atrophy and anæmia, 1·029 per 1000 of strength. In the year 1880, out of a death-rate of 21·05 per mille, 8·70 were accounted for by these eight diseases; while the balance of 12·35 were ascribed to the following maladies or classes of disease:—0·24 to small-pox, 1·45 to chest disease, 2·66 to phthisis, 3·39 to diseases peculiar to women, 0·73 to apoplexy and sunstroke, 0·24 to abscess, 1·21 to heart disease, 1·94 not specified, and 0·25 to syncope. From the moment the soldier's wife sets foot on Indian soil—sometimes before, during the passage out through the Canal, the Red Sea, or the Indian Ocean,—she is liable to be confronted with influences which are inimical to the preservation of a high standard of health. As she is now landed at the ports of disembarkation in the winter season, she has not at first to contend against the greatest of all her enemies—malaria. But even at this period she may be exposed to the substantial dangers arising from the direct action of the sun, and have to learn, after painful and bitter experience, that the brain must be protected by efficient headgear and an umbrella covered with cotton cloth. In the closely approaching hot weather, the succeeding rains, and the drying up season between the cessation of the monsoon and the commencement of the winter, when most parts of the plains are steeped in malaria—some much more than others—most of all perhaps the border lands of marshes, jheels, and the Terai, she is too frequently neglectful of such necessary precautions, and she will be fortunate if she escapes an attack of ague or some other ailment—it may be febricula or what is termed seasoning fever, dysentery, or diarrhœa—during her first year of residence. During the decennium 1871 to 1880, both years inclusive, the admissions of sick women to hospital exceeded the strength by 1593 cases. But, as it is not always needful for these women to go on the sick list for every illness that would be deemed sufficient to disqualify their soldier husbands for military duty, a certain number, not definable with precision, may be borne patiently in their own quarters without being officially reported, and therefore do not find a place in the returns. Be this, however, as it may, it appears that, out of a strength of 58,260 women of the European army of India, 39,853 had to be treated for illness, of which 38,294 admissions were due to the eight principal diseases previously cited, whilst a considerable proportion of the remainder was the result of the direct or indirect operation of malaria. Unlike the contagious and exanthematous fevers, a prior attack of the various types of malarious fever confers not only no immunity from subsequent seizures, but there is reason to believe that each paroxysm—especially if the individual be still resident in districts where the cause abounds and is endemic—renders the liability to future ones greater and greater. Whether in its comparatively stormless action, gradually, sometimes imperceptibly, resulting in characteristic deterioration of the general health without ever developing into paroxysms of fever, or in the tempest of ague, or remittent, sometimes moderately severe, at at other times so pernicious as in its subjective phenomena to be indistinguishable from typhus, this thing or condition, which for want of a better term we still have to call malaria, exercises a deleterious effect, mainly upon the vaso-motor nervous system. Hence the disorders of digestion and assimilation, visceral congestions and enlargements, altered constitution of the blood (anæmia, simple and pernicious), pigmentation of the skin and internal organs, weakening of the circulatory and muscular systems, and many other states of impaired health, grouped in the returns under the headings, "General Debility" or "Atrophy and Anæmia," and accounting for 13,404 cases during the decennium. To the dangers of a tropical sun, excessive heat, and malaria must be added imperfect house accommodation; bad water, if we except the stations of Calcutta, Madras, and Bombay; vegetable and animal food of inferior quality; difficulty in attaining adequate open-air exercise owing to the exhausting heat of the climate, the short cold season being excepted; inability to secure the cooling influence of an evenly worked punkah in the hot weather; liability to chill from the general disuse of light flannel next the skin; and childbearing, with a host of diseases peculiar to women, causing alone 3·39 per 1000 of the death-rate. During the ten years ending 1880 the death-rate among the children of the European army of India amounted to 67·864 per 1000. The excess of mortality due to climatic causes is well shown in the following figures:—Thus, the death-rate among soldiers' children was—in 1877, 50·33 in India and 24·06 in the United Kingdom; in 1878, 79·73 and 28·41 respectively; in 1879, 77·06 and 26·86; and in 1880, 60·43 and 30·28. Of the decennial average mortality, 29·726 deaths per 1000 of strength were caused by the eight principal diseases already referred to, leaving a still larger balance of 38·138 from other maladies, of which 24·228 resulted from tubercular disease, heat-apoplexy, meningitis and hydrocephalus, convulsions and dentition. According to age, there died per 1000 of strength:—

	1877.	1878.	1879.	1880.
Under 6 months	224·65	295·39	319·63	290·73
Between 6 mos. and 1 yr..	158·73	218·75	216·98	210·31
„ 12 „ 18 mos.	137·45	210·00	214·16	181·16
„ 18 „ 2 yrs.	55·87	141·59	103·26	94·66
„ 2 years and 3 „	45·63	71·58	118·75	55·72
„ 3 „ 4 „	18·34	39·34	36·27	51·45
„ 4 „ 5 „	16·72	23·28	40·71	32.47
0 to 5 „	87·49	135·10	138·03	116·68
5 „ 10 „	10·06	12·08	16·72	11·37
10 „ 15 „	6·41	8·05	9·74	6·29

Most of this vast mortality is ascribed to malaria, heat, unhealthy parents transmitting enfeebled constitutions to their children, insanitary surroundings, errors in natural and artificial feeding, etc. To enable the soldier's wife to realise the importance of pure air, pure water, wholesome food, good cookery, plenty of house-room, free ventilation, daily exercise and bathing, avoiding undue exposure to the sun, efficient clothing, a perfect system of hygiene and conservancy in the preservation of her own health and that of her offspring; she should be provided with a sanitary primer, written in plain language, setting forth very briefly and concisely all the simple truths necessary for her to know. Such a work, intelligible to the commonest understanding, if mastered and acted upon and supplemented wherever and whenever practicable by lectures, would go some way to improving the health and lessening the waste of life among the women and children of the European army of India.

In the discussion which followed, the President, Drs. Chevers, Murray, Scriven, Lawson, and Bovill, and Mr. Long took part, and some comments by Dr. De Renzy were also read on the subject.

THE Army Medical Department dinner took place at the Inns of Court Hotel on the 25th ult. One hundred and eleven officers—active and retired—were present. The Director-General, T. Crawford, M.D., occupied the chair, and Inspector-General R. Lawson (retired) the vice-chair. Sir J. W. Reid, K.C.B., and Sir Joseph Fayrer, K.C.S.I., were guests.

HEAVY DAMAGES.—In the second trial of the suit of John Lilly against the New York Central and Hudson River Railroad Company for $35,000 (about £8750) damages for the loss of both legs by accident, while employed by defendants in the yard of the Grand Central Depôt, the jury returned a verdict for that amount, which is equal to the largest sum ever received in a similar suit in the Brooklyn Courts.—*Phil. Med. News*, April 28.

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OBITUARY.

WILLIAM E. STEELE, M.D. Dub., F.K.Q.C.P., etc.

This week we have to chronicle the death of the efficient and courteous Registrar of the Branch Medical Council for Ireland. Dr. Steele died, aged sixty-six years, at his country residence, Wilton, Bray, county Wicklow, on Saturday, the 5th ult., after a long illness. He had been in failing health for several months, and more than one hemiplegic attack prepared his many friends for the worst long before death came.

William Edward Steele graduated as Bachelor of Arts in the University of Dublin in the year 1836, and in the following year took his degree of Bachelor of Medicine, not proceeding to the higher degree of Doctor of Medicine until 1856. In 1840 he became a Licentiate in Medicine of the King and Queen's College of Physicians, of which corporation he was promoted to be a Fellow on May 22, 1848. He at once gained the confidence of his colleagues, so that three years later he was elected to the important post of Registrar of the College, an office he continued to hold until 1860. At the beginning of 1861, Dr. Steele was appointed Registrar of the Branch Medical Council for Ireland in succession to Dr. Maunsell. This appointment Dr. Steele held until his death—during a period of more than twenty-two years,—discharging his duties to the satisfaction of the Branch Council and of the profession in general. For many years Dr. Steele was also Registrar of the Royal Dublin Society, and subsequently became Director of the Science and Art Museum, Dublin. It will thus be seen that he had gradually withdrawn from the active practice of his profession; nevertheless, his worth and character are fitly alluded to in these columns, having regard to the high medical qualifications he possessed, and to the professional position he occupied as Registrar to the Branch Council for Ireland.

TRAVERS BOYNE BARTON, M.D. Univ. Dub.

Under circumstances of an exceptionally painful nature this young and promising physician lost his life on Tuesday, April 24. On the afternoon of that day, Dr. Barton, who was Surgeon to the County Donegal Infirmary, Lifford, went to Londonderry to fetch home by water a canoe which he had purchased, and which was lying at the City of Derry Boat Club house. A northerly wind was blowing, which was favourable to a sail on the river Foyle from Londonderry to Lifford. Accordingly, Dr. Barton laid aside the paddles and hoisted a sail shortly after leaving the club-house, and, having passed under Derry Bridge, proceeded about half a mile further, when a sudden gust caught the sail and overturned the canoe. The unfortunate gentleman was observed by a man at the Great Northern Railway shed trying to right the boat, and, failing in that, endeavouring to swim ashore; but he had not gone far when he was seen to be sinking. No help was near, as the man (who was, so far as known, the only witness of the melancholy occurrence) had no means of rendering assistance. The body was not recovered until the afternoon of Monday, the 30th ult. Dr. Barton, who was only twenty-seven years of age, was a son of James Barton, Esq., of Farndreg, Dundalk, County Louth, and a nephew of Mr. John Kellock Barton, President of the Royal College of Surgeons in Ireland. His career had been a distinguished one. A senior prizeman in Surgery at the Adelaide Hospital, Dublin, he graduated in Arts and Medicine in the University of Dublin. He then served as a surgeon in the Peninsular and Oriental Steam Packet Company. On the death of Dr. Robert Little. of Lifford, Dr. Barton was appointed Surgeon to the County Donegal Infirmary, with a prospect of a long life of usefulness before him.

"Majalis" or "Maialis"?—Dr. Wallace, of Bloomingdale, N.Y., asks for the authority upon which the spelling of "maialis" is based. The spelling according to Gray is "convallaria majalis." It is so given by Webster. The use of "i" instead of "j" has no doubt been adopted because it is so spelled on the Continent, and especially in France, where the use of this article was introduced by Prof. Sée.—*New York Medical Record*, May 5.

MEDICAL NEWS.

University of Aberdeen.—At the late Medical Graduation Term, the following candidates, after the usual examinations, received degrees in Medicine and Surgery:—

The Degree of M.D.

John Barrett, M.B., C.M., P. and O. Service; Harry Arthur Benham, M.B., C.M., Dundee Royal Asylum; Alexander Hill Griffith, M.B., C.M., Royal Eye Hospital, Manchester; Frederick Mortimer Hawkins, M.B., C.M., London; William Reid, M.B., C.M., Kensington, London; Charles Boards Richardson, M.B., C.M., Brighton; William Dyne Steel, M.B., C.M., Abergavenny; David Tulloch, M.B., C.M., Winnipeg, Canada.

The Degrees of M.B. and C.M.

John Baker, Aberdeen; Robert Milne Beaton, Aberdeen; Alfred Brown, M.A., Welshpool; George Buchan, Aberdeen; Sylvester John Cole, Freetown, Sierra Leone; Henri Cook, Greenock; Alexander Cowley, Dublin; George Forsyth Ashley Da Costa, Kingston, Jamaica; Francis Falconer, M.A., Aberdeen; James Thomson Fraser, Longsight, Manchester; John Gerard, M.A., Aberdeen; John Gordon, Aberdeen; Andrew Hosie, Aberdeen; John Inglis, M.A., Aberdeen; David Ireland, Brechin; Charles Jeffrey, Tarland; George Johnston, Fintray; Thomas Mair Johnstone, Ellon; John Bamford Kerr, Crawshawbooth, Manchester; James Francis Macdonald, Aberfeldy; John Matheson, M.A., Plockton, Ross-shire; Frederic Maude, Highgate, London; John M'Combie, Oxton, Morayshire; Grenville Edwin Moffett, Calcutta; James Moir, St. Kilda, Victoria; John Drew Moir, St. Kilda, Victoria; James Murray, Nairn; Alexander Nicoll, Rhynie; David Petty, Montrose; James Robert Purdy, Morpeth; Alexander Rennie, M.A., Wester Fintray; James Taylor Robb, Keith; William Scott, Auchairn, Keith; William John Henderson Sinclair, Dunbeath, Wick; William Allan Stewart, Buxburn, Newhills; James Taylor, M.A., New Deer; George John Kemp Turner, Ellon; John Turner, Portsmouth; George Vincent, Bedfont, Middlesex.

Of the above-named candidates, John Gerard, M.A., David Ireland, James Francis Macdonald, Alexander Rennie, M.A., and William Scott received their degrees in Medicine and Surgery with honourable distinction. At the same time, William Kelty, William Ledingham Rurton, James Lawrence Smith, and George Cardno Still were certified as having passed all the examinations, but did not graduate. The following candidates are now declared to have passed the First Division of the First Professional Examination:—

John Fleetwood Cumming, John Grigor Dallas, Edward Greaves W. Deane, Frederick Arthur Foy, John Johnston Gray, James William M. Gunn, Albert Edward Henderson, James Thomson Lewis, James Thornton Macpherson, John Malcolm, James Melvin, Edward Russell Orchard, David Alexander Shirres, Charles Smith, John Wesley Smith.

The following candidates have completed the First Professional Examination:—

Charles Mitchell Aird, Alfred Wm. Alcock, Charles Spencer Anderson, Matthew Ferguson Anderson, Joseph Marshall Barnes, James Wilson Bett, David Macdonald Brown, John Christie, James Forsyth Craig, Alexander Gordon Davidson, John Stuart Davidson, James Steel Dickie, Leslie Durno, George Forbes, John Francis Scott Fowler, William Stewart Geddie, David Gill, Henry William Godfrey, George Gordon, William Henry Gray, George Nicol Henry, Francis Grice Jones, David Alexander F. Kydd, John Marshall Lamb, Andrew Anderson Maclennan, Farquhar M'Rae, Alexander S. Manson, Alexander Milne, James Black Milne, James Shaw Milne, William Vincent Morgan, James Murray, John Coutts Myles, Arthur Edward Patterson, Eapen Poonen, Patrick Whyte Rattray, Cecil Robertson, William Robertson, Hugh Ross, George Scott, David Simpson, William Bulwer Simpson, John Rutherford Skinner, William Gordon Stott, Alexander James Stuart, James Thomas Thorne, Andrew Whyte, Reginald Graham Wills, James Martin Young.

The following candidates have passed the Second Professional Examination:—

Henry M'Kenzie Adamson, George Henry Allden, John Anderson, Joseph Anderson, John Baker, Christopher George Battiscombe, Charles Gordon Bennett, William Ronaldson Clark, James Will Cook, Alexander Mitchell Cowie, George Burnett Currie, Augustus William Dalby, George Duffus, Walter Angus Elmslie, Henry Gibbons, John Gordon, Thomas Bell Graham, Arthur Stephen Inglis, James Logie, Stuart Macdonald, Frank Innes Mackintosh, Alexander Maclean, James Mitchell Munro, Alexander Murchison, Robert Dowell Presslie, Alexander Reid, Hermas Thiele, John Eustace Webb, Arthur Meredith Whitehead, John Thomas Windle.

The next Professional Examination for degrees in Medicine commences on Saturday, July 28.

University of Glasgow.—Medical Examinations.—At the recent Medical Examinations the following candidates passed:—

First Professional Examination.—John Allan, W. Carrick Allan, John Baird, Samuel J. Baird, David Reid Barrie, Charles W. Bell, H. Dunnet Brown, Hugh D. Buchanan, William Butchart, M.A., Archibald T. Campbell, Robert Corbett, Alexander D. Crawford, William C. Crichton, Donald Currie, William Davidson, George W. Davis, Josephus L. Downs, William Findlay, W. J. Gibbin, Adam Hamilton, Robt. Hamilton, Charles S. Harris, James E. Hunter, William Huntly, M.A., William J. Keir, George Marshall, Alfred E. Miller, George Miller, Alexander Munro, Donald S. MacCall, J. R. Ronald MacCrindle, George G. M'Donald, Hugh M. M'Houl, Archibald Maclachlan, Alexander H. MacLean, David T. MacLeod, Charles Mactaggart, Andrew H. Richmond, John Ritchie, John Rowatt, Pramath Roy (2), Walter Sanderman, William Shand, John S. Stewart, Robert Stirling, John Thorburn, James Watson, Robt. Whitelaw, Leonard Williams, William Yorke.

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Second Professional Examination.—Samuel P. Alexander, William Allan, Harry Bamber, William T. Blakely, William Brown, John J. Brownlee, William Buchanan, Quintin Chalmers (3), George M. Connor, James Crawford, Alexander Dewar, William Downie, M.A., Robert Eaglesham, James D. Farquharson, James Findlay (3), Alexander Frew (3), Andrew B. Fulton, Robert C. Gilroy, John Graham, W. James Holme, John A. Kerr, Alex. M. Kinghorn, William Kirkland, Alex. Kirkpatrick, J. Begbie Laing, Robert Livingstone, W. Gray Marshall, R. Gibson Miller, David Moffat, William C. C. Muir, Andrew Murdoch, Thomas C. M'Culloch, Roderick M'Donald, Alex. M'Kean, Ernest M'Kenzie, Charles M'Kinnon, M.A., Donald J. M'Intosh, Digby M. M'Phail, James Ralley, Robert Ramsay, William Rankin, John O. Reddie, George C. Rodger, Robert Routledge, David Roxburgh, Thomas Russell, Gavin S. Scott, Miller Semple, J. Charles A. Smith, John White, Andrew Wilson.

Third Professional Examination.—Samuel Alexander, Alex. G. Auld, John Beveridge, George Clark, John Clerk, William Colquhoun, Francis H. Colvin, J. B. Cumming, John Cunningham, David Finlay, Alexander Frew (2), Herbert M. Gay, Michael H. Greener, Thos. Howard, Alexander Jack, Arthur G. Keogh, George A. Morris, James W. A. Murdoch, Duncan Macartney, M.A., Wm. M'Cracken, Wm. M'Creadie, David Macdonald, Neil C. M'Donald, Duncan Macgilvray, Hugh M. Mackintosh, David Orr, Alex. B. Paterson, Alex. Peacock, John Ritchie, Richard A. D. Robb, Alex. Robertson, Frank Russell, James Shaw, Alexander J. F. Skottowe, Wm. F. Somerville, M.A., James P. Smith, Joseph Thornley, George B. Todd, R. Bruce Young, M.A., Robert H. Young.

UNIVERSITY OF DUBLIN.—At the First Summer (Trinity Term) Commencement, held on Wednesday, May 2, in the Examination Hall of Trinity College, the following degrees in Medicine and Surgery were conferred by the University Caput, consisting of the Right Hon. J. T. Ball, LL.D., Vice-Chancellor of the University; the Rev. J. H. Jellett, D.D., Provost of Trinity College; and the Rev. James W. Barlow, Senior Master non-regent:—

Baccalaureus in Medicinâ.—Gulielmus Hamilton Allen.

Magister in Chirurgiâ.—Ephraim MacDowel Cosgrave (*stipendiis condonatis*.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—DOUBLE QUALIFICATION.—The following gentlemen passed their First Professional Examination during the recent sittings of the examiners:—

Thomas Young, Rowberron; Edmund Arthur Lightburne, Newry; Benjamin George Brock, Caithness; Ernest John Lawrence, Dublin; James Wallace Moore, co. Londonderry; William Alexander Waters, Ripon; Henry Goodwyn, Lucknow; George Andrew Storrar Gordon, Canada; Henry Hick, Bolton-on-Dearne; Louis Vallée, Paris; Vernon Edmund Russel Ardagh, India; Sidney Edward Percy Cade, Cork; Peter Campbell, Glenorchy; William Stewart, Edinburgh; Alfred Devonald, Pembrokeshire; John Thomas Jones, North Wales; Griffith Gryffryah Jones, Anglesey; William Chalmers, Cornwall; William Cautley Atkinson, Manchester; Henry Edward Richardson, Belgaum, Bombay; William Singleton Fulshaw, Leicestershire; Charles Graves, Dublin; Charles Thomas Blackwell, London; James Doyle, Manchester; William Valentine, Lancashire; Aubrey Blakiston, Yorkshire; Heather Bigg, London; Charles Dundas Grant, Edinburgh; Digby Patrick FitzGerald French, co. Galway; Theophilus Edward Samuel Scholes, Jamaica; John Sullivan de Courcey, co. Cork; Knox Robert Pilliner, Jamaica; William Alexander Neill, Dublin; Sydney Morse, Somersetshire; John Cromie, co. Down; Thomas Joseph Jones, North Wales; John Thomas, Australia; Patrick Hehir, Templemore; Robert William Felkin, Beeston, near Nottingham; Thomas Roberts, co. Cork; John Robert Henry Dubourg, Elgin; Alfred Ernest Woodforde, London; James Campbell, London; William Benson, Lancashire.

The following gentlemen passed their Final Examination, and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

Thomas Leslie Crooke, Sheffield; James Albert Hunter, Ontario; Matthew Henry Gardiner, Campbeltown; John Small, Fifeshire; Percy Howard Day, York; Robert Greenwood Dempster, Liverpool: Walter Frederick Clark, Yorkshire; Hugh Gough Haines, Madras; Karl Winqvist, Sweden; Edwin Alfred Cormack, Edinburgh; Thomas Young, Rowberron; Arthur Ernest Marsack, Olney, Bucks; William Patterson, co. Down; Tom Bairston, Halifax; William Henry O'Meara, co. Limerick; Robert Williams, Anglesey; John William Dunbar Hooper, Dinapore, India; Edward Albert Warren, Cork; William Henry Piercy Fox, Madras; Hunter Urquhart Walker, Madras; Hartwell Woodhouse James, Bangalore; George Hessenauer, Germany; William Henry Harris, Stony Stratford; Richard Macartney, Ceylon; Robert McCall, Edinburgh; Robert Lowry Dickson, co. Fermanagh; Arthur Hawkyard, Leeds; Wilton Mills, Whitworth; Thomas Alexander Papillon, Reading; Henry Edward Richardson, Belgaum, Bombay; William John Meharry, co. Down; Edwin Gilmore Knill, Ontario, Canada; Henry George Myles, Limerick; Ernest Westbrook, London; Henry Frederic Horne, Bangalore; James Hamilton, Donegal; John O'Brien, Mitchelstowndown; John Allen Carr, Bentham; William Allen Fisher, co. Cork; Edward Esdale Shiels, St. Louis, U.S.A.; Edward Bridges Townsend, Southsea; William Arthur Dickson, Irishtown, Dublin; Peter Forbes Jardine, Glasgow; Thomas Tenison Collins, Tipperary; Thomas Richardson-Griffiths, Woolwich; Lambert Houghton, New York; William Kidd, co. Down; Alfred Devonald, Pembrokeshire; Cornelius Joseph O'Brien, Cork; William John Cregan, co. Down; William Robert Fox, Melbourne; Henry Crombleholme Bradley, Preston.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, May 7, 8, 9, and 10, the following candidates were successful:—

For the Licence to practise Medicine—

Charlick, Alfred John, Ellengowan, Birkdale Park, Southport.
Davis, Jones Henry, 23, Conyngham-road, Dublin.
Dillon, Paul Robert, 21, George's-place, Dublin.
King, Richard Thacker, Brighton-road, Rathgar, Dublin.
Marsden, Herbert Harrison, Lynwood, Shrewsbury-road, Birkenhead.
Parke, John Latimer, Tideswell, near Sheffield.
Patterson, Robert Dixon, Moy, co. Tyrone.
Robinson, Henry, 49, Hope-street, Liverpool.
Sproulle, Thomas Wetherall, Moville, co. Donegal.
Todd, John Joseph, Omagh, co. Tyrone.
Walpole, George Albert, Castlenode, Strokestoun.
Waterfield, William Henry, 1, Lansdowne-terrace, Dublin.
Wynne, Edward, Esker House, Upper Rathmines, Dublin.

For the Licence to practise Midwifery—

Charlick, Alfred John.
Davis, Jones Henry.
Dillon, Paul Robert.
Fenton, Arthur Wellington, M.B., B.Ch. Dub., Easkey, co. Sligo.
King, Richard Thacker.
Marsden, Herbert Harrison.
Parke, John Latimer.
Patterson, Robert Dixon.
Robinson, Henry.
Swan, Samuel Alexander, M.D. Royal Univ. Ire., 22, Milton-terrace, Belfast.
Todd, John Joseph.
Waterfield, William Henry.
Wynne, Edward.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary or Anatomical and Physiological Examinations for the Fellowship of the College at a meeting of the Board of Examiners on the 24th ult., and when eligible will be admitted to the final examination, viz.:—

Brock, J. H. Ernest, student of University College.
Bull, W. Charles, B.A. Cantab., of St. George's Hospital.
Carr, J. Walker, of University College.
Castle, Bernard, of St. Bartholomew's Hospital.
East, C. Harry, of King's College Hospital.
Fox, Herbert, of St. Bartholomew's Hospital.
Harsant, J. George, of Guy's Hospital.
Jolliffe, A. Robert, of Charing-cross Hospital.
Page, H. Marmaduke, of St. George's Hospital.
Randell, R. M. Henry, of Guy's Hospital.
Walker, H. Secker, of University College.
Wells, G. Lees, of St. Bartholomew's Hospital.

Four candidates were sent back for six months. The following gentlemen passed on the 25th ult., viz.:—

Dale, W. Kelynack, student of King's College Hospital.
Heath, C. Joseph, of St. Bartholomew's Hospital.
Newbolt, G. Palmerston, of St. Bartholomew's Hospital.
Priestley, R. Chambers, of King's College Hospital.
Santi, P. R. William, of St. Bartholomew's Hospital.
Thane, E. Herbert, of University College Hospital.
Williams, J. Edward, of St. Bartholomew's Hospital.

Seven candidates were rejected.

Professional Examinations.—At the recent primary or Anatomical and Physiological examination for the Fellowship of the Royal College of Surgeons there were eighty-six candidates, as against seventy-six at the corresponding period last year, when the rejections amounted to forty-two; this year there were forty-three out of eighty-six. At the pass examination in Pathology, Therapeutics, and Surgery, which was brought to a close on Saturday last, there were eighteen candidates, against seventeen last year. To these gentlemen the following questions were submitted on the 24th ult., when they were required to answer all four questions, from 1.30 to 5.30 p.m., viz.:—1. What are the conditions favourable to the healing of wounds, and what are the various methods by which these are promoted? 2. State what you understand by the term "asthenopia"; mention the disorders of which it is commonly symptomatic; indicate how its principal forms may be clinically distinguished, and give their treatment. 3. What is meant by the tension of a part? Illustrate its causes and effects by examples, and describe its treatment. 4. Give the diagnostic symptoms of aneurism of the innominate, common carotid, and vertebral arteries respectively, from other pulsating tumours that may occur at the root of the neck; and point out the treatment appropriate under various circumstances. The names of the successful candidates cannot be published until submitted by the Court of Examiners to the Council at its next meeting for confirmation.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—During the last sittings of the examiners the following gentlemen passed their Final Examination, and were admitted L.R.C.S.E.:—

David Prain, Fettercairn; James Whitton, Queen's County; John Clancy, co. Kerry; Frank Sturges, London; William Guy, Kent; Arthur Herbert Butcher, Ripon.

The following gentlemen passed their First Professional Examination for the Licence in Dental Surgery:—

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James Maynard Dunlop, Dumfries; James Graham Munro, New York; John Wood, Dalbeattie.

The following gentlemen passed their Final Examination, and were admitted L.D.S. :—

William John Mason, Somersetshire; William Thomas Elliott, Diss, Norfolk.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held on Friday, April 20, and following days, the undermentioned gentlemen, having passed their final examination for the Letters Testimonial, and having taken the declaration and signed the roll, were admitted Licentiates of the College, viz. :—

William G. Butler, James L. Callaghan, Loftus Campbell, Michael Carr, Joseph Coffey, Sir Charles Coote, Bart., Charles A. Daley, Quinton R. Darling, Patrick T. Dillon, Alfred E. Dugdale, Sinclair Finlay, George Fisher, Arthur O. Fitzgerald, John R. Fitzgerald, Diego Gannon, James Hamilton, Allen H. Hanley, James J. H. Jackman, Joseph J. Jackson, Andrew J. G. Kelly, Christopher P. Kelly, William Love, Michael J. M'Cartan, Bernard A. M'Ginity, Alexander L. M'Kenzie, Charles L. Magill, Henry Morhead, Thomas C. Moore, Charles G. D. Morier, Francis S. Morrison, Patrick H. Murray, Joseph Niblock, Robert D. Patterson, John Robinson, Albert W. Sheperd, John C. Soady, Thomas W. Sproule, John Taylor, Henry R. Todd, William A. Tomlinson, Henry E. A. Warren, and James L. E. Somers.

Twelve were stopped.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 24 :—

Dodson, Arthur Edward, Downs Park-road, Clapton.
Parke, John Latimer, Tideswell, near Sheffield.
Spiller, Frederic Winstanley, Belgrave-road, Birmingham.

The following gentleman also on the same day passed his Primary Professional Examination :—

Harris, Charles Joshua Joseph, Charing-cross Hospital.

BIRTHS.

BIRCH.—On May 17, at Cromwell House, Stockport-road, Manchester, the wife of Philip Birch, L.R.C.P., M.R.C.S., of a daughter.

BRISBANE.—On May 24, at 21, Park-road, Regent's-park, N.W., the wife of J. Brisbane, M.D., of a son.

LUNN.—On May 19, the wife of John R. Lunn, Medical Superintendent of the Marylebone Infirmary, Notting Hill, W., of a son, who survived his birth but a few hours.

MAISEY.—On May 21, at Charlbury, Oxfordshire, the wife of F. T. Maisey, M.R.C.S., of a daughter.

SHELDON.—On May 25, at 123, Cornwall-road, Notting Hill, W., the wife of Thomas Sheldon, M.D., of a daughter, stillborn.

TRIMBLE.—On May 27, at Southsea, the wife of James Trimble, Fleet Surgeon Royal Navy, of a daughter.

WARNER.—On May 27, at Oaklands, Woodford, Essex, the wife of Percy Warner, L.R.C.P., M.R.C.S., of a daughter.

WINSLOW.—On May 23, at Sussex House, Hammersmith, the wife of Dr. L. S. Forbes Winslow, of a daughter.

MARRIAGES.

BARRINGTON—COULTON.—On May 24, at Pentney, Frederick Albert Barrington, L.K.Q.C.P., of Lynn, to Ellen Isabella, second daughter of John James Coulton, solicitor, of Lynn and Pentney.

EDWARDES—DONALDSON.—On May 5, at Bryanston-square, Edward Joshua Edwardes, M.D., M.R.C.P., of Orchard-street, W., to Clara Annie, daughter of J. Hunter Donaldson, Esq., of Southwick-crescent, W., and Harold's Lea, Horley, Surrey.

KNOWLING—FOX.—On May 24, at Wellington, Somerset, Ernest M. Knowling, B.A., M.B., M.R.C.S., of 5, Lexden-terrace, Tenby, to Helen Emily Hankey, youngest daughter of the late George Smith Fox, Esq., of Wellington.

MOORE—MATTHEWS.—On May 24, at Torquay, York T. G. Moore, L.R.C.P., M.R.C.S., to Edith Elfrida, daughter of E. J. Matthews, of Babbicombe.

MORLEY—HAWKINS.—On May 23, at Southampton, Thomas Simmons Morley, M.D. Lond., of Barton-upon-Humber, son of John Morley, M.R.C.S., L.S.A., to Jessie, second daughter of the late Edward Bishop Hawkins, of 10, Blechynden-terrace, Southampton.

O'CONNOR—NOYES.—On May 24, at Notting Hill, Bernard O'Connor, M.D., of 40, Brook-street, son of the late William O'Connor, M.D., of 30, Upper Montague-street, to Mariquita, eldest daughter of the late Henry James Noyes, formerly 26th Cameronians.

THORNHILL—HUGHES.—On May 26, at Brighton, John Thornhill, 45th Regiment, to Caroline Alice, second daughter of Dr. Hughes, of Brighton.

WALPOLE—ANDREWS.—On May 26, at Lancaster-gate, George Albert Walpole, L.K.Q.C.P., etc., to Margaret, second daughter of Frederick Andrews, of 34, Leinster-terrace, W.

DEATHS.

ALLINSON, ANTHONY, M.R.C.S., at King's Lynn, on May 27, in his 74th year.

ARNOTT, CHARLES DAVID, M.D., M.R.C.S., L.S.A., at Stradbroke Villa, Gorleston, Great Yarmouth, on May 26, in his 63rd year.

BLACK, FRANCIS, M.D., at 33, Kensington-gardens-square, W., on May 29, aged 64.

HANSON, GEORGE HENRY, M.D., of Hampton-place, Brighton, at Llanthony, Herefordshire, on May 22.

JOHNSON, JOHN FELIX, M.D., formerly Surgeon in the Royal Navy, at Downham Market, on May 26, aged 58.

MURRAY, JOHN JARDINE, F.R.C.S., etc., at 99, Montpelier-road, Brighton, on May 23, aged 48.

SHELDON, ELIZABETH ANNE, wife of Thomas Sheldon, M.D., at 123, Cornwall-road, Notting Hill, W., on May 25, aged 33.

VACANCIES.

CENTRAL LONDON OPHTHALMIC HOSPITAL, GRAY'S-INN-ROAD, W.C.—Assistant-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons of London, Edinburgh, or Dublin, and must produce certificates of having attended the practice of some ophthalmic institution for at least six months. Testimonials to be addressed to the Secretary, on or before June 9.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. Salary £100 per annum, with board and apartments. Candidates must be unmarried and have registered qualifications both in medicine and surgery. Applications, with certificates, to be sent to the Hon. Secretary, on or before June 15.

DEVON COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary £120 per annum, with board and residence. Candidates must be unmarried. Further particulars may be obtained from Dr. Saunders, the Medical Superintendent, or from Mr. T. E. Drake, solicitor, Exeter, the Clerk to the Committee, to whom applications, stating age, with testimonials, are to be sent before June 18.

QUEEN'S HOSPITAL, BIRMINGHAM.—Resident Physician. Salary £70 per annum, with board, lodging, etc. Candidates must hold a registered medical qualification. Applications, testimonials, and certificates of registration, to be sent, under cover to the Secretary, from whom all further information may be obtained, on or before June 20.

ST. BARTHOLOMEW'S HOSPITAL.—Two Casualty Physicians. Particulars of the duties and all necessary information may be obtained by personal application at the Clerk's office. Applications, with testimonials, must be left at the Clerk's office on or before June 8. The attendance of candidates is requested at a meeting of the House Committee to be held at eleven o'clock forenoon on Thursday, June 14, when the appointments will be made.

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon (non-resident). Salary £200 per annum. Candidates must be doubly qualified. Applications in writing, stating age, with recent testimonials, or copies, to be sent to the Secretary, not later than July 14.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Bridgwater Union.—Mr. John Weller has resigned the Middlezoy District: area 6849; population 2121; salary £36 per annum.

New Winchester Union.—Mr. Edward Bucknell has resigned the Worthy's District: area 20,177; population 2743; salary £150 per annum.

APPOINTMENTS.

Blackburn Union.—Oswald S. Wraith, L.R.C.P. Edin., L.R.C.S. Edin. to the Darwen District.

Brentford Union.—Albert B. Day, M.R.C.S. Eng., L.S.A., to the Schools at Isleworth.

Carmarthen Union.—Morgan Lloyd, L.R.C.P., M.R.C.S., to the Llanwinio District.

Hayfield Union.—James Edwin Anderton, M.R.C.S. Eng., L.R.C.P. and L.M. Edin., to the Hayfield District and the Workhouse.

Huddersfield Union.—David Robertson, M.D. and M.C. Queen's Univ. Ire., to the Kirkheaton District.

Shardlow Union.—George William Smith, M.R.C.S. and L.S.A. Lond., to the Keyworth District.

THE TESTIMONIAL SYSTEM.—The system of signing testimonials to the efficacy of different articles of diet and physic, which has become so common in this country, but more especially so in the United States, is thus stigmatised in the *Philadelphia Med. News* of May 5 :—"Circulars are issued by the ton, praising this or that preparation or pill, or infants' food, or purgative water, or disinfectant, and each is quickly made remunerative by the endorsement of various doctors and ministers, whose signatures are a supposed guarantee of their worth. Two classes of doctors sign such papers—first, well-known, good-natured men, with weak moral spines, who advertise the article; and, secondly, ill-known, worldly-wise men who are advertised by it. There is nothing more common than for physicians to sneer at the readiness with which clergymen lend their names to every medical circular that is presented to them. The day for such sneers has gone by. We live in glass houses. The last circular (only, of course, 'to the medical profession') is made more obnoxious than usual by the lithographed signatures of four well-known New York medical men, four also well-known Philadelphians, and six irregulars, also equally divided between the two cities. The majority of these men do not need advertising. Why, then, should they place themselves in such an undignified and unethical position as to allow their names to be used by a commercial firm for its own profit?"

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VITAL STATISTICS OF LONDON.

Week ending Saturday, May 26, 1883.

BIRTHS.

Births of Boys, 1863; Girls, 1809; Total, 3692.
Corrected weekly average in the 10 years 1873-82, 2523·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	806	712	1518
Weekly average of the ten years 1873-82, corrected to increased population ...	794·0	714·3	1508·3
Deaths of people aged 80 and upwards ...	...	...	48

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	7	3	4	7	...	4	.	1
North ...	905947	1	19	4	4	5	...	2	...	2
Central ...	292238	...	6	2	...	1	...	2	...	2
East	692738	...	23	14	2	3	...	...	...	3
South	1265927	...	22	13	4	11	...	4	...	2
Total	3826483	1	77	36	14	27	...	12	...	10

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·884 in
Mean temperature	58·2°
Highest point of thermometer	81·0°
Lowest point of thermometer	39·5°
Mean dew-point temperature	48·7°
General direction of wind	Variable.
Whole amount of rain in the week	0·35 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 26, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending May 26.	Deaths Registered during the week ending May 26.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2692	1518	20·0	81·0	39·5	58·2	14·55	0·35	0·89
Brighton	111262	57	37	17·4	72·7	43·7	54·3	12·39	0·50	1·27
Portsmouth ...	131478	88	43	17·1	...	...	...	...	...	...
Norwich	896·2	58	27	15·7	...	...	...	...	...	...
Plymouth	74977	40	23	16·0	68·0	43·0	55·0	12·78	0·07	0·18
Bristol	212779	150	72	17·7	69·0	41·2	54·1	12·28	0·34	0·86
Wolverhampton .	77557	53	25	16·8	74·5	43·8	54·5	12·50	0·28	0·71
Birmingham ...	414846	332	168	21·1	...	...	...	...	...	...
Leicester	129483	108	64	25·8	74·8	39·0	57·3	14·06	0·52	1·32
Nottingham ...	199349	197	76	19·9	...	...	...	...	...	...
Derby	85574	67	35	21·3	...	...	...	...	...	...
Birkenhead ...	88700	66	22	12·9	...	...	...	...	...	...
Liverpool	566753	429	279	25·7	65·0	45·7	53·6	12·01	0·01	0·03
Bolton	107862	91	38	18·4	68·0	41·7	52·9	11·61	0·02	0·05
Manchester ...	339252	268	218	33·5	...	...	...	...	...	...
Salford	180465	164	98	26·8	...	...	...	...	...	...
Oldham	119071	96	50	21·9	...	...	...	...	...	...
Blackburn	108460	90	45	21·6	...	...	...	...	...	...
Preston	98564	76	41	21·7	...	...	...	...	...	...
Huddersfield ...	84701	45	32	19·7	...	...	...	...	...	...
Halifax	75591	35	38	26·2	...	...	...	...	...	...
Bradford	204807	124	72	18·3	69·2	41·1	55·0	12·78	0·05	0·13
Leeds	321611	242	115	18·7	71·0	39·0	55·3	12·95	0·19	0·48
Sheffield	295497	229	140	24·7	75·0	37·0	56·6	13·67	0·26	0·66
Hull	176296	131	72	21·3	79·6	35·0	55·7	13·17	0·28	0·71
Sunderland ...	121117	112	58	25·0	72·0	40·0	53·4	11·89	0·02	0·05
Newcastle	149464	119	86	30·0	...	...	...	...	...	.
Cardiff	90033	79	29	16·8	...	...	...	...	...	...
For 28 towns ...	8620·5	6238	3521	21·3	81·0	35·0	55·1	12·84	0·22	0·56
Edinburgh	235946	130	99	21·9	66·8	37·6	53·6	12·01	0·02	0·05
Glasgow	515589	359	323	32·7	64·0	40·2	53·8	12·12	...	...
Dublin	349·85	244	184	27·5	68·5	44·0	55·4	13·00	0·05	0·13

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·83 in. The highest reading was 30·02 in. on Monday morning, and the lowest 29·40 in. on Saturday at noon.

NOTES, QUERIES, AND REPLIES.

"He that questioneth much shall learn much."—*Bacon.*

A Seaside Home for Poor Manchester Children.—The proposal made some months since by the Honorary Secretaries of the Children's Refuges, Strangeways, to establish a seaside home for city children, at Lytham, is now an accomplished fact. A house has been taken there and furnished.

A Provincial Teacher.—We cannot give you the desired information. Wait until the annual publication of "Pass and Pluck" by the College, next month.

A Disheartened Coroner.—Mr. Hawkes, the Birmingham Borough Coroner, at an inquest on the body of a newly-born child which had been found in an ashpit in Digby-street, but bearing no marks of violence, and in which case the police had been unable to discover the mother, remarked that he did not think it necessary to have a post-mortem examination of the body. He had spent a great many two-guineas since he had been a coroner, on post-mortem examinations in similar cases, but without any good result. If he had called a doctor he would, no doubt, have said that he could not swear whether the child had had any separate existence. He was perfectly disheartened to think of the fees which he had caused the borough to pay in such cases. The police would continue their inquiries. Verdict—"Found dead."

The Port of London Sanitary Authority.—The City Common Council has agreed to a proposal to erect a hospital at Gravesend, recommended by the Port Sanitary Committee.

Cecil F.—The Local Government Board sanctioned the payment by the St. Pancras Board of Guardians of the costs in defending Mr. Dunlop, medical officer of the workhouse, against the recent charge of manslaughter.

Assisting Poor Patients leaving Hospitals.—In connexion with one of the London hospitals a fund is being raised by a committee of ladies for the purpose of giving assistance to those of the patients who on leaving are not able immediately to obtain employment—an example which might be imitated at other similar institutions where such a fund does not exist.

Inefficient Inspection of Dairies.—Dr. Maclachlan, Medical Officer of Health, Walsall, in his report to the Sanitary Committee of the Town Council, referring to the fatal cases in young children whose food is chiefly milk, observes:—"There can be no doubt that this article of diet, unless carefully guarded, is extremely liable to cause diarrhœa, yet by an anomalous arrangement the inspection of dairies and of places where milk is retailed devolves on the police, who have not, and who cannot be expected to have, that special knowledge of sanitary science which is one of the essential qualifications for a sanitary inspector."

Inquirer.—Subject to the approval of the Local Government Board, the salary of Mr. C. McCann, the Medical Superintendent of the Highgate Infirmary, will be £400 a year, with house, coals, gas, and a paid assistant.

Non-Vaccination: Cumulative Amercements.—At Bristol Police-court, last week, a potato merchant of that city was fined £6 and costs for the non-vaccination of his children. It was stated that the defendant had already paid about £90 in fines and costs in respect of the same children, and the solicitor who appeared on his behalf characterised the continued prosecutions for the same offence as a species of persecution.

Dr. Williams.—Mungo Park, the African traveller, was a medical man. Livingstone also was a member of the College of Surgeons; he died May 4, 1873.

The Benefit of Sanitary Improvements.—Dr. Robinson, Medical Officer of Health, Dover, in his report on the borough of Hythe, states that the average death-rate at Hythe of the last nine years has equalled only 14·5; that of last year being down to 13·5. This low mortality, he adds, must prove a source of satisfaction to the Town Council, justifying as it does the action taken in providing a perfect system of drainage, wholesome water-supply, and the execution of other public improvement works.

Whooping-cough, Rowley Regis.—It was reported to the Local Board, on the 21st ult., that 102 cases of whooping-cough had occurred in the parish, thirteen being fatal. No fresh case of small-pox had occurred for a month.

A House-Drainage Scheme for St. George's, Hanover-square.—A contemporary states that at the last meeting of the Vestry a motion was made that the Medical Officer of Health be asked to report to the Vestry a scheme which he thought should be adopted in the drainage of all houses in the parish, in respect to gulleys, foul gas generated in the sewers, and house-drains. If the scheme were approved by the Vestry it could be applied in the case of all houses to be built in the future, so that gulleys and sewer ventilators be superseded. The motion was lost by a large majority. It was stated that there was more than one system of house-drainage, and "drain doctors" differed.

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Protesting against more Litigation.—The Hampstead Vestry has unanimously passed a resolution expressive of astonishment that it is the intention of the Metropolitan Asylums Board again to contest the Hampstead Hospital Case in the courts of law at the ratepayers' expense, and the Vestry strongly protest against any further expenditure of the ratepayers' moneys beyond the sum—presumably many thousands—that has been already expended in useless legal proceedings.

Notification of Diseases Bill.—The Wandsworth District Board of Works has resolved to petition Parliament in favour of the Bill.

An Incident at a Vivisection Lecture, Paris.—The Paris correspondent of a daily contemporary states that M. Brown-Séquard was giving a lecture at the College of France on vivisection, and produced a young monkey on which he intended to perform experiments. He had not proceeded further than to tie up his patient—who, not liking the preliminary operation, uttered piercing cries,—when a lady, elegantly dressed, stepped forward and struck the professor across the face with her parasol. He was ungallant enough to call her "an old fool," and ordered her to be removed. At the police-office she said she had only properly acted on the Gramont humanitarian law. The correctional police must decide whether this plea justifies an assault.

Seizure of Meat outside the Central Meat Market, Smithfield.—Mr. Peacock, the Sanitary Inspector of the Holborn District, reported last week to the District Board of Works that he had seized and had destroyed 2550 lbs. of meat which was totally unfit for human food.

Evading the Patent Medicine Duty.—Two chemists at Manchester have been fined, respectively, 40s. in three cases, and 20s., for selling patent medicines without a proper Government stamp. One of the defendants said half the chemists in Manchester were doing the same thing for which he was fined.

Official Pressure.—The Local Government Board, feeling they have no alternative, have urged the Bethnal Green Board of Guardians to take steps with the view of providing an institution for the reception and treatment of the sick entirely detached from the Workhouse, which, as they point out, is required by the Metropolitan Poor Act, 1867. One of the principal objects of the Legislature was to secure the complete separation of the sick from the other classes of indoor poor. The matter was referred to a special committee of the Guardians for consideration.

"*First-Aid*" *Items.*—Mr. V. Barrington Kennett, during a recent tour in India, made arrangements for the formation of centres at Bombay and Calcutta. A small class of the native police at Bombay is already under instruction by Dr. Balfour, with the consent of Sir Frank Souter, the Chief Commissioner of Police, and they take much interest in the work. ——Surgeon-Major Godwin, who, during the last five years, has bestowed great care on the instruction of the police in rendering first-aid to the injured, has been presented by the Royal Arsenal and Dockyard (Woolwich) police with a handsome inkstand, subscribed for by the police ambulance classes whom he has instructed, in recognition of his services.——Lord Lyttleton presented, a few days since, at the Pilgrim Hall, New Kent-road, certificates to several successful candidates belonging to a local corps of the St. John Ambulance Association. These ambulance classes were established in October last, in connexion with the Southwark Help-Myself Society; eighty-one men had been enrolled members, and seventeen women had also joined the female branch of the corps.

The Sanitary Ignorance of Builders.—Dr. S. W. North, Medical Officer of Health for the city of York, in a lecture on the sanitary construction and maintenance of dwellings, referring to the necessity for good drainage, said that many builders in York did not even know the difference between agricultural drainage and sewerage, and they would say it was folly to cement the joints of drain-pipes. It was most undesirable to have drains under houses unless the pipes were constructed of cast-iron; and he pointed out objections to earthenware pipes, even if accompanied by the best workmanship.

COMMUNICATIONS have been received from—
Dr. S. Coupland, London; Dr. J. W. Langmore, London; The Registrar of the Apothecaries' Hall, London; The Secretary of the Local Government Board, London; Dr. J. Mitchell Bruce, London; Mr. J. Chatto, London: The Honorary Secretary of the Obstetrical Society, London; The Honorary Secretary of the Odontological Society, London; Mr. J. Dixon, Dorking; The Registrar-General for Scotland, Edinburgh; The Secretary of the Royal Institution, London; Dr. Yandell, New York; Dr. J. W. Moore, Dublin; Dr. E. F. Willoughby, London; The Honorary Secretary of the Ascham Society, London; Surgeon-Major Don, London; The Honorary Secretary of the Epidemiological Society, London; The Honorary Secretary of the Ophthalmological Society, London.

PERIODICALS AND NEWSPAPERS RECEIVED—
Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—Le Progrès Médical—Archives de Neurologie—Nation, May 26—Scottish Review—Morningside Mirror, January 15 and February 15—Medical Register—Indian Medical Gazette—New York Medical Journal—National Anti-Compulsory Vaccination Reporter.

BOOKS, ETC., RECEIVED—
Thrift, by G. W. Reynolds, M.D.—Clothing, by John Priestley, M.R.C.S.—Diseases of the Ovaries, by Lawson Tait, F.R.C.S.—The Symptoms and Diagnosis of Malaria in Children, by L. Emmett Holt, M.A., M.D., New York—The Contagious Diseases Acts: Speech of the Right Hon. G. Osborne Morgan, Q.C., M.P.—Localisation of Cerebral and Spinal Diseases, by J. M. Charcot—The High Alps in Winter, by Mrs. Fred Burnaby—Medical Guide to Contrexéville (Vosges), by Dr. Debout d'Estrée—Lectures on Diseases of the Nervous System, by Samuel Wilks, M.D., F.R.S.—Anatomical Researches on the Deviations of the Nasal Septum, by B. Loewenberg, M.D., Paris—Coccobacteria in Purulent Otorrhœa, by Loewenberg, Paris—Annual Reports on the Sanitary Condition of the Urban and Rural Sanitary Districts of Taunton for 1882—Les Microzymes, par A. Béchamp—Perinephric Abscesses, by John B. Roberts, M.D., of Philadelphia—Heart-Puncture and Heart-Suture, etc., by John B. Roberts, M.D., of Philadelphia—The Science of Man, by Charles Bray—Report of the Metropolitan Board of Works, 1882—Illustrated Medicine and Surgery, by George Henri Fox and Frederic B. Sturgis, vol. ii., No. 2—Student's Guide to the Examination of the Pulse, etc., by Byrom Bramwell, M.D., F.R.C.P.—Report on the Sanitary Condition of the Cambridge Improvement Act District for 1882.

APPOINTMENTS FOR THE WEEK.

June 2. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Turner, "On Russian Social Life."

4. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Mr. Henry Power, "On the Lacrimal Apparatus and Accessory Organs of the Eye."

Royal Institution, 5 p.m. General Monthly Meeting.

Odontological Society of Great Britain, 8 p.m. Casual Communications. Mr. Walter Coffin, "On a Pressure Escape Quieter for Nitrous Oxide." The adjourned discussion opened by Mr. Sewill in February on the Theory of Dental Caries.

5. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. McKendrick, "On Physiological Discovery."

Royal College of Surgeons of England, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

6. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

Hospital for Consumption and Diseases of the Chest, Brompton, 4 p.m. Dr. J. Mitchell Bruce, "On Cases of Non-Valvular Cardiac Disease."

Royal College of Surgeons of England, 4 p.m. Mr. Frederic S. Eve, "On Cysts and Cystic Tumours in General."

Obstetrical Society of London, 8 p.m. Specimens will be shown by Dr. Elder, Dr. Grailly Hewitt, Dr. Potter, and others. Dr. Herman, "On a Case of Acute Gangrene of the Vulva in an Adult." Dr. Champneys, "On the Obstetrics of the Kyphotic Pelvis."

7. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Royal Institution, 3 p.m. Mr. R. S. Poole, "On Recent Discoveries in Cyprus and Asia Minor."

Parkes Museum of Hygiene, 8 p.m. Dr. J. C. Steel, "On the Management of the Sick Room" (illustrated by models).

Ophthalmological Society, 8½ p.m. Discussion on Eye Symptoms in Diseases of the Spinal Cord, introduced by Dr. Gowers. Communications or remarks are promised by the following gentlemen:—Dr. Hughlings-Jackson, Mr. Hutchinson, Dr. Walter Edmunds (Case of Sudden Failure of Sight in Locomotor Ataxy), Mr. Marcus Gunn, Mr. Lawford (Cases of Optic Atrophy in General Paralysis of the Insane, with Microscopical Sections), Dr. Bevan Lewis (Observations on the Pupil in Spinal Disease), Dr. Sharkey (Cases of Optic Atrophy in Disseminated Sclerosis). Living Specimens at eight o'clock.

8. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Royal College of Surgeons of England, 4 p.m. Mr. Frederic S. Eve, "On Cysts and Cystic Tumours in General."

Royal Institution (Council Meeting, 8 p.m.), 9 p.m. Prof. Dewar, "On the Electric Arc and Chemical Synthesis."

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ORIGINAL LECTURES.

A SKETCH OF

THE ORIGIN AND DEVELOPMENT OF THE SCIENCE OF HYGIENE.

Being the Inaugural Lecture of the Parkes Museum, delivered on June 1, 1883.

By F. S. B. F. DE CHAUMONT, M.D., F.R.S.,
Professor of Hygiene in the Army Medical School, Netley.

To trace the history of the search of the human race after health would be almost tantamount to writing the history of the race itself. Fortunately, both for myself and my hearers, such an undertaking is neither expected nor intended. An inquiry into early wanderings and gropings after health would be doubtfully useful, even if it were likely to be interesting, for it would bear to the hygiene of the present day something of the same relation that the visions of the astrologer bear to the astronomy of Newton. Perhaps some might object that this is claiming too much for our subject, and that even its title to be treated as a science may be questioned. But much the same objection might be made to medicine, and perhaps even to other branches of knowledge which are conventionally included in the list of exact sciences. A careful examination, however, of the position which hygiene now holds will, I think, justify us in claiming that it has made such advances as may fairly entitle it to take its place among the progressive, if not absolutely exact sciences. Its literature has been said with truth to be amongst the oldest in the world, the earliest records being religious ceremonial formulas which ever involved rules directed to maintain the health and efficiency of the people.

It has been proposed to place upon these walls the names of the illustrious dead who were the pioneers and founders of our science, and the difficulty will probably lie more in the wealth than in the paucity of material, rendering selection less easy where so many are worthy. We cannot doubt that in order of chronology the first name to be honoured is that of Moses, as the author of the most complete and detailed system of hygiene in ancient times. His rules, given as part of the Divine law, are of course mixed up with religious ceremonial, both as being appropriate to the age and to the nation for whom they were intended, and also as being more likely to be followed when made in that way a part of the religion of the people. We may be pretty well sure that the code of Moses was the outcome of the wisdom and experience of long past ages. "Nemo fuit repentè turpissimus"; so also "Nemo fuit repentè hygienicus." Be that as it may, however, one cannot but admire the excellent precepts laid down for the cleansing and purifying of house and camp, for the security of pure water, for choice of good and wholesome food, for the isolation of the sick and the unclean, for the destruction of refuse, etc. Some of the rules we may smile at nowadays, as being a superfluity of precaution, and it is true that with advance of knowledge we can see that certain of them were unnecessarily sweeping in character; but still it would not be too much to say that a fairly strict adherence to the Mosaic law would have preserved mankind from many of the disastrous plagues which have afflicted it. The history of the Jews themselves illustrates this point. Of old, when a pestilence visited them, it was always represented, and probably with perfect truth, as a punishment consequent upon the breaking of the law—a statement which may be frankly accepted either by those who maintain the special intervention of a Divine Providence, or by those who regard it as a strict consequence following on antecedent cause. In later times, and especially during the middle ages, the Jews enjoyed a remarkable immunity from outbreaks of epidemic disease, an immunity which still distinguishes them in our own time. Several causes have combined to bring this about. 1st. They are generally temperate and frugal. 2nd. They still in the main follow out the Mosaic law with regard to their food, their meat being carefully examined and selected for its freedom from signs of sickness or parasites, nothing but pure (or kosher) meat being used. And 3rd. By reason of the periodical purifications which take place in their dwellings, as a part of their religious rites, which purifications extend to most minute particulars, so minute as to render it hardly possible that disease germs should lurk in any part of the dwelling. So little, however, was the real cause of their healthiness appreciated by our predecessors in the bad mediæval times, that it was held an irrefragable proof of their demoniac machinations, which led them to poison the wells which supplied the Christian community with water, their bigoted enemies not stopping to consider that it would be much against the interest of the Jews to kill or harm those with whom, by commerce, they gained their livelihood. But, indeed, our own time furnishes the exact counterpart of this cruel and unreasoning tyranny, not merely in the savage outrages perpetrated by the rude and ignorant populace of Russia, but in the disgraceful *Judenhitze* which has stained the name of civilised Prussia, and was led by—save the mark—the chaplain of the Court itself!

Let us turn now to the classic records, as they are called—that is, the writings that remain to us from the Greeks and Romans. Considering how many men must have written in those times, how general knowledge and the art of writing was, we have to lament the paucity of the literary remains that have survived. How we curse the fanatical zeal of Omar, who burned the library of Alexandria, and still more the senseless stupidity of the monks of later days, who scraped out the writing from priceless manuscripts to write missals and the like in their place! As might be expected, it is to the Father of Medicine, the great Hippocrates, that we owe the most of what we have left of Greek hygienic literature, although we must admit that even in Homer there are traces of hygienic knowledge, and that there the disinfecting powers of cleansing fires of sulphur are fully recognised. It is a remarkable fact that one of the chief books of Hippocrates relating to hygiene—viz., that on "Air, Waters, and Places,"—is one of the few about the authorship of which no doubt has ever been raised. Like the code of Moses, it was probably a summary of the already existing knowledge of the subject, supplemented and extended by the experience of the great physician himself. Another name that deserves remembrance is that of Xenophon, whose triumphant retreat was no less a hygienic than a military triumph; and there is no doubt also that Alexander the Great was a master of the art of hygiene, to have taken his force so far with so little loss. Nor ought we to omit the name of Herodicus, one of the preceptors of Hippocrates, and the first to introduce gymnastics on scientific principles, not only as a curative, but also as a preventive measure. The works of Asclepiades, who boasted that he would never be sick, and did, indeed, die of a fall, and those of Aretæus, doubtless contained reference to preventive medicine, whilst those of Galen, which extended to 300 volumes, the majority of them now lost, furnished many of the precepts on which later hygiene was based. On the other hand, the myth which makes Health, or Hygieia, the daughter of Asklepios (whom we call Æsculapius) no doubt arose from an instinctive perception of the value of medical science in preserving health as well as in the cure of disease. We may also be permitted to believe that the honours paid to his sons Machaon and Podalirius were due, at least in part, to their hygienic foresight as well as to their medical and surgical skill. The famous line of Homer shows the estimation in which the military surgeon of those days was held, and the consternation that fell on the Grecian camp when Machaon was wounded—

Ἰητρὸς γὰρ ἀνὴρ πολλῶν ἀνταξιος ἄλλων,

which is thus rendered by Pope—

"A wise physician skilled our wounds to heal,
Is more than armies to the common weal."

Would that modern commanders had an equally just and appreciative estimation of the services of the best abused but most beneficent of professions. I may mention that the above line of Homer has been selected as the motto for the medal in military surgery, founded by the liberality of the late Mr. Nathaniel Montefiore, and awarded every session at the Army Medical School, Netley. Besides the writers

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already quoted it would be unjust to omit the name of Aristotle, whose writings include important hygienic precepts. The praise of Health was also sung in an ode of Ariphron, who calls her πρεσβιστη μακαρων, eldest born of the blessed, and also by Isocrates, one of the purest of Greek writers, whose line Ἡ περι το σῶμα και την ψυχην Ὑγιεια, has been adopted as the motto of the gold medal founded at Netley in memory of Edmund Alexander Parkes. The general life of the Greeks was eminently hygienic, being mostly outdoor and under favourable conditions, persons even of high position taking part not only in active occupations, but in labours that might be even considered menial by the unthinking. The honourable place that athletic games held is a point of resemblance between the Greeks and our own countrymen that ought not to be lost sight of. Nothing is more conducive to health of body and mind than active exercise in the open air, and the splendour of Greek literature, art, and knowledge is a sufficient answer to those who are afraid lest athletics should develope the muscles of our youth to the detriment of their brains.

Among the Romans the care bestowed upon the provision of pure water—with which is connected the celebrated name of Frontinus, as *Curator Aquarum*—and their elaborate system of drainage, prove that they had correct ideas on some of the fundamental questions of hygiene. Their fondness for bathing and extensive establishments for that purpose remain monuments of the next to godliness which even at this distance of time we, with all our boasted civilisation, have been unable to emulate. The more recent discoveries in the Campagna have still further shown that they were fully aware of the conditions which alone could make that now pestilential region habitable, as a system of subsoil drainage has been revealed that is a reproach to the ignorance and supineness of modern times. Nor was Rome the only city of antiquity that was efficiently drained, for we have evidence of it at Agrigentum at least; but Rome was certainly among the oldest of which we have actual remains, the beginnings of its great cloaca going back at least five-and-twenty centuries. Another direction in which the Romans showed great knowledge of the principles of hygiene was in the management of their troops on the march and during war. The rules for encampments given by Vegetius are excellent, and to the great care shown for every detail of sanitation must be attributed the comparatively small loss which the armies of the Romans appear to have sustained. We may say, indeed, of classical times generally that there was a remarkable absence of devastating epidemics, none of those on record approaching in fatality and intensity the great plagues which swept over Europe down to quite modern times.

In taking a cursory retrospect of the Old World in its medical aspects, I should be inclined to say that on the whole its medicine was as much preventive as curative. It is probable that such a proposition would be combated; but, in spite of the treatises that have survived in curative medicine and surgery, and the long list of medicaments that we find, for instance, in the works of Galen, there was probably as much, if not more, done in the preventive line as in the simply curative. The motto of the time might have been, "Venienti occurrite morbo." Two things seem to indicate this:—1. There was a dread and impatience of disease, so much so that men were known to commit suicide to escape it; like the aged Indian who slew himself at the tomb of Achilles, for fear he should die of disease, from which he had through life been free. 2. The sentiment of pity for the weak and the oppressed appears to have been absent; there was the same tendency as we find among animals and among savages to hold a sick man of little account, as useless to the State, and the sooner got rid of the better. Hence, perhaps, the curious fact that we have no record whatsoever of public hospitals or infirmaries for the sick poor during the classical period—the earliest being as late as the reign of Justinian.

From the time of the decline and fall of the Western Empire the progress of hygiene appears to have been arrested. Some few of the treatises of the Greek and Latin physicians survived, others were known only as translated from the Arabic, etc., whilst the wholesome traditions of the hygienic life of Greece and Rome appear to have decayed, and we pass into a dark and dirty period when fanaticism usurped the place of religion, and dirt became the odour of sanctity. The Hermits of the Thebaïd became the types of all that was holy, and so framed their lives and manners as to be as much as possible the antithesis of the heathen. The heathen led an active and healthy life, the Christian fanatic led a life of mooning and inaction; the heathen washed himself and his clothing, the Christian forswore cold water and wore his clothing till it fell off his body from sheer rottenness. The picture of the thousand years which elapsed between the downfall of Rome and the final capture of Constantinople, as drawn by Michelet in his "Sorcière," is one of the most striking as well as disgusting that can be conceived. "Pas de bain," he says, "pendant mille ans!" Can we wonder at the plagues which devastated Europe? Is it astonishing that the "black death" cut off two-thirds of its inhabitants? Although the revival of learning was partly instrumental in arousing the nations to a sense of their degraded condition, yet the change was by no means great, even down to much later days, and it is humiliating to think, from the accounts of Erasmus and other visitors to our shores, that our own country remained long pre-eminent in Europe for dirt and disease. Hardly a decade passed without visitations of some foul malady until the cleansing fires of the great conflagration of London in 1666 appear to have extinguished the last vestiges of those old and dreaded enemies. It is true that even then we were far from being free from epidemic disease, and that we are still open to its ravages; but the forms of disease which have shown themselves since the Great Plague are of a type, if not entirely different, still of a kind and under circumstances which have been more understood, and the causes traced more certainly to particular conditions. But one can easily imagine how different the case of Europe might have been could the hygienic knowledge collected during and before the classic period have been carefully put together, formulated, and acted upon by the succeeding generations. As it is, whatever may have been written in the middle ages was either a mere re-echo of the classic writings, a copying of the Arabian physicians, or a farrago of nonsense into which spells and magic largely entered. When a fresh interest began to be excited, and men began slowly to perceive that the elixir of life was a vain imagining, their minds turned more to actual observation, and among other things the science of dietetics attracted much notice. The older writers had already written much on diet, and even Hippocrates had pointed out the close relation between food and work, a relation which has been fully recognised only in our own generation. Various treatises on food and regimen were written later, of which the two that might claim notice are the one entitled "Taceium Domus," or "Tables of Health," published under the name of "Elluchasem Elimithar," and written, it is said, by two Jewish physicians at the request of Charlemagne. This is a curious old book, and very "rarely met with," as remarked by Mackenzie in his "History of Health," "except in public libraries, which is no great loss, being but a mean, perplexed, and whimsical performance, and scarce worth taking notice of, but only because it happens to be "sometimes quoted by the learned." We possess a very fine copy of this book, which is a beautiful specimen of the printing of the early part of the sixteenth century, in our library at Netley. It is quaintly illustrated throughout with woodcuts of much spirit, representing every article and operation mentioned in the book which it is possible to illustrate. But the most celebrated mediæval work on the subject is undoubtedly the renowned "Regimen Sanitatis Salerni," the code of the famous University of Salerno, which is believed to have been compiled by John of Milan in 1099. So much was it esteemed that it was called the "Flower of Physic": "Hoc opus optatur, quod flos medicinæ vocatur." Haller enumerates twenty editions, and it was translated into various languages—among others into English by Paynell (1579 and 1609), and by Dr. P. Holland, whose version is the best known. It was also the subject of numerous and voluminous commentaries, such as that by Arnoldus de Villa Nova, none of which, however, added much that was valuable to the original. We may well believe that this Code of Salerno is a summing-up of the hygienic knowledge and experience of the time, most of it probably borrowed from the ancient writers, and suited to the habits of the age. Some of it is no doubt fantastic, but much of it is sound sense. Some of the precepts might well fit many towns of the present day:—

"Lucidus ac mundus sit vitæ habitabilis aër,
Infectus neque sit, nec oleus fœtore cloacæ."

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Dr. Holland's translation is not very faithful; some may render it this way—

"Dwell in air both clear and pure,
Free from taint or smell of sewer!"

I do not know, however, if our friends of the Blue Ribbon persuasion would quite approve of the next precept—

"Si nocturne tibi nocest potatio vini,
Hoc tu manè bibus iterum, et fuerit medicina."

Which I take the liberty of rendering thus—

"If overnight your drink has hit you,
Take a hair of the dog that bit you!"

Talking of dogs, I am sure all would rejoice if the receipt for the cure of a mad dog's bite were only efficacious, as it is certainly simple—

"Appositus perhibent morsus curare caninos
Si tritse cum mele priùs fuerint et aceto."

Which Dr. Holland translates thus—

"A mad dog's byting may recured be,
With onyans, hony, vinegar, these three."

But we must not dwell any longer on this quaint book, although it was long the basis on which works on hygiene were founded. A list of writers who followed, more or less obscure, is given by Mackenzie in his "History of Health," and by Sir John Sinclair in his "Health and Longevity." Indeed, it may be said that no writings on science during this dark period were worth notice, except those attributed to our own Roger Bacon.

One of the first really practical writers on the subject of hygiene was the well-known Ludovico Cornaro, a noble Venetian, who, after a youth of intemperance and excess, reformed his ways and kept so strict a watch over his diet and habits that he prolonged his life to the age of one hundred years, dying in April, 1566. Twelve ounces of solid food and fourteen ounces of liquid—in this case wine—were all he allowed himself, but then he led a life that was less life than mere vegetation, for he was careful to avoid heat, cold, fatigue, grief, watchings, and every other excess that could hurt his health. "How," says Sir John Sinclair, "could the business of the world be carried on if every man, like Cornaro, were to begin to follow such a system at the fortieth year of his age?" Yet the value of Cornaro's treatise was very great, for it was an indisputable proof that life might be maintained, and even health, upon much smaller amounts of food than were often taken, and further, that temperance and moderation are the best resources against both disease and accident. He recounts how he had been upset in a carriage, and been in consequence severely bruised and had an arm and leg dislocated. The doctors wished to bleed and purge him, but he, confident in his temperate habits, desired merely that his limbs should be set and he himself be let alone, after which he made a rapid and complete recovery. The advanced age to which he lived, and also the great ages of Pope Paul Farnese, Cardinal Bembo, and the Doges Lando and Donato, whom he cites, all of whom were men of regular and temperate lives, contrast remarkably with the short lives of the average of men of the time—old men being very rare, and even those who had passed the half-century uncommon.

Various writers followed Cornaro, few of them of much note, save the famous Jerome Cardan, one of the most learned of the physicians of the Renaissance, but somewhat whimsical in his hygienic views. He opposed the views of Galen, and in particular objected to exercise that caused the smallest amount of fatigue or perspiration or accelerated the respiration. He considers it to be a proof that Galen was wrong, seeing that he died at the age of seventy-seven, which, Cardan says, cannot be properly considered old age. Cardan, however, died himself a youth of seventy-five! He adhered to the principles of Cornaro in diet, and showed that he understood to some extent hereditary influence, as he considered that one of the chances of living to a great age was to be descended from a long-lived family.

Of the other writers of the period I will only refer to Thomas Philologus of Ravenna, on account of his strong protest against intramural interment, thus anticipating by some three centuries the happily fruitful labours of our distinguished countryman Edwin Chadwick.

The next writer of eminence was the celebrated Sanctorius, native of Istria and a professor of Padua. He wrote a work on health, entitled "Medicina Statica," and he also began the era of exact observation by his well-known experiments with the weighing-chair, by which he endeavoured to show the weight of the insensible perspiration. His experiments were very crude and inaccurate; but they were in the right direction, and his work may be considered as marking an epoch in the advance of scientific observation. The aphorisms in his book are couched in quaint and even fantastic language, but many of them are sound when stripped of the vagueness and mannerism of the time. He is particularly severe upon a certain "Staticomastix," who had criticised him, and had asserted that a plentiful perspiration did not take away from the body one ounce of weight.

The writers from the time of Sanctorius down to the end of the seventeenth century call for little attention, as they seem to have added but little to the knowledge of the time. The remarkable physical discoveries of the close of that century and throughout the whole of the next certainly paved the way for more exact observation in medicine, both in its purely medical and its etiological aspects. Accordingly, we have the observations of Boerhaave and Haller, and a host of other names of distinction, all representatives of progressive medicine, either directly or indirectly connected with the advance of hygiene. Sketches of the various writings of this and preceding periods are given by Mackenzie in his "History of Health," by Sir John Sinclair, and by Hallé in his long article on Hygiene in the "Encyclopédie Méthodique." And I may here pause for a little to consider the name of the science which we have adopted. It has been objected to that we have taken a foreign word when an English one would do, and that there is no reason why the plain word "health" should not answer our purpose. To this we may reply that the foreign word better defines the science or art, and is less likely to lead to confusion; that the word is now adopted and used in every country of the world, and is therefore common property; and that by its use we accomplish the same end as when we apply a scientific name to a disease, or to a plant, an animal, or a chemical compound. Each of these, under its scientific name, is easily recognised and accurately described. The word "hygiene" itself is derived from the Greek Ὑγιάινω, "I am in good health," and was apparently first definitely used by Ambrose Paré, according to Littré. Its use in this country was not general until quite recent years, the expression "medical police" being more usually employed. In Germany the kindred expression "Sanitäts-Polizei" was adopted, as well as the more truly Teutonic word "Gesundheitspflege"; but now the word "hygiene" (formerly written "hygieine") is coming into regular use. There is therefore some advantage in having a common title for our science, even although it be of foreign origin. But, after all, a good half of our tongue is of foreign origin, and as it is one of the most assimilative of all the languages of the earth, we need not reject a word that has much to recommend it, on mere grounds of sentimental nationalism.

It is a little difficult in a necessarily restricted lecture to convey any exact idea of the way in which modern hygiene became formulated into so much of a science as it can at present lay claim to; but I will attempt to make a brief sketch of its more salient points. In the eighteenth century there were several important questions inquired into, and to a large extent solved, of which the chief were—(1) the influence of air as a factor in the spread of disease; (2) the true cause and prevention of scurvy; and (3) the prophylaxis of small-pox. Taking the last first, we may say that the introduction of inoculation was a most important step, even although we must admit that it introduced a greater danger to the community at large than could be compensated for by the protection to individuals. But it was the first step on the road which led at the close of the century to vaccination, one of the most signal triumphs of preventive medicine, and in our own time to the magnificent results obtained by the renowned Pasteur, results which seem pregnant with so much hope for the future of our race.

The inquiry into the causes of scurvy was another step in advance, of the most signal importance. No one in the present day can form any idea of the ravages that terrible disease produced. All long voyages were imperilled by it, whilst the very existence of England depended upon her fleet, which had frequently to return to port absolutely crippled with scurvy, in some cases as many as ten thousand men being landed from the Channel fleet helpless. Although

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so far back as the seventeenth century the efficacy of fruits and fresh vegetables as preventives had been surmised, if not actually noted, it is really to the renowned Captain Cook that the credit is mainly due of having established this important fact. That eminent navigator never lost an opportunity of taking on board fruits and fresh vegetables whenever he could, and the result was that he was able to bring home from a lengthened voyage crews in almost perfect health and condition, a thing never before known. It took many years, however, to impress this fact sufficiently upon the authorities, and it was not until 1796 that the medical officers of the Navy (among whom was the renowned Sir Gilbert Blane) obtained the regulation ordering lime-juice to be supplied to our seamen. The effect was magical; scurvy lost its terrors, and it may be that the supremacy of England at sea during the Napoleonic wars was in part owing to the improved condition of her seamen during that gigantic struggle. We have still a monument of the extent of the disease in the immense naval hospital of Haslar, the largest in this country, which was built of such dimensions mainly to admit the extraordinary number of scurvy patients which were being continually landed from our fleets. We have not yet got entirely rid of this enemy, but I think we know now how to combat it, in spite of heretical opinions which find expression from time to time.

The recognition of foul air as a factor in disease was certainly begun in the last century, when the brilliant discoveries in pneumatic chemistry made by Lavoisier, Cavendish, Priestley, Black, and Rutherford, threw such a flood of light upon a previously obscure subject, and opened the whole immense vista of the boundless science of modern chemistry. It was only then that the physiology of respiration could be even partially understood, and the changes recognised which take place in the respired air from the lungs of man. The great disaster of the "black hole" of Calcutta, and the terrible effects of the gaol fever, investigated by Howard and others, pointed to foul air as a main factor in the propagation of disease and death; and this was further corroborated by the observations made by military surgeons, that outbreaks of typhus (or putrid fever) were most rapidly arrested when troops were encamped and scattered widely over the surface of the ground. It was reserved for the later researches of Neil Arnott and other hygienic observers of the present century to prove the still more important fact that foul air is the main cause of the still more general and fatal class of destructive lung diseases, which in this and in other lands cut off so many of the brightest and the best.

Another important discovery of the last century was the determination of the cause of the well-known lead colic by Sir George Baker. This opened up the large field of metallic poisoning, which has received so much elucidation and proved of such importance in reference to the water-supply of large communities.

In the present century we have to point to the establishment of the fact of the water carriage of disease, with which the name of Snow is so honourably associated, the differentiation of continued fevers by Stewart and Jenner, and their connexion with the poison of infected excreta by the labours of Budd and other eminent men. To those we must add the elaborate investigations into the modes of propagation of cholera, dysentery, and other tropical diseases, and the means by which scarlet fever, diphtheria, etc., are carried from place to place by various channels of communication. It would be unadvisable, even if it were possible, to enter into details on these points, but there is one branch of the subject on which we must dwell for a little. No inquiry can assume a scientific form unless it has a numerical basis to work upon, and therefore it behoves us to note the starting-point of such a basis in hygiene, if we can find it. This we do find in the collection of statistics, a beginning of which was made a long time ago in the bills of mortality kept in this country. We know how imperfect those were, and how even the population of this country was not correctly known until within the lifetime of men still living. But still beginnings were made, and the question taken up more and more enthusiastically by enlightened men, until at last the Government Statistical Department was formed, and that remarkable series of reports begun which will immortalise the name of William Farr. From that time the future of hygiene was assured, for there was sound ground to work on; and if we add to that the valuable reports on the health of towns published by the Commission of which the present Duke of Buccleuch was president, we shall have stated some of the most important foundations of modern sanitary science. Those reports disclosed a state of things little dreamt of, and the statistical returns compiled by Dr. Farr showed how much the life and health of the nation were dependent upon the conditions in which its individual members were placed. The establishment of the General Board of Health, under Mr. Chadwick, was one of the valuable outcomes of this remarkable movement. Although the original Board of Health was brought to an end in 1854, yet its work has been continued and expanded under Mr. Simon, his colleagues and successors, in spite of many difficulties and obstacles.

The part which the public services, such as the Army and Navy, played in the progress of hygiene was very important, as might indeed be expected; for under no other circumstances could bodies of men be so well observed, and the effects of surroundings and conditions upon health noted. Accordingly we have a long roll of names connected with those services which must ever be remembered with honour: in the Navy we have such men as Lind, Blane, Trotter, Burnett, etc.; and in the Army, Pringle, one of the most philosophical physicians who ever lived, Brocklesby, Fergusson, McGrigor, and a host of others. The labours of the late Sir Alexander Tulloch, Deputy Inspector-General Marshall, and Assistant-Surgeon (now Surgeon-General) Balfour, in collecting and arranging the Army statistics, were of the highest value, and it is not too much to say that the publication of the first Army Medical Statistical Report marked an epoch in hygiene, especially in that part that deals with climatology. It exposed the fallacy of the common notions of acclimatisation, of the advantages of a seasoning fever, and similar ideas. It showed also that it was possible for men of temperate habits and in hygienic conditions to live and thrive in the tropics, whilst the death and sickness that were unfortunately so common were due much more to the ignorance and folly of man than the influence of climate in any form. The truth of that is to be seen now, when life in the West Indies is actually healthier, especially for young soldiers, than service at home; whereas sixty years ago a tour of service there was looked upon as almost a sentence of death. It is true we have still yellow fever to combat, but we know now much better how to deal with it when it does come, and how to obviate its invasion when it is threatened. The army medical statistics are continued now yearly, but it is a matter of regret that they have been allowed to be published in so abstract and undetailed a shape as to deprive them of much of their utility. It is to be hoped that this mistake may be remedied, and that the saving of a trifling sum, which is said to be the reason, may be recognised as a truly false economy. But perhaps the most remarkable contribution the Army has made to sanitation has been by the evidence given to the Royal Commission of 1857, which met after the Crimean war to investigate the causes of the sickness and mortality of our troops. The results of that Commission are well known, and from its publication may be dated the reforms which have been productive of much advantage both to our own and foreign armies, and to the civil population as well. The paramount influence of foul air in the production of lung disease was proved to demonstration, and the art of ventilation was placed upon a secure foundation. The Barrack Hospital Committee, of which Dr. Sutherland and Captain Douglas Galton were the active members, laid down a series of regulations for the construction of barracks and hospitals, which have been followed with the utmost benefit both at home and abroad. Following this came the Indian Commission, which did for that vast dependency what the Home Commission had done for the rest of the empire. The mortality in India was found to be inordinate, and it was equally clearly traced to insanitary habits and surroundings. To recognise an evil and its cause is half-way to curing it; and after a lapse of a quarter of a century we can point, not certainly to perfection, but to such an improvement as might fairly at one time have been looked upon as chimerical. The death-rate of the army at home is only two-fifths of what it was before the Crimean war; the death-rate in India is only one-third, and the death-rate in the West Indies one-tenth.

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In civil life it has recently been shown that the improvements of later times have resulted in a diminution of 2 per 1000 in the general death-rate, and with the knowledge we now have of the causes of disease we may be sure that a general death-rate of not more than 15 per 1000 may be confidently looked for. We have not yet got rid of the fatal endemics in our midst, but they are in some directions diminishing, and we have good hope for the future; whilst it seems probable that neither cholera nor any other introduced pestilence could establish a foothold in our land. The remarkable immunity of soldiers and prisoners in the last epidemic shows what can be done when people can be compelled to lead fairly hygienic lives.

I might extend this lecture by reference to the various theories of disease propagation, but time will not permit of it, even if it were otherwise desirable. I may, however, say that no one theory yet promulgated completely satisfies the requirements of the case, and that there may be some basis of truth even in the most conflicting views. So much has been done hitherto, and so much activity is being shown in investigation, that we cannot fail ere long to find the key to many of the mysteries that now baffle and perplex us. It is quite clear that it is only by a knowledge of the causes of disease that hygiene can be advanced, and that it can never be in any way perfected without a complete system of etiology; and we are at present in this position, that practical hygiene has to some extent outstripped the knowledge of disease causes. We look, therefore, anxiously towards the pathological investigations of the time, and we deeply deplore the well-meaning but misguided zeal which is at present placing such grave obstacles in the way of the only means by which true science can advance, namely, direct experiment.

Although there are many names I might refer to as great writers on hygiene, abroad as well as at home, there is one which we cannot omit in a lecture like this, more especially as it is the first delivered in this Museum which has been founded to his memory. Edmund Alexander Parkes did more than any other one man in this or any age to make hygiene a positive fact, a practical science, based upon not only philosophical conceptions, but actual experiment. Starting in life as an army medical officer, he was able to produce, during his short service in India and Burmah, works upon dysentery and cholera, which will always be of the greatest value. Retiring into civil life he became eminent as a physician and teacher, and in 1855 he undertook the organisation of the hospital at Renkioi, in the Dardanelles, which was a perfect model of successful hygienic administration. Struggling with distressing and dangerous disease, he continued to lead a life of intellectual activity not often accomplished by the most robust; and when, in 1860, the Army Medical School was established by Lord Herbert of Lea, Sir James Clark had no hesitation in advising that Dr. Parkes should be secured, if possible, as the Professor of Hygiene. How excellent the foresight of that eminent physician was we all know, for Dr. Parkes was not only the first professor of the science in this country in point of time, but also the first in every sense of the word. The publication of his well-known "Manual of Practical Hygiene" gave us for the first time a work on the subject which was not merely a string of opinions and surmises, but at every point brought opinion to the test of figure and experiment, where it was possible, and thus laid the foundation for a real science in the future. Similarly with his teaching he pressed upon the Government to establish practical laboratories for his pupils, where they could do for themselves as much of the experimental work as time and opportunity allowed; and he impressed upon those who studied under him the necessity of testing everything by actual investigation, and bringing all statements to the proof of figures before accepting them as true. There was never, probably, a man of calmer and more judicial mind, a man more rigidly critical of his own work, or more kindly disposed to allow every credit to the work of others. Having known him personally for many years, during thirteen of which I was his assistant and colleague, I can bear confident testimony to the exceeding beauty of his character, in which "sweetness and light" were never more truly displayed, and the scrupulous accuracy and care with which every investigation of his was carried out. The science of hygiene could have no purer and better founder, and its votaries no brighter and more spotless example.

ORIGINAL COMMUNICATIONS.

PRACTICAL NOTES ON THE ORDINARY DISEASES OF INDIA,

ESPECIALLY THOSE PREVALENT IN BENGAL.

By NORMAN CHEVERS, C.I.E., M.D.

(*Continued from page 607.*)

TREATMENT OF THE MALARIOUS REMITTENT OF THE PLAINS.

Only a short time before I went to India the antiphlogistic system, of which bleeding and mercury were the chief arms, was the "sheet anchor" in the treatment of Remittent Fever. I know men who are still healthy who were bled and salivated for Malarious Fever, but who probably would have been much healthier, and who would doubtless have suffered less at the hands of dentists, if their cure had been effected by quinine. I, ill directed by my books of reference, treated fever with Calomel and VS. in my first voyage to India, in medical charge of recruits—in 1848. Long and interesting histories of this heroic and spoliative treatment in India have been written by able authors.(a) It prevailed for many years; writers of authority who zealously advocated it are now living. It vitiates the practical utility of the otherwise still invaluable works of men who used to be the leaders of medical opinion in the East—Twining, James Johnson, Kenneth Mackinnon, and Ranald Martin. A general idea of the prevailing opinion, to deny which was ignorance and heresy, may be formed by reading the following passage from the chapter on Remittent Fever in a sensible book on the Principal Diseases of India, published in 1843, by Dr. W. L. Macgregor:—"If the lancet and calomel fail in arresting the progress of the disease, the result is generally fatal." To many officers of experience now practising in India this mode of treating Malarious Fevers must appear irrational and unjustifiable, but it was perfectly in accordance with the opinions acted upon by the profession at home. It is almost needless to say that, until VS. went out in India, it was practised everywhere in nearly all inflammatory diseases and fevers. Even at the great London hospitals, people used to visit the surgery to be bled by the dressers every "Spring and Fall," and whenever their own sensations or the opinion of their friends that they were too "full-blooded" appeared to indicate this measure; while the cuppers exercised their own discretion in performing the barbarous operation of CC. upon all who demanded it.(b)

Further, Indian physicians employed bleeding in fevers upon a *rationale*, which, however incorrect, was at least perfectly clear and definite. They held that it was needful to prevent and to subdue "*Ardency*," and to avert and to relieve *abdominal congestion*. Then, mercury would not act upon the system until the force of the circulation had been reduced by blood-letting, and blisters could not be employed if not preceded by active depletion.

The majority of our early authorities on the treatment of Indian fevers were "Company's" medical officers whose practice lay chiefly among European troops. Their patients were generally over-fed and lazy, drank spirits freely, and went about recklessly in the sun; consequently, "ardency" was a marked feature in the fevers of the hot weather. It is probable that, in Twining's time, the type of intermittents and remittents displayed more ardency than it does at present. Very possibly these "Ardent Fevers" then demanded bleeding and bore it well, as London Typhus did sixty years ago. The worst complications of these fevers, cerebral and abdominal congestions, were then considered, perhaps justly, to be essentially inflammatory. I do not believe that, in my time, they were inflammatory at all; if they were, quinine commanded them. As I have already remarked, there is not much of this extreme acute visceral congestion in the Bengal Remittents of the present day, except

(a) By Edward Hare, "Malarious Fever," *Indian Annals of Medical Science*, No. xviii., page 1; and by Joseph Ewart, *ibid.*, No. xiv., page 1, "A Review of the Treatment of Tropical Diseases—Malarious Fever."

(b) I had just written this when a valued contemporary, who studied in Edinburgh, looked in. I read the passage to him. "Yes," he said; "and we used to cup one another. I have still the marks on my arm; Mac—— cupped me, and I cupped him."

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where the use of quinine and other treatment has been neglected until the patient is moribund or nearly so. Hare is certainly right in saying that quinine prevents congestion in these fevers. Where we had opportunity of treating our cases early in Bengal, we were so little apprehensive of serious internal complications that an able contemporary of my own speaks of "that bugbear, abdominal congestion." But there cannot be a doubt that, whether it depended upon the type of the disease or the non-administration of quinine, grave abdominal congestion was of frequent occurrence in Twining's day; and, even in my time, severe splenic lesion was characteristic of the first attack of Mutlah and Peshawar Fever. If the type of extreme ardency should ever again characterise the fever of Europeans in the hot weather, it is not impossible that it would demand loss of blood; but, if it could fall to my lot to encounter the outbreak of such a fever, I would certainly begin with the use of quinine, guarded by ipecacuanha, in the belief and full hope that I should succeed in quelling the ardency, without the use of even a single leech.

In 1848, Kenneth Mackinnon regarded mercury in fevers "as a specific to check the consequence of inflammation." It may be asked, How came it that, for many years, highly educated physicians, observant and deep-reasoning men, went on salivating the unhappy victims of Remittent Fever? The answer is plain. Mercury is quite as potent as quinine is in "curing" a paludal fever which immediately threatens life.

Kenneth Mackinnon saw this truth darkly. He says (p. 227), "I believe, though I am not quite sure, that it is a febrifuge." Edward Hare, who overthrew the practice of salivation in Indian fevers, perceived it clearly. He taught(c) that mercury is an antidote in Malarious Fevers. But how evil an antidote! How contrary was its use to the wise injunction of Henry Marshall Hughes—"*Combat disease by those means which are least expensive to the patient's constitution.*" Treated by calomel and bleeding (calomel required bleeding because, until the ardency of fever was subdued by VS., mercury would not salivate), the victim of an Indian Paludal Remittent escaped with bare life and a ruined constitution.(d)

We object to the mercurial treatment of Indian Fevers as we do to variolous inoculation, not because it is inefficient, but because we have, in quinine as in vaccination, a remedy which is not only valid, but perfectly safe.

The fight of advancing science and good sense against the mercurial treatment of Indian Fevers was prolonged and fierce. There now lies before me a very rare little book which relates an early and most singular episode in this contest. It is known as "Halliday's Memorial." Dr. A. Halliday, a Presidency Surgeon in Calcutta of fifteen years' Indian service, a clever man, but rather ardent controversialist, was, in the year 1821, suspended by Government from employment and from the Service for arguing rather too warmly to the Medical Board, one of whose members was a strong believer in calomel, that this drug was used with dangerous recklessness at the General Hospital. Four cases which he cited will satisfy the reader of the present day. V. got 686 grains of calomel for an attack of fever. J. got 864 grains for the same disease. For dysentery, L. got 695 grains, and B. 974. It need scarcely be added that these patients died.(e) I am not an advocate for the utter abandonment of the use of calomel in deadly Indian Remittent, but I used it only in cases where life was evidently threatened.

It is not so with bleeding. For many years before I left India VS. had been practically abandoned. During the first six years of my Indian practice I always carried a case of lancets. I never used these but twice, and then in vain—once in a case of apoplexy, on another occasion in one of injury to the head. In old times my hospital used to possess a large stoppered bottle filled with bleeding-lancets. About ten years ago, having a troublesome boil which I carefully concealed from my colleagues, who were addicted to the use of the scalpel, I sent to the hospital for a bleeding-lancet, and could not get one! I was more fortunate at a private druggist's. Still, I did not consider it needful to send in an emergent indent, upon the Apothecary-General, for bleeding-lancets. I have discussed the question of bleeding in Indian Fevers with senior medical brethren who had practised VS. and undergone it in their own persons. The arguments which recommended it were clear. It abated "ardency"; it cooled the skin and lowered the pulse; it enabled mercury to salivate; it relieved headache, splenic distension, and the pain of pleurisy and hepatitis; it freed the breathing in pneumonia. Thus it satisfied the physician and the patient and also the bystanders, who, in India, have always been energetic in demanding that "decisive measures shall be promptly adopted." A distinct impression upon the disease, apparent to everyone, was produced: thus every bleeding was regarded by all as a triumph of science over disease,—quite irrespective of the final result. I know the record of a case illustrative of the use of VS. by an Indian physician, whose memory I esteem and honour so much that I will not name him, which, but for its sadness, might now cause a smile as a piece of grim humour. The narrator met a brother officer at a consultation in Calcutta. As they were separating, the colleague spoke of a pain in the right loin, which had troubled him for a day or two. This, on examination, was found to be due to inflammation of the posterior part of the right lobe of the liver. The narrator adds, "*Although* he was bled three times, he had a difficult recovery"! (f)

When I first became Secretary to the Calcutta Medical Board, in 1855, fever was very prevalent in Peshawar, and was generally attended with splenic enlargement. It was the fashion to apply multitudes of leeches over Peshawar spleens. Leeches were so costly that, in one instance, the Board felt justified in questioning the expenditure. The very able surgeon declared that he had prescribed, and even personally supervised, the application of every leech. A member of the Board, who was a good arithmetician, went closely into the question, and gave us several very striking calculations, one of which showed that the bulk of leeches reported to have been consumed, in one month, in one regimental hospital, would in the aggregate fill an ordinary coffin! Nearly twenty years after this happened, I was told by my house-physician, at my morning visit, that the next patient, just admitted, complained of hepatic pain. Without speaking to the man, I uncovered his abdomen, and then ventured confidently upon the questions—"In what regiment did you serve at Peshawar twenty years ago, and when did you take your discharge?" The man appeared utterly astonished, and exclaimed—"Did you ever see me before? How came you to know that?" "No," I replied; "you are quite a stranger to me, but we doctors know many things 'not dreamt of in your philosophy.'" The explanation is easy. This was a middle-aged man, with some traces of soldierly bearing, much anæmiated. A single glance at the left hypochondrium showed an enormous constellation of leech-bites; and my knowledge of Indian medical practice, during the previous quarter of a century, told me that it was only in the regimental hospitals at Peshawar that leeches had been applied over big spleens in such profusion within that term.

This heroic mode of treating enlarged spleen did not, however, at all originate with Queen's surgeons at Peshawar. After recommending VS. guardedly in inflammatory remittent, Mackinnon (*op. cit.*, page 239) says: "Leeches are always advisable, even when the complications are moderate in degree, and particularly when the exacerbations and remissions are well marked, ... for this shows us more than anything that we have to deal with a marsh fever, the issue of which is always more or less uncertain." As the MS. of this chapter is lying on my table, a brother officer tells me that, having been attacked with malarious fever in the jungly Soonderbuns, on his way to Chittagong, and being taken into that station insensible, the surgeon bled, leeched, and blistered him within the first four-and-twenty hours. Placing his hand over his left hypochondriac region, he added, "I have still scars of thirty-eight leech-bites here." The

(c) "Malarious Fever," *Indian Annals of Medical Science*, No. xviii., 1865.

(d) I am quite willing to admit that we, of the present day, who are anti-mercurialists, have resigned a power which the greatest of our predecessors exercised with large success. I say "the greatest," because I have not the slightest doubt that men of the highest discrimination and judgment, like Abraham Colles, possessed a most valuable remedial agent in mercury. A few years ago a careful perusal of Colles's work on Syphilis and the Use of Mercury convinced me that, *in his hands*, the drug was both safe and efficient. I happened to be case-taking in a ward at Guy's Hospital when Bransby Cooper and Colles came alone to a woman in whom nearly everything had been tried in vain for the cure of an ununited fracture of the humerus. "If I had that case," said the Dublin surgeon, "I would put up the arm in splints and touch her gums." This was done, and the bone reunited as if it had been recently broken.

(e) Pp. 174-75.

(f) The italics are mine.—N. C.

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types of fever were such at Chittagong, when I joined several years later (in 1849), as certainly would not have admitted of such heroic depletion. In his long and very distinguished subsequent Indian career, Dr. ——, although strong and active, always appeared anæmic. After many years' retirement, he is florid and enjoys a good measure of health.

I have often thought that some laborious medical bookworm might do well to compile a list of *maxima* and *minima*, showing, for example, among a thousand other extreme facts, the largest number of leeches applied, the largest quantity of blood drawn by VS., and the greatest weight of calomel swallowed, in the cases of patients *who survived*. The following example(g) would almost be worthy of a place in such a compilation, as showing how much depletion was formerly employed and recovered from (did the constitution of this patient ever fully recover?) in India. The italics are mine.

A young European gentleman, aged twenty, was attacked with Remittent Fever. He was found to be labouring "under a rather acute paroxysm; the tongue being much furred, the pulse rather quick and full, with pain somewhat severe in the temples and back of the head. *A considerable quantity of leeches were applied to the temples*, and calomel and antimony with purgatives were administered. In the morning there was apyrexia or decided remission, but secretions were deficient, and the tongue still coated in the centre. *A similar treatment was pursued*, the paroxysms returning about noon and continuing till morning, increasing in severity. The pain of the occiput was particularly marked. It would be uninteresting to detail the daily treatment; suffice it to say, *it was antiphlogistic. He was bled to syncope, had leeches repeated*, a scruple dose of calomel, with smaller and repeated doses at intervals, followed in four hours by compound infusion of senna and sulphate of magnesia. On the fifth day he was seized with a fit of epilepsy." His medical attendant attributed this mainly to a fall from his horse six weeks previously, when he pitched on the back of his head, and suffered from moderate symptoms of concussion. "During and subsequently to the fit, the pupils were enormously dilated" [From head mischief, or from loss of blood?—N. C.], "the febrile excitement increased, and the pain of the occipital region was severe. *Fifty leeches were again applied*" [the word "again" appears to signify that fifty were applied on each of the two previous occasions]; "a large blister to the back of the neck, and a scruple dose of calomel followed by compound powder of jalap and scammony. Three hours afterwards, and before the remedies had been administered, another epileptic paroxysm occurred, the convulsions of the extremities being severe, and the patient sensible during the fit. He was seen immediately on its subsidence. *He was again bled freely from the arm*; the last mentioned" [blister and drugs] "which had arrived were simultaneously administered. The pain of the head greatly subsided." The bowels acted freely, the tongue became clean, "but the pulse was still somewhat sharp" [Shall we say hæmorrhagic?]. The skin acted freely. He was kept under the action of pills composed of a quarter of a grain of tartarised antimony, six grains of calomel, and six of compound extract of colocynth, taken every two hours. "From this period the more alarming features of the disorder ceased to manifest themselves. His mouth became slightly affected by the calomel; two or three slight paroxysms of fever occurred, but it assumed quite an intermittent form, which yielded to exhibition of sulphate of quinine every four hours, and attention to the bowels. He has now recovered."

We have seen that, when Kenneth Mackinnon wrote in 1848, he admitted the use of bleeding and calomel in Indian Fevers, but the reader who will peruse his Fourth Chapter will perceive that his admirably careful and thoughtful mind had begun, at least, to see that a great change of opinion and practice, the light of which had already dawned upon him, was at hand; he consequently surrounds his heroic spoliative treatment with injunctions of moderation and caution in its employment. Everywhere at that time VS. was beginning to go out of use, and Quinine was gaining accessions of reputation. Long previous to this Mackinnon had reservedly acknowledged the potency of Quinine in Indian Fever. In 1838 he wrote—"I cannot say that I have ever seen the sulphate of quinine of much use given with a hot skin, but in the marsh fever, when a paroxysm is ended, it is our sheet anchor, and he who waits for a clean tongue on which to give it is, in my opinion, risking the life of his patient."(h) In 1847, the year preceding that in which I went to India, Mr. Edward Hare came boldly forward with that which was considered at the time as a grand heresy, but which was recognised by many as a great truth, and which, with considerable modification, was soon adopted as our established practice. Citing the authority of American physicians, Mr. Hare boldly declared that "Quinine may be given in the largest doses, whether there are head symptoms, delirium, coma, or pain in the liver. Whether it be in the hot stage or the cold, Quinine is not only safe in all forms of Malarious Fever, but its certain cure. And in cases where there is danger to life, the earlier and the larger the doses of Quinine which can be given to the patient, the better." Mackinnon received this bold opinion with great reserve. I italicise the words which convey the main objection which he and many others made to the new idea. "*In fever we have been watching, and in remittent with the feeling that life or death hung upon it, for the time when we could begin quinine.* Now we are informed that waiting is in every point of view loss of time; that quinine may be given safely in the very climax of fever; that it will prevent the congestions and complications which end in death." This waiting for remission and complete intermission was the great error of old practice over which Hare triumphed. And Mackinnon's last review of the treatment of Remittent, published in 1855,(i) shows that his large and candid mind had then almost adopted the truth of the new doctrine in its entirety, although he had not abandoned the opinion that, especially in the Continued Fevers, the employment of "mild depletion" is "useful and advisable."(k) So strongly, however, was the deadly error of waiting for full remission rooted in India that, up to the day of my retirement, six years ago, it was occasionally cast in my face. I would inquire, on being called to consult upon a case of Remittent of grave type, "How long has he been ill?" "Eight days." "In what doses are you giving quinine." "He has not had any. I have endeavoured, but in vain, to obtain sufficiently marked remission." "Yes," I would add, "he will probably die in a few hours, despite of any treatment which you can now adopt." Everyone, I think, now agrees that (except where death is threatened in the cold stage, or where the hot stage is so violent as to assume the sunstroke character) it is better not to give quinine in Intermittent until the very first commencement of the sweating stage. In a common Intermittent a large dose of quinine, taken a little before or in the hot stage, generally gives a headache which is so severe as to be worse than the disease itself. I have repeatedly watched the fierce conflict between the fever and a heroic dose of its antidote. Its intensity is such as to recall Crashaw's lines—

> "Go, now, and with some daring drug
> Bait thy disease; and, whilst they tug,
> Thou, to maintain their precious strife,
> Spend the dear treasures of thy life."

Consequently, although I fully agreed with Hare in his main principle, I did not give quinine *in large doses* from the first in all stages of Malarious Remittent. In a severe case I preferred to give two grains of quinine every hour throughout the height of the disease, guarding each dose with a sixth or an eighth of a grain of ipecacuanha when there was delirium or coma. This practice was attended with so much success that I pursued it undoubtingly until I left India.

My rather incautious use of the expression that Paludal Remittent is "curable by quinine," in the chapter on True Enteric Fever, page 364, of September 27, 1879, has brought

(g) Abridged from the *Indian Journal of Medical Science*, New Series, vol. ii. for 1857, page 276.

(h) Page 207.

(i) *Indian Annals*, No. v., page 154.

(k) At first, people were severe upon Hare for saying that, from James Johnson's time until 1847, the only advice had been to bleed and give calomel purgatives, but to be very careful not to give quinine too soon. This statement was shown by my friend, Dr. John Macpherson ("Bengal Dysentery, etc., with a Notice of the Use of Quinine in Intermittent Fever," 1850), to have been rather too sweeping. Although Hare gave due credit to others, Dr. Macpherson's history of the introduction into practice of the free use of quinine, early in the progress of Remittent Fever, is of great value. Hare's way had been paved by Maillot in Africa, Hille in Surinam, Byrne and other American physicians, Geddes, Wright, Cadenhead, and Eyre in Madras, Morehead in Bombay, and by Corbyn, Twining, J. Murray, John Macpherson, and Ranald Martin in the Bengal Presidency. Nevertheless, although Hare was not altogether a discoverer, he was a great reformer, and there can be no question that, almost from the day on which he placed his views before the profession, in November, 1847, his energetic advocacy of quinine put an end to the evil reign of bleeding and calomel in Bengal.

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upon me the inquiry, "Have you always been able to cut short a case of severe Remittent by Quinine?" This question was, I think, sufficiently dealt with previously in my definition of the QUININE TEST of Indian fevers—page 131, of August 2, 1879—in which I say that neglected and moribund cases are often found to be beyond the power of quinine. My mind travels over a multitude of native cases who were admitted to hospital in an absolutely hopeless or positively dying state—cases brought, with great fatigue and exposure and want of supporting diet, from remote country places, after the disease had gone on unchecked for days; and I recollect many other cases of slow recovery due to the same causes. But, in Europeans, who generally seek aid at once, I had a large amount of good success. In uncomplicated cases of Remittent, taken early, the QUININE TEST will rarely fail; and I believe that, *if recovery be possible, Remittent Fever will always yield, albeit often very slowly, to Quinine*, backed by due support and careful nursing.

When I believed that quinine would suffice, I relied solely upon it, but when I saw that a patient was threatened with death, I endeavoured to get his system under the influence of the other great antidote, mercury. I did this as early as possible, *i.e.*, immediately I was called to the dying man (not discontinuing quinine), but never with perceptible good result in cases of ordinary Remittent, probably because the specific was employed too late. It goes very hard with the subject of Remittent Fever when his case has advanced so far as to resist the commanding power of quinine. In the cases where convulsion takes the place of rigor in the cold stage (where I consider that the type is usually Pernicious Intermittent—not Remittent), my experience leads me to place a high value upon one or two doses of Calomel in combination with quinine, given promptly. Steady nourishment, day and night, *always by night*—in severe cases by the rectum—is indispensable in Remittents. At the outset the bowels must be thoroughly cleared by aperients, but to cause intestinal irritation by drastics is, in the last degree, objectionable. In natives, a minor but important precaution must never be neglected in cases of fever and in other severe diseases. When brought to us, especially in the cold season, their skins are frequently so perfectly unclean and dry, and often so beset with aggravated chronic scabies, that we cannot hope to treat fever or to employ diaphoretics with any chance of success until the *exuviæ* are removed. With this view it is safest, to avoid chill in grave cases, to use plentiful inunction with warm oil. When recovering from fever or any other severe illness, the native of Bengal always asks us, "Can I bathe?" This question is not to be taken merely in its literal sense; it also means, "Have I recovered from my disease?"

The hypodermic injection of quinine is now a good deal practised in India. It appears to be of great value, but I have no personal experience of its use.

(To be continued.)

LITERARY PRODUCTION IN FRANCE.—The *Journal de la Librairie*, which registers every work published on French territory, appeared for the first time in 1811, and in the following year it signalised the production of 5442 works, including 162 romances. In 1816, the production, like the frontiers of the country, became restricted, so that there were only 3763 works published, including 238 romances. But an unexpected fact is that during all the reign of Louis Philippe the production of books continued stationary, the totals of 1847 having been even lower than in 1832—5530 works, of which 212 were romances,—and yet this was a period of the most brilliant and fertile union of romancers and narrators which has ever been seen. Literature had not yet become an industry by which a man could live, well or ill, just as by any other. The reading public was restricted, and it required a persevering conviction to succeed. When we go over a list of authors of that period, one is astonished at finding that almost all of them achieved notoriety. If they wrote, it was because they had something to write about—a primary condition of a true success. At the present time, besides some 700 or 800 journals which have to be filled up, there were, in 1880, 12,444 works published, including 715 romances and 90 translated romances; and they are ever on the increase.—*Journal de la Société de Statistique*, May.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

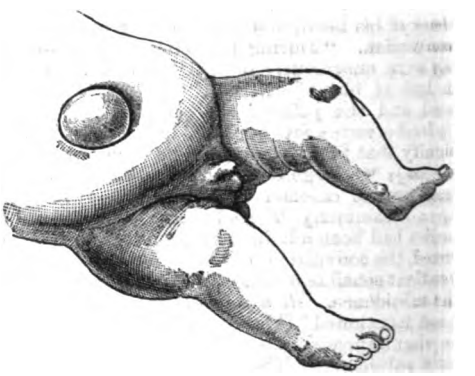
NORTH-EASTERN HOSPITAL FOR CHILDREN.

IRREDUCIBLE HERNIA INTO THE BASE OF THE UMBILICAL CORD, CONTAINING THE CÆCUM—OPERATION—DEATH.

(Under the care of Mr. GODLEE.)

AN infant, forty-eight hours old when first brought to the Hospital on March 20, 1883, presented a tumour of globular, or rather ovoidal shape, at the umbilicus, of the size of a large Tangerine orange. It was covered with a raw surface, partly formed of imperfect granulations and partly of horny flakes of dried umbilical tissue. The contents appeared to be intestine, but as it was not easily reducible, no prolonged attempts with the object of effecting it were made at that time by the House-Surgeon, but the tumour was wrapped in a moist boracic acid fomentation, and enclosed in a large mass of oakum. The child was otherwise well formed and of a fair size; it had been pretty constantly sick, but had passed meconium. The midwife had fortunately applied the ligature on the distal, and not the proximal side of the swelling.

The next day the surface of the tumour was cleaner, but the child continued to be sick; the bowels acted from time to time. On March 27 the child was seen by Mr. Godlee, who tried to reduce the contents, but unsuccessfully. The tumour was now, however, decidedly smaller than when first seen, and the ring of skin round its base appeared to be contracting to some extent. The dressing was applied as before, but a little more pressure was exerted with the bandage.



On March 31 an attempt at reduction was made while the child was under the influence of chloroform. Some gurgling occurred, but the greater part of the mass was quite irreducible. Some time was spent in cleaning the outer surface by picking off the yellow scales, and rubbing it with carbolic acid lotion and dusting it over with iodoform with the view of rendering things pure in case of an operation being considered advisable. It was then dressed as before. The child was now taking the breast freely, but was constantly sick; the vomited matters being yellow, and probably coming from the small intestine. The bowels were open from time to time.

On April 3 the child had evidently lost ground; the bowels had been confined, though they had acted naturally on the morning of this day. The vomiting continued. Chloroform was therefore administered, and after carefully scraping the outside of the tumour with a sharp spoon, and rubbing it well with carbolic acid lotion (one to twenty), a cautious incision was made through the anterior and lower parts. The walls were thick, but very little bleeding occurred. The intestine was found to be firmly adherent to the greater part of the interior of the sac, and to be itself very closely matted together, so that the separation of coil from coil, and of the whole mass from the sac, was a matter of considerable delicacy and difficulty; in fact, at one part a small piece of the sac was left adherent to the intestine, as it appeared to be unsafe to use force

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enough to separate them. Some bleeding occurred from the adhesions. The intestine contained in the tumour proved to be the cæcum and vermiform appendix together with the end of the ileum. It was clear that there was no peritonitis, and the intestine itself did not seem to be inflamed. The sac was then removed with scissors. The ring of skin which had surrounded the neck of the tumour was afterwards freshened, and the wound brought together. First the peritoneal surfaces were drawn together with fine catgut stitches, and then the cutaneous and fibrous margins of the opening approximated with stout silver-wire and fine catgut sutures; a large mass of iodoform wool being placed on the wound and secured by a tightly applied strap and bandage. The operation lasted in all thirty-five minutes.

Next day (April 4), twenty-six hours after the operation, the child was brought to the hospital. The mother reported that it had not been sick, and that the bowels had been relaxed. It had taken the breast well, but had been restless, so that it had been given the two half-minims of laudanum which had been ordered for it. The child, however, had a yellow colour of the skin, and did not look well; and in fact it became gradually weaker, and died on the morning of April 5.

The autopsy was made on the following day. It was found that the edges of the wound, which had been drawn together with wire sutures, were firmly adherent, and there was no appearance of undue tension or of inflammation having been present. The wound was cut out, and the peritoneal surface examined from behind; firm adhesion had also taken place here, and, immediately behind the wound, the intestine which had been in the sac was adherent to the abdominal wall. This consisted of four inches and a half of large intestine, and about two inches of ileum matted together, forming with some pieces of blood-clot a hardish rounded mass. It was, however, free from all appearance of inflammation, and on slitting it open the mucous membrane was found to be quite healthy. The meso-cæcum was four inches and a half long, and, indeed, the cæcum and the ascending colon seemed to be fixed to the right border of the mesentery, and were in no way attached to the iliac fossa. There was no general peritonitis; the posterior parts of the abdominal cavity and the pelvis were occupied with a considerable amount of treacly, uncoagulated blood, some of which had also found its way into the tunica vaginalis. The other organs were healthy, with the exception of the lungs, in which there were some subpleural ecchymoses. The foramen ovale was patent. The yellowness of the skin mentioned during life was apparent after death, and was probably due to the absorption of blood-colouring matter.

Remarks.—The rarity of the condition here found made me a little uncertain as to the best course to adopt, and, in looking back at the course of the symptoms, it is perhaps to be regretted that an operation was not performed earlier; for, although nothing approaching to strangulation had occurred, it is, I think, clear that the vomiting (which so much reduce the child's strength) and the constipation must have depended upon the condition of the bowel, for both disappeared promptly after the operation. I was loth, however, to open the peritoneal cavity whilst the outer surface of the tumour was in a highly putrescent condition, thinking the chance of exciting septic peritonitis would then have been very great. As it was, this danger seems to have been avoided, though the child succumbed to the exhausting effects of the vomiting and the shock of the operation. It is, perhaps, at first sight a little remarkable that a hernia into the umbilical cord should be a matter of such rarity, seeing how common are umbilical herniæ in young babies; but the condition of quiescence of the child in utero, contrasted with the constant crying from the moment of birth, no doubt is sufficient to account for the apparent anomaly.

GAMBETTA'S BRAIN AGAIN.—It is claimed by Prof. W. Krause, of Göttingen, that the true weight of Gambetta's brain was not 1160 grammes, as reported. Soon after death the arteries were injected with a zinc-chloride solution. This solution extracted the water from the brain, and lessened its weight, according to Prof. Krause. He estimates its true weight at 1320 grammes. There may be some truth in this view, but not much.—*New York Med. Record*, April 7.

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THE MEDICAL TIMES AND GAZETTE *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, JUNE 9, 1883.

THE ARMY MEDICAL INQUIRY: EGYPT.

LAST week we placed before our readers the conclusions arrived at by the Committee with regard to the condition of the hospitals at Ismailia and Cairo. We propose now to speak of the amount of professional work that fell upon the medical officers, and the results. The Committee say: "We would direct attention to the statistics furnished to us by Surgeon-General Hanbury, which give the results of the sick and wounded in all the hospitals of Egypt from July 17, when the first battalions landed at Alexandria, to October 9, the date upon which the forces ceased to be considered an army in the field. During that period the average strength of the force (including the Europeans of the Indian Contingent, but not of the Royal Marines) is shown to have been 13,013 non-commissioned officers and men; the number of admissions to hospitals was 7590 (namely, 378 wounded in action, 7212 suffering from diseases or injuries); the number of deaths returned is 172 (74 died of disease, 5 from accident, and of the remaining 93, 82 were killed in action, and 11 died of their wounds subsequently). The admission-rate per 1000 was 582·3, and the death-rate 13·21. The number of men invalided to Malta or England was 2331. Thus, up to October 9, less than 3 per cent. of the wounded men admitted to hospital died; of the remaining 7212 admitted to hospital, 74 died of disease. There remained under treatment in the hospitals of Egypt on the above date 1444. The figures give a death-rate for the whole force of 24·39 per 1000 per annum. Of the officers, 10 were killed in action, and 52 were wounded, of whom 2 died, and 48 were invalided to England before October 9. These figures speak for themselves of the skill and care with which the medical officers must have performed their professional duties in Egypt. Much credit is also due to the

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medical officers for the absence of pyæmia and other diseases incidental to hospitals in war." With regard to this subject—the amount of work to which the medical officers were subjected,—Sir William Mac Cormac, in his Remarks appended to the Report, gives some further valuable and interesting details. "In the largest of our London hospitals," he observes, "with their numerous staff and most complete and disciplined arrangements—the London Hospital, for instance, with nearly 800 beds, and having the largest casualty practice of any of our civil hospitals,—the number of patients daily admitted to the wards is under 20, and about the same number leave either able to walk out or to be taken away by their friends, the Hospital having no further concern with them. At the Palace Hospital, 767 cases were admitted from August 23 to 31, which is at the rate of 85 a day; and 1311 were admitted from September 1 to 15, or about 88 daily. After Kassassin, and up to the battle of Tel-el-Kebir. 200 sick would sometimes arrive during the night, and, after that action, as many as 350 were brought down at one time. The first batch after Tel-el-Kebir, numbering 194, arrived after midnight at Ismailia, and the telegram which was meant to order preparations to be made for their reception arrived two hours after they were in the hospital. In the Citadel Hospital at Cairo, the admissions from September 18 (the day the Hospital was opened) to September 23 were 763, or on the average 127 daily. In addition to this the authorities had to arrange where the sick and wounded men were eventually to go—whether to the hospital ships, the transports, or back to the front. As many as 300 patients have had to be selected and sent on board ship in one day. During the month of September, the period of the greatest pressure, 2315 invalid officers and men were embarked from Ismailia. In view of the battle of Tel-el-Kebir, 382 patients were sent off. From September 18 to September 26, 1469 invalids were embarked." That all this means immense labour and anxiety needs not to be pointed out; nor that, as Sir William Mac Cormac says, "the organisation must indeed be very complete which does not give way under such a strain." Sir William also refers to the very remarkable and satisfactory fact that during the whole campaign there was never any outbreak of any of those infective diseases that have hitherto made such terrible havoc among the wounded in times of war. There was no pyæmia, no erysipelas, and no hospital gangrene. And not a single man lost his eyesight, though there were 1494 cases of inflammatory affection of the eyes admitted to hospital. Those of our readers who remember, or can refer to our articles last year (*Medical Times and Gazette*, pages 153 and 247-8, vol. ii. 1882) on the Health-Risks of the Campaign in Egypt, and on Egyptian Ophthalmia, will recognise the significance of these facts. And to what we said in those articles we may add, quoting again from Sir William Mac Cormac's Remarks, that Sir James MacGregor, in his "Medical Sketches of the Expedition from India to Egypt," published in 1804, states that, "plague excepted, the most formidable disease in the army was ophthalmia. In September the total number of cases exceeded 600. In October the great prevalence and severity of the disease are described as really alarming. Of the Indian Contingent, fifty were invalided blind, while the French are said to have sent home 1000 blind men from Egypt."

When, leaving the Report aside for awhile, we attempt to examine the mass of evidence, with its charges and countercharges, and its contradictory suggestions, we are reminded of a large battle picture of the bad old school of art. Everybody knows the canvas full of fire and fury, but so obscured by clouds of smoke that it is impossible to discover at a glance who are the assailants or who are the defenders, or what the quarrel is about. As we bury ourselves in the pages, we confess to feeling a similar kind of bewilderment. It is clear enough that the doctors are on the defence; but the assailants, judging by their evidence, do not seem actuated by any common cause of enmity. The accusing witnesses are of all kinds. Some complain because the doctors have not succeeded in training the Hospital Army Corps into a well-bred set of mess waiters, and notice with scorn the dirty breeches of the hospital orderlies. Others point out the general complaints made by sick officers, as damning evidence of medical incompetence. And, on the other hand, we meet with complaints that the private soldiers *wouldn't* complain; and the suggestion that this sad fact was due to a fear of the doctors. The following is an extract from some of the "evidence," so-called, on this point:—"(5032) I think that the men in Hospital are exceptionally afraid of giving straightforward answers to the doctors on a question of that kind" (namely, as to whether the bread was good). "I think that, unconsciously, the medical officer who said to them as he went round, 'I am the medical officer in charge of this hospital, and this is a friend of mine, who is an officer of the headquarter staff, and I want to ask you if you have any complaints at all to make about your treatment in this hospital?' might have given a particular impression. That was the form in which he put the thing, and I think that when he said that, the sort of way in which the question presented itself to the men's minds was—'I am the man who has to decide the food that you get here, and the medicine you get here, and the treatment that you get here—say, if you dare, that you have anything to find fault with here.' The doctor did not say that, of course, and I am sure he had not the slightest intention of conveying that impression, but it certainly seemed to me that the men were afraid to give straightforward answers." Was it worth while admitting, printing, and publishing evidence so vague, so imaginary as this, given by a combatant officer—unless indeed it, and quantities of statements as vague, were accepted as the strongest proofs possible that there was very little real fault to be found with the Army Medical Staff? Some witnesses point to the superiority of hospitals managed and served by women, while other gentlemen air their own little separate grievances. We will quote one more example of what seems to us as astoundingly absurd complaints from officers. In this case (2442) an officer seriously complains of the want of an enema apparatus. He remarks: "I said [to the surgeon in charge in the hospital at Ismailia], 'This is rather a serious case for me. I do not want to be put to more pain than I can help; can you not get an enema from one of the "men-of-war"?' and he said, 'In the first place, I do not know whether I can get it; and, in the next place, I have nobody to send; and, anyway, it is impossible to send to-night to do anything. We will try this other means, and, if that fails, I will see what I can do to-morrow.'" The absurdity of the complaint is more startling when the witness acknowledges that it was getting dark, that "it was about half a mile from the hospital to the wharf, and then some distance across the lake at Ismailia, and more than possible there would be difficulties about obtaining a boat to board the man-of-war." It is difficult to believe that the officers really expected the military hospitals, in the highest stress and strain of a hurried campaign, to be as fully equipped in every way as a perfectly organised and regulated civil hospital in the piping times of peace, but this seems to have been the case.

There is, however, little doubt that the state of the army hospitals was not on all points satisfactory, and we shall by-and-bye deal with the great question as to where the blame of that should really lie.

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THE CHARGE AGAINST A MIDWIFE.

At the last session of the Central Criminal Court, Mary Ann Goss, a midwife, was charged before Mr. Justice Hawkins with manslaughter, in having caused the death of Elizabeth Harmer by communicating puerperal fever to her. The charge was based upon the finding of the coroner's jury; and the vital point in the chain of evidence upon which that jury came to their verdict was the testimony of the medical man who had examined the body of the deceased post-mortem, and who stated that she died from blood-poisoning. This was vital, because if Elizabeth Harmer did not die from puerperal fever, of course no charge against another person of causing her death by communicating that disease to her could be sustained for an instant, however much it might be supported by circumstantial evidence. Before the Judge, however, were laid the statements of two other medical men whose opinion was contrary to that of the practitioner who examined the body and gave evidence at the inquest. These gentlemen had not been called upon for their opinions at that inquiry. With this conflict of testimony before him, Mr. Justice Hawkins made some strong remarks condemnatory of the manner in which the coroner's duty had been done in this case. "The coroner," he said, "might just as well not hold an inquest at all." The prosecuting counsel appeared to concur in his Lordship's opinion, for they decided to tender no evidence against the prisoner, who was therefore at once acquitted.

Upon the merits of this case we express no opinion. Whether guilty or not, we hope that Mrs. Goss's approach to within a measurable distance of a prison-cell, through this charge, will cause her for the rest of her life to exercise the most scrupulous care against even the suspicion of becoming a vehicle of infection, and that her bitter experience may be a useful lesson to others as well as to herself.

We advert to the case for the purpose of considering the cause of the failure of justice which took place. That there was a failure of strict justice is clear, for if Mary Ann Goss was guilty, she ought to have been punished, and if innocent, the verdict of the coroner's jury was an infamous slander which ought never to have taken shape, and Mary Ann Goss, in consequence of it, suffered popular odium, personal anxiety, loss of time, and expense, which she did not deserve. The verdict of the coroner's court was based upon the post-mortem examination. In many cases it is, as everyone knows, difficult, even when the body has been well examined, to state precisely the cause of death. But, with all the uncertainty that arises from the imperfection of our knowledge, nothing enables us to speak with so much precision as a complete autopsy. There are, it is true, fatal diseases which cause characteristic symptoms during life, but do not leave very definite appearances after death. But a competent pathologist, who has before him both the symptoms during life and the results of a thorough post-mortem examination, ought to be able to assign the cause of death with a certainty which no one, without an autopsy, possibly could do. Evidence based on the clinical history of the case, confirmed by a properly made post-mortem, ought to be irrefutable. By "properly made" we mean, first, that it should be made by a competent person, that is, by one accustomed to make such examinations; and, second, that, where it is possible that a criminal charge may arise out of the facts, due notice should be given, and there should be sufficient publicity about it, so that any person against whom an accusation is likely to be brought may send representatives, and thus subsequent cavilling at the report should be impossible.

The rule upon which coroners at present act is a very good one for ordinary cases. They are accustomed to call the registered medical practitioner who last saw the patient, to take his evidence as to the cause of death, and, if a post-mortem be required, to request him to make it. This custom is a good one in the general run of cases, in which there is no reason to suspect foul play, no controversy is likely to arise, and it is enough to roughly ascertain that there is disease present sufficient to cause death. But there is one special class of cases in which it is invariably departed from—viz., those of suspected poisoning. In such, the analysis of the stomach is always handed over to a toxicological expert. In this we have a recognition of the incompetence of the ordinary general practitioner to undertake a difficult and important proceeding for which his previous duties have not fitted him.

This is recognised, notwithstanding the fact that the methods of testing for the more commonly employed poisons form part of the examinations which many medical men have passed. The reasons which lead to employment of an expert in cases of poisoning seem to us to apply to all cases in which the ends of justice, the life or liberty of individuals, and the safety of the community depend upon the results of a post-mortem examination. It is impossible for a general practitioner, engaged in large midwifery practice, and fully occupied besides, to make post-mortems frequently; and it is almost equally impossible for the significance of morbid appearances to be properly appreciated except by one who is in the constant habit of examining the dead body. Pathological science is advancing every day, and one who would keep abreast of it must be constantly engaged in its pursuit. Not only is proper judgment difficult for one unpractised in morbid anatomy, but the occasional making of post-mortems upon which very much does not depend tends to produce a hurried and careless performance of a distasteful task (for a post-mortem, except to one whose heart is in it for the love of the scientific truth it teaches, is a distasteful task). Many instances might be given of medico-legal post-mortems performed so imperfectly as to reflect no credit upon the profession. Many will remember a case in which four persons were accused of having starved a woman to death, the deceased having undoubtedly died in a very emaciated condition, attributed by the prosecution to want of food. Among the suggestions thrown out by the defending counsel were that the condition of the body might have been due to stricture of the œsophagus, or to diabetes, or to tubercular meningitis; and the presence or absence of these conditions, which a proper post-mortem ought to have decisively settled, was never determined, although the examination was made by men who, as general practitioners, were highly and deservedly respected. More recently a case was brought before the Medical Council, in which a medical man had given evidence as to the state of the kidneys, which it was proved he had not removed from the body; and this, too, was a case out of which a criminal charge sprang.

We do not hold that the general practitioner should be superseded. His evidence—that of a skilled observer who saw the patient when alive—will almost always be indispensable. But we do think that it would be for the interests of justice and of our own profession if, in cases in which the post-mortem examination is a vital part of the evidence, coroners looked upon it as their duty to see that such an examination was made by some person accustomed to investigations of the kind, just as they now hold it their duty to entrust chemical analyses, when required, only to persons in the habit of making analyses. Some coroners already do so, to their credit, and we have no doubt that there will come a time when properly selected pathological experts will be recognised to be as necessary for the ends of justice as chemical experts. Of course, the proper selection of such persons is a matter upon which

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their acceptance and usefulness must largely depend. It will not do for the coroner to choose some private friend of his own, or some just qualified student of whose talents he thinks highly. What is wanted is not merely book knowledge, but large practical experience in deadhouse work, combined with judgment, caution, knowledge of the world, and tact. Upon this, however, we will not further dwell. We feel strongly that conflicts of medical testimony such as occurred in the case of Mary Ann Goss do not further the ends of justice or increase the respect in which our profession is held; and they seem to us unavoidable, unless, in cases such as hers, care is taken to have the post-mortem, upon which so much depends, made by some one who will do it in such a manner as to put the result beyond dispute.

THE WEEK.

TOPICS OF THE DAY.

His Royal Highness the Prince of Wales presided last week at the seventieth annual festival of the Royal Hospital for Diseases of the Chest, City-road, and, in proposing the toast "Prosperity to the institution," explained that when this Hospital was established seventy years ago no other of the same kind existed either in this country or in Europe. From the fact that other hospitals of a similar character had more recently been founded, public attention had, to some extent, been withdrawn from this institution; but, through the efforts of an influential board of management, the progress of the charity during the last few years had been marked. In the year 1873 the number of patients registered was 4806, last year they amounted to 7017; the annual subscriptions received eleven years ago amounted to £947, last year they reached the sum of £1639. The annual subscribers were the true test, after all, of a charity's repute, and were withheld or given according to the value of the work done. The special object of the gathering was to raise a fund for the enlargement of the Hospital; a considerable piece of freehold ground had been obtained and paid for, and the plans of the new wards and offices had been most carefully considered. The Council stated that they required £10,000, of which sum they had £1000 in hand at the beginning of the year; with four or five thousand pounds more they could build the new wards, furnish them, and maintain the first year's patients. His Royal Highness concluded with an eloquent appeal to the company to assist this object. Before the close of the proceedings it was announced that the result of the festival would be to add £4355 to the funds of the institution.

The fifth annual meeting of the Home Hospitals Association for Paying-Patients was recently held under the presidency of the Duke of Northumberland. According to the report submitted, the pay system of relief was rapidly increasing in popularity. The increasing difficulties experienced in obtaining funds had led the managers of more than one of the larger general hospitals to consider the possibility of introducing some pay-beds into the ordinary wards. Of 479 applications for admission to Fitzroy House, Fitzroy-square, during the past year, 139 had been granted, and 166 had to be refused for want of room. Towards the £5000 increased capital which had been asked for, £3713 had already been raised. In a brief address, the noble Chairman congratulated the Association on its prosperous position, and stated that with a very small amount of additional interest on the part of the public their liabilities would be entirely cleared off, and there would then be an opportunity of increasing the accommodation now afforded. Further, it was hoped to be able to establish a convalescent home in connexion with the Hospital. It would be possible to raise the prices charged, but he should be very loth to see that course adopted; on the contrary, if any change were advisable, it should be rather to keep in view the advantage of extending the benefits of the institution to the classes who were unable to bear the expense which illness always entailed. The success of the undertaking had surprised him, for the expenses had not only been covered, but a considerable interest on the outlay had been realised.

The Italian War Office has had prepared for the use of the military authorities a statistical map showing the extension and relative intensity of malaria throughout that peninsula. This map has been compiled from an exhaustive series of sanitary observations that have been carried on for years in all the provinces of the kingdom. Italy is divided into sixty-nine provinces, of which only six are completely free from this scourge, while it is felt with great severity in twenty-one. It is estimated that 40,000 men, or 10 per cent. of the army, are annually victims—many fatally—to malaria; and the annual cost of special hospitals and arrangements to meet this amounts to over ten millions of francs. The general damage to the whole population from the ravages of this plague must be very great, when it is remembered that it strikes down hundreds and thousands of the working classes, at the most industrious period of their lives, and that it is the tangible cause why so many districts are allowed to remain barren and uncultivated. It is noteworthy that malaria seems to have increased, both in extent and intensity, with the development of railways. This is attributed to the large excavations which are allowed to remain unfilled, becoming in time the seats of stagnant ponds or marshes. Some of the Italian lines have acquired the reputation of being permanent homes of malarial fever.

Major Marindin, on behalf of the Board of Trade, has recently concluded an inquiry, which was held in the Council Chambers, Edinburgh, regarding an application which had been made by the Electric Brush Light Company of Scotland for a provisional order for a specified area in the city of Edinburgh. He said that the inquiry was held exactly under the same conditions as those with regard to applications made by gas and water companies. It was the first inquiry under the Electric Lighting Act. It embraced the questions of capital, area, and the ability of this Company to carry out the works which they proposed to construct. Several witnesses having been examined, Major Marindin stated his intention of reporting against the preamble of the Bill, on the ground that the Company had failed to make out their case.

Convocation at the University of Oxford on June 5 voted the sum of £1000 per annum for three years towards the expenses of certain works for improving the drainage of the Thames Valley in the immediate neighbourhood of Oxford. These works, which are regarded as highly desirable for sanitary purposes, will mainly consist in the removal of certain weirs, and of Iffley Lock, necessitating considerable dredging, besides making a new cut between the Cherwell and the Isis, and another below King's Mill. The cost of these improvements is estimated at some £17,000. The Thames Valley Drainage Commissioners, who are now carrying out works above Oxford, involving an expenditure of £34,000, did not feel justified in making the improvements desired at Oxford with the funds at their disposal, seeing that they are called for, not for agricultural and navigation purposes, but on sanitary grounds. It is understood that the City Corporation will contribute about £2500, and the colleges are being asked to contribute the remaining £11,000 or £12,000, that is, about three-fourths of the whole amount.

Subject to the conditions of their scheme (*Medical Times*

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and Gazette, March 31, page 364), the Grocers' Company now announce as the matter of competition for their Quadrennial Discovery Prize of £1000 for original research in sanitary science, the following problem :—"To discover a method by which the vaccine contagium may be cultivated apart from the animal body, in some medium or media not otherwise zymotic; the method to be such that the contagium may by means of it be multiplied to an indefinite extent in successive generations, and that the product of any number of such generations shall (so far as can within the time be tested) prove itself of identical potency with standard vaccine lymph." The prize is open to universal competition, British and foreign. Competitors for the prize will have to submit their respective treatises on or before December 31, 1886, and the award will be made as soon afterwards as the circumstances of the competition will admit, but not later than the month of May, 1887.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

The three members of the Council of the Royal College of Surgeons who retire this year by rotation are—Mr. John Cooper Forster, one of the Vice-Presidents of the College; Mr. John Birkett, who was President of the College in 1877; and Mr. Prescott G. Hewett, also a past President. Of these Mr. Cooper Forster only will seek re-election; and it is probable that most, if not all, of the following Fellows will also be candidates for seats in the Council at the ensuing election :—Mr. George Lawson, of the Middlesex Hospital—Member, August 9, 1852; Fellow, December 17, 1857. Mr. Nottidge Charles Macnamara, of the Westminster Hospital—Member, April 17, 1854; Fellow, June 10, 1875. Mr. Oliver Pemberton, of the Birmingham General Hospital—Member, April 12, 1847; Fellow, April 18, 1875. Mr. Robert Brudenell Carter, of St. George's Hospital—Member, December 12, 1851; Fellow, 1864. Mr. Sydney Jones, of St. Thomas's Hospital—Member, April 4, 1853; Fellow, December 11, 1856. Sir William Mac Cormac, of St. Thomas's Hospital—Member, February 27, 1857; Fellow, January 12, 1871. Mr. Arthur Edward Durham, of Guy's Hospital—Member, May 14, 1858; Fellow, May 31, 1860. Mr. Reginald Harrison, of the Royal Infirmary, Liverpool—Member, April 15, 1859; Fellow, December 13, 1866.

ORGANISATION OF CONVALESCENT AID.

The Secretary of the Society for Organising Charitable Relief, etc., writes to the *Times* that the Society is endeavouring to meet the claims for means of sending convalescent patients into the country or to the seaside during the summer, by organising distinct accommodation for as many as possible of the crowd of applications that come through the thirty-eight district committees of the Society. "Convalescents, besides receiving medical certificates, are sent only after careful inquiry into their circumstances, and are encouraged, moreover, where possible, to testify to the keenness of their desire by assisting to pay some part of their expenses." Beds are to be taken in the name of the Society at convalescent homes for the whole summer, and it is hoped also that beds may be obtained through local help, in various cottages both by the sea and in country villages. A very great amount of real good can be done by placing convalescent beds at the service of the medical staffs of the metropolitan hospitals, infirmaries, and dispensaries; but the scheme of the Charity Organisation Society smacks too much of the "inquiry office." The system of exactly measuring and weighing all the "circumstances" of applicants before any help is given, takes all the loveliness and soul out of charity rightly so-called, and leaves a poor, mean, faded effigy that benefits neither the receiver nor the giver.

THE BANQUET TO PROFESSOR VILLEMIN.

Professor Verneuil, in the belief that during the now prevalent discussions on the question of the communicability of tuberculosis the claims of Professor Villemin, of the Val-de-Grâce, have been too much overlooked, especially by foreigners, organised a protesting banquet at the Café Riche. It was largely attended by members of the Faculté de Médecine and medical officers of the army and navy, and several eloquent addresses were delivered. In the toast of the evening, Professor Villemin's claims as the discoverer of the inoculability of tubercle by experimental investigations were warmly and successfully vindicated. As might be expected on such an occasion, these claims were carried somewhat too far when it was maintained that all the recent discoveries relating to the parasitic nature of the disease are only the natural and necessary results of Professor Villemin's and M. Pasteur's researches.

THE ARMY MEDICAL SERVICE.

Mr. Gibson, M.P., has given notice that on Monday next he will ask the Secretary of State for War whether, having regard to the grave charges and insinuations freely brought in evidence before Lord Morley's Committee and in the Press against medical officers engaged in the late Egyptian war, he will take care that the vote in the Army Estimates is taken at a time when those interested in vindicating the conduct of those officers will have ample opportunities of so doing.

SUCCESSFUL CASE OF REMOVAL OF LARGE SPLEEN.

A successful case of removal of the spleen in leukæmia, by Fernando Franzolini, of Turin, is recorded in the *Wiener Medicinischen Wochenschrift*, No. 20. The patient was a pale, delicate woman, twenty-two years of age, who worked in a match manufactory at Paderno. From childhood she had been sickly, and since the age of seventeen menstruation had been irregular, and at times she had suffered from hysterical symptoms. She had never lived in a malarial region, and had never suffered from intermittent fever. In the beginning of the year 1879, without any assignable cause, she began to suffer from severe pain in the left side of the abdomen, which was increased on standing and on pressure. In July, 1880, a splenic tumour of considerable size could be made out, and in January, 1881, an increase of the white blood-corpuscles was noted. The patient was anxious to submit to an operation with the object of obtaining relief, and was admitted into hospital. On admission, the skin and mucous membranes were very pale; there was no œdema, and no enlargement of glands. A tumour could be detected in the left side of the abdomen, which felt elastic, but the boundaries of the tumour could only be ascertained with difficulty. The dulness extended in the long axis 24 centimetres (9½ inches), in the transverse axis 27 centimetres (10½ inches). The white blood-cells were five times more numerous than normal. There was no albumen in the urine. An incision was made along the linea alba to the left of the umbilicus, 22 centimetres (8½ inches) in length. The coils of intestine and the large omentum which presented were protected by warm water compresses, and the spleen, with the help of the assistants, was pushed out of the wound. On account of the shortness of the pedicle in the floor of the peritoneal cavity, it was found necessary to place a double silk ligature on the splenic artery, which was the size of the forefinger, and on the vein, which was the size of the thumb. The gastro-splenic ligament included in two ligatures, and the diaphragmatic in one ligature, were divided. The patient lost scarcely a spoonful

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of blood. The operation lasted eighty minutes. The spleen measured in length 26 centimetres (10¼ inches), in breadth 16·5 centimetres (6½ inches), in thickness 7 centimetres (2¾ inches), and weighed, after removal of 300 grammes (9 ounces) of blood, 1526 grammes (52 ounces). Notwithstanding an attack of pleurisy on the left side, accompanied by severe pain and fever, which lasted eight days, the wound healed, and the patient is now perfectly well with the exception of severe uterine pain at the menstrual period. The white blood-cells diminished gradually, and an examination of the blood in January, 1882, four months after the operation, showed almost a normal condition.

THE PARIS WEEKLY RETURN.

The number of deaths for the twenty-first week of 1883, terminating May 24, was 1247 (678 males and 569 females), and of these there were from typhoid fever 46, small-pox 19, measles 45, scarlatina 2, pertussis 20, diphtheria and croup 41, dysentery 1, erysipelas 8, and puerperal infections 3. There were also 56 deaths from tubercular and acute meningitis, 238 from phthisis, 36 from acute bronchitis, 95 from pneumonia, 78 from infantile athrepsia (27 of the infants having been wholly or partially suckled), and 37 violent deaths (27 males and 10 females). The number of deaths registered was lower than the mean of the last four weeks, which was 1259. The only increase in deaths from epidemic diseases occurred in measles, which rose from 33 to 45. The births for the week amounted to 1290, viz., 684 males (512 legitimate and 172 illegitimate) and 606 females (457 legitimate and 149 illegitimate): 96 infants were either born dead or died within twenty-four hours viz., 51 males (37 legitimate and 17 illegitimate) and 42 females (26 legitimate and 16 illegitimate).

ROYAL COLLEGE OF SURGEONS IN IRELAND.

At a special meeting of the Council of the Royal College of Surgeons in Ireland, held on Saturday, June 2, Dr. Arthur Wynne Foot, Senior Physician to the Meath Hospital, and Lecturer on Practice of Medicine in the Ledwich School of Medicine, was elected Professor of Practice of Medicine in the School of Surgery, in room of Dr. James Little, resigned. Dr. Foot is a Doctor of Medicine of the University of Dublin, and a Fellow and Censor of the King and Queen's College of Physicians in Ireland. He enjoys a high reputation as an able teacher of both clinical and systematic medicine, and the School of Surgery in his appointment has gained a worthy successor to his distinguished predecessor. The annual general meeting of the Fellows of the College was held subsequently, the President of the College, Dr. John Kellock Barton, taking the chair. A motion was proposed by Dr. Thornley Stoker, altering the mode of election of professors and examiners. The method heretofore pursued under the charter was that seven members of the Council were drawn by lot, and to these was intrusted the election. The change proposed by Dr. Thornley Stoker, whose motion was carried, was that the entire Council shall elect by open voting. Professor Jacob formally moved that the College should cease to recognise night lectures. A lengthened discussion ensued, but, in the end, the motion was, on a division, negatived by a large majority. The meeting then adjourned until Monday, the 4th inst., on which day the College held a meeting, pursuant to the provisions of the supplemental charter, to elect officers for the ensuing year, when the following gentlemen were elected, viz.:—*President:* William Ireland Wheeler. *Vice-President:* Edward Halloran Bennet. *Secretary:* William Colles. *Council:* William Colles, Richard G. H. Butcher, Rawdon Macnamara, George H. Porter, James H. Wharton, Edward D. Mapother, Archibald H. Jacob, Edward Hamilton, Philip C. Smyly, Robert M'Donnell, George H. Kidd, John Denham, J. Kellock Barton, Samuel Chaplin, Joliffe T. Tufnell, Anthony H. Corley, William Thornley Stoker, William Stoker, and Charles A. Cameron.

THE UNIVERSITY OF CAMBRIDGE.

The election to the Professorship of Physiology in the University of Cambridge will take place on Monday, the 11th inst. The endowment of the Professorship is £800 a year, exclusive of fees, and the Professor is not to be permitted to undertake the private practice of medicine or surgery. The electors are the Vice-Chancellor, Professor Huxley, Dr. Humphry, Mr. J. N. Langley, Dr. Pye-Smith, Dr. Burdon-Sanderson, Professor Stokes, and Mr. S. H. Vines. Of course, Dr. Michael Foster, the Trinity Prælector, who has made the Cambridge School of Physiology, will be the first Professor. The election to the Professorship of Anatomy is also fixed for the same day. The endowment of this Professorship is £600 a year, exclusive of fees. The electors are the Vice-Chancellor, Mr. J. W. Clark, Professor Flower, Dr. Michael Foster, Professor Huxley, Professor Liveing, Professor Newton, Professor Paget, and Dr. Allen Thomson.

MEDICAL ACT AMENDMENT BILL.

A deputation, representing the Faculty of Physicians and Surgeons of Glasgow, the Royal College of Physicians, Edinburgh, and the Royal College of Surgeons of that city, had an interview with the Lord Advocate on Saturday last respecting the Medical Act Amendment Bill, certain clauses of which they desired to have modified. The Bill proposes to create three separate Boards, to have entire charge of medical education and examinations in the three kingdoms; but while on the English Board the Universities would be represented by eight members and the Corporations by eight, and on the Irish Board the Universities by six and the Corporations by five members, on the Scotch Board it was proposed that the Universities should be represented by eight members and the Corporations by three—a proposition which, it was urged, would be prejudicial to the public interest. The Lord Advocate, in reply, stated that the views of the deputation should receive due consideration.

THE WAYNFLETE PROFESSORSHIP OF PHYSIOLOGY, OXFORD.

The question of voting a sum of £10,000 for providing the Waynflete Professor of Physiology with a laboratory, waiting-rooms, and lecture-room, came before Convocation of the University of Oxford on the 5th inst., and gave rise to considerable discussion. Mr. West, rector of Charlbury, opposed the grant on anti-vivisection grounds. The question was not, he said, a clerical or a professional one. It was a lay question, to be decided by the general sense of physiologists and laics combined. And, as it might possibly be said it was a question of confidence in the Professor, he quoted expressions of the Professor in favour of the propriety of vivisection in certain cases. The Warden of New College objected to the outlay on economical grounds. The University had borrowed largely, and, in common honesty, must learn to do without things it would much like to have. The Warden of Keble observed that he was sorry to seem to oppose scientific studies, to which, in fact, he bore goodwill. But the Professorship was the foundation of a new school of study, the bases of which must, therefore, be looked to. The University had received the Professor himself with honour and cordiality; but the Professor, though he guaranteed abstention from vivisection in his teaching, had refused to pledge himself as to research

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Moreover, it was not possible to dissociate altogether the abuses of vivisection as practised abroad from its practice as advocated even by a humane professor. Mr. Romney spoke on behalf of the humanity of science, and of doctors as the priests of suffering nature. Dr. Acland pointed out that vivisection did not constitute the main part of physiological inquiry; and spoke strongly of the importance of the subject in relation to medicine. The Waynflete Professor, Dr. Burdon-Sanderson, observed that, with regard to the question of the moral relation of man to animals, he had endeavoured to form conscientiously his own principles, to act in accordance with them, and in practising vivisection to avoid all unnecessary pain. He did not intend that students should make experiments involving vivisection, or that such experiments should be used for purposes of instruction. But beyond this he could not go as to the use of animals in investigation, given the conditions that, as hitherto, he should do his utmost to limit suffering. The use of experiments on animals was, he maintained, necessary. The question being at last put to the vote, the grant was carried by a majority of three, eighty-eight votes being given for, and eighty-five against it. The University Commission, in establishing the new Professorship, had not supplied any funds for the plant required; and while they had established a University fund, they had forbidden its application to this purpose, though at Cambridge it was allowed. There seems to be some doubt whether instruments for the laboratory may be provided out of this fund, or whether the University will be called on for a fresh grant.

IS SCURVY INFECTIOUS?

If the question, Is scurvy infectious? had occurred at any time to the majority of medical men, it would probably have been dismissed with a half-thought as an impossibility. Nevertheless, an Italian doctor, Luigi Petrone (*Central. für Klin. Med.*, No. 21), seems to have seriously entertained the notion, and apparently believes, that scorbutus is an infectious complaint. He bases his belief on the result of experimental inoculation performed on two animals. The blood from a vein on the back of the hand of a patient the subject of scurvy was injected under the skin of two rabbits. After a few days, and without any other symptom than some fever, the animals died. At the post-mortem examination extensive blood extravasations were found under the skin of the back and ears as well as in the meninges. The other organs, including the spleen, were normal. We must confess that, to our mind, the results of Dr. L. Petrone's investigations prove absolutely nothing.

A CASE OF SMALL-POX IMPORTED INTO DUBLIN HARBOUR.

At the weekly meeting of the Board of Guardians of the South Dublin Union on Thursday, May 31, Dr. Byrne, one of the medical officers, reported that on the previous evening a ship, the *Ardmore*, had arrived in Dublin Bay with a case of small-pox on board. He at once visited the ship in company with Dr. Charles A. Cameron, Superintendent Medical Officer of Health for Dublin, and they found that the patient, a sailor, was labouring under an attack of confluent small-pox. He was removed to the port hospital-ship, which, fortunately, had not been abolished, as had been proposed last summer (*Medical Times and Gazette*, page 51, vol. ii. 1882). The *Ardmore* was placed in strict quarantine, none of the crew being allowed to go on shore, and orders were given that no person would be permitted to board her—not even the revenue officers—until it was safe to do so. The patient's clothes and bedding were destroyed by fire, and every means were taken to prevent the spread of infection. Dr. Cameron, who was present, said he was glad to be able to report that they found everything on board the hospital-ship in excellent order. The Board of Guardians approved the action of the medical officers, and appointed a special nurse to take charge of the patient. At Dr. Cameron's suggestion, they also resolved to appoint a temporary medical officer to attend the sick man at a salary of one guinea per diem. Drs. Byrne and Cameron are to be congratulated on the prompt measures they took to protect Dublin from another invasion of small-pox; and the enlightened spirit in which the Board of Guardians endeavoured to give effect to the recommendations of the medical officers deserves recognition.

THE BALFOUR STUDENTSHIP, CAMBRIDGE.

The subscribers to the "Balfour Memorial Fund" have handed over to the University of Cambridge £6500 in railway securities, on condition that the regulations for the administration of the fund as adopted by the subscribers be approved by the University. These regulations provide that the fund shall be called the Balfour Fund, and shall be devoted to the furtherance of original research in biology. The income of it is to be used—1, to endow a studentship, the holder of which shall devote himself to original research in biology, especially animal morphology; 2, to further, by occasional grants of money, original research in the same subject. The Balfour Studentship is to be of the net annual value of £200, or such larger sum as the University shall from time to time determine, and shall be tenable for three years. It is not to be awarded from the result of a competitive examination, and the student shall not necessarily be a member of the University. The student is not to be at liberty during his tenure of the studentship to follow systematically any business or profession, or engage in any educational or other work which, in the opinion of the administrators, would interfere with his original inquiries, but is to devote himself to original biological inquiry. Stringent regulations are proposed for the purpose of showing that the holder of the Studentship for the time being is fulfilling the objects of it. Grants in aid of original research in biology may be made from the fund, either to the Balfour Student, or to any other persons engaged in research.

FEMALE DRESS REFORM.

Amongst the buzzing questions of the day, one of the most popular, perhaps, and most futile, is the future style of dress to be adopted by the female sex. Two exhibitions are at this moment inviting inspection—one in Piccadilly, organised by the Rational Dress Association; and another at Knightsbridge, opened under the auspices of the Hygienic Dress Association. Whether either of these will bring about the radical reform which each of them considers necessary in the apparel of the softer sex, is open to question; meanwhile, in order that the subject should not be allowed to drop out of public attention, Lady Harberton recently delivered a lecture at St. James's Hall, at a *conversazione* of the London Literary and Artistic Society, on the all-important question of "Rational Dress." Dealing first with the question of form, Lady Harberton urged that by the present mode of dress the true lines of nature were not only not followed, but were actually reversed. Any observer of animal life, she contended, must have noticed that the slightest interference with locomotion caused necessarily a loss of power, and this was the very thing that was done by the present form of women's dress. Every inch of drapery below the knee caused fatigue and loss of power. Drapery was beautiful, it was true, but when it was allowed to leave its proper place it was robbed of its greatest charm. She believed the first step towards rational dress would not be taken until women would wear

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some form of divided skirt, having for its object perfect freedom of movement of the most important limbs of the body. It had been urged that this dress would be unwomanly, but she maintained that nothing would be unwomanly which had for its object what was necessary and true. Whatever change women chose to make in their dress, that form of dress would, of course, be exclusively worn by the sex; and they had to remember that it was necessary, in order to go through life successfully, to have that which enabled the sex to perform their duties and enjoy their pleasures in the best possible manner. Speaking on the question of stays, Lady Harberton said no sane person could doubt that the steel of the corset forced downward the internal organs; and medical experience showed that 77 per cent. of the internal ailments of women were caused by tight and improper clothing. We do not know where Lady Harberton gets her statistics, but her style of address appears well suited to her subject, and to the tastes and talk of the times,—it is dogmatic, has a veneer of reasoning and learning, and a dash of quasi-philosophical catch-words.

PRE-HISTORIC MAN.

THE *Union Médicale* of June 2 announces a discovery of the highest scientific interest, and which, if it turns out to be real, will show that pre-historic man is no longer a myth. On piercing a new gallery in a coal-mine at Bully-Grenay (Pas-de-Calais), a cavern was broken into containing six fossil human bodies intact—a man, two women, and three children—as well as the remains of arms and utensils in petrified wood and stone, and numerous fragments of mammals and fish. A second subterranean cave contained eleven bodies of large dimensions, several animals, and a great number of various objects, together with precious stones. The walls were decorated with designs of combats between men and animals of gigantic size. A third and still larger chamber appeared to be empty, but could not be entered in consequence of the carbonic acid it contained, and which is being removed by ventilators. The fossil bodies have been brought up to the surface, and five of them will be exhibited at the *mairie* of Lens; the others are to be sent to Lille in order to undergo examination by the Faculté des Sciences. Representatives of the Académie des Sciences of Paris and of the British Museum, having been telegraphed, are expected to be present.

THE IRISH MEDICAL ASSOCIATION.

ACCORDING to custom, the annual general meeting of this incorporated Society took place on the first Monday in June at the Royal College of Surgeons, Stephen's-green, Dublin. The outgoing President, Dr. James Molony, of Tulla, county Clare, occupied the chair. Dr. John Henry Chapman, Honorary Secretary, read the annual report, in which it was stated that during the past year the steps necessary to have the Irish Medical Association incorporated had been completed, and that it now enjoys the status, duties, and privileges of an incorporated society. The report stated further that the Medical Act Amendment Bill, as introduced, provided effectually for the objects which the Association has advocated for many years past, *i.e.* (*a*) admission to the practice of the profession through one central examining body for each division of the kingdom; (*b*) reconstitution of the General Medical Council, with direct representation of the profession thereon; (*c*) increased stringency of the law for the repression of illegimate practice. But, in committee, a change of which the Association could not approve was made, namely, the King and Queen's College of Physicians was left with insufficient representation on the Medical Board for Ireland. Moreover, the direct representative had no seat at the Board, and therefore no direct influence in the important questions which are placed in the hands of the Board for settlement. In these and other minor respects the Bill was still open to improvement. The report referred to other matters concerning which the Association had taken action; and dealt with an important case, in which grave injustice was attempted to be done to a prison surgeon in the matter of payment of a substitute; and also with the vexed question of fees payable to medical witnesses. On this latter point the Council expect soon to be able to present to His Excellency the Lord Lieutenant a convincing statement that the fees and allowances now fixed are not reasonable for members of the medical profession. The report was adopted, and resolutions approving the principle of the "Medical Act Amendment Bill," the "Union Officers' Superannuation (Ireland) Bill, and Mr. Meldon's "Notification of Infectious Diseases (Ireland) Bill," were unanimously adopted. On the declaration of the ballot, Dr. Archibald H. Jacob, the newly elected President, took the chair, after which the proceedings terminated with the usual votes of thanks.

DR. DUDFIELD'S REPORT ON THE HEALTH OF KENSINGTON.

THE report of Dr. T. Orme Dudfield, the Medical Officer of Health, on the sanitary condition of the parish of Kensington for the four weeks from March 25 to April 21 contains the following remarks. The severe weather of the past few weeks has told heavily on the public health, as shown by a great rise in the rate of mortality, due to an increase in the number of deaths of young children and of aged people and of persons at all ages from diseases of the chest. For the first time this year the death-rate (19·1 per 1000) approximated somewhat closely to the decennial rate (20·6 per 1000); in the two previous months respectively the rate was 14·9 and 17·0 per 1000. The death-rate in the metropolis was 25·2 per 1000, or 1·2 per 1000 above the decennial average (24·0 per 1000), and 6·1 per 1000 above the rate in Kensington. The deaths of children under five years of age in the four weeks under notice were 22 more than in the previous four weeks, in which, moreover, they were 23 above the number in the preceding month. The deaths from chest diseases were 16 more than in the previous four weeks. It may be stated that the mean temperature of the air in the four weeks now under report was 44·8°, or 0·8° below the mean in the corresponding weeks of the previous ten years. The most satisfactory feature in respect of the public health of this period, Dr. Dudfield observes, was the continued lowness of the zymotic death-rate. The deaths from the principal diseases in this important class, which were 12, 21, and 19 respectively below the corrected decennial average in the previous three months, were 16 below the average in the four weeks dealt with by this report, the total having been 14, and the average 30. Only 9 cases of scarlet fever were recorded in the four weeks, and 1 very mild case of small-pox, the latter being but the second recorded in this parish during the present year.

PERIODIC RECURRENT PARALYSIS OF OCULAR MUSCLES.

A REMARKABLE case of paralysis of the ocular muscles, coming and going every month simultaneously with the appearance and disappearance of the catamenia, has been recorded by von Hasner (*Centralblatt für Klin. Med.*, No. 21). It occurred in a girl aged seventeen years, of good physique, who had suffered since her thirteenth year from ptosis of the left upper eyelid, which set in every month, lasted three days, and was accompanied at its commencement by headache and vomiting. Menstruation began at the age of fifteen years, when it was observed that this

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coincided with the monthly ptosis of the left eye. The author had the opportunity of seeing the patient at the onset of one of her periods, and then made out total palsy of the muscles of the left eye; the second day of the menstrual period witnessed a regression of the paralysis of the left eyelid, of the headache, and vomiting. With the cessation of the menses on the third day a gradual restoration of the movements of the eye took place, the pupil remaining dilated a little while longer.

VOLUNTEER MEDICAL ORGANISATION.

A MEETING of the Executive Committee of the Volunteer Medical Organisation was held on Friday, June 1, at Charing-cross Hospital, when the Secretary stated that considerable progress had been made in the movement, favourable expressions of opinion having been received from a great many hospital physicians and surgeons in London and the provinces. Volunteer surgeons to the number of fifty-one have already placed their names on the General Committee; and all the medical schools have now representatives on either the Executive or General Committee. The Secretary was directed to convey to Messrs. Savory and Moore the thanks of the Committee for the kind grant of twenty field haversacks complete for the use of the ambulance company at Charing-cross Hospital. The National Aid Society have very courteously allowed the Organisation to hold committee meetings at, and to have letters addressed to, their offices at 5, York-buildings, Adelphi. Besides Charing-cross Hospital, where a trained company already exists, St. Bartholomew's is about to take up the movement on a large scale. The London and St. George's are also moving in the matter.

ELECTION OF OFFICERS OF THE IRISH MEDICAL ASSOCIATION.

THE following officers for the ensuing year were elected by ballot at the annual meeting of the Association on Monday, June 4:—*President:* Dr. Archibald Hamilton Jacob. *Vice-Presidents:* Leinster—Dr. James Ridley, Tullamore; Ulster—Dr. Bagot, Enniskillen; Munster—Dr. G. Peirce, Newcastle, Limerick; Connaught—Dr. R. J. Kinkead, Galway. *Council:* Drs. C. Bent Ball, Dublin; Parsons Berry, Mallow; J. W. Boyce, Stillorgan; R. Browne, Rathmines; W. Carte, J.P., Dublin; H. G. Croly, Dublin; T. Darby, Bray; T. Drapes, Enniscorthy; R. V. Fletcher, Ballinasloe; J. R. Harvey, Dublin; R. S. Hayes, Naas; G. M. Hearn, Cavan; W. J. Hepburn, Dublin; David Jacob, Maryborough; J. B. Kelly, Drogheda; James Martin, county Waterford; A. Meldon, Dublin; W. Malcomson, Cavan; G. J. Mackesy, Waterford; R. M'Donnell, Dublin; Francis V. M'Dowell, Baltinglass; G. Morrogh, U.S. Club, Dublin; J. Molony, county Clare: A. O'K. Nolan, county Galway; J. F. Pollock, Dublin; G. H. Porter, Dublin; T. Purcell, Dublin; A. O. Speedy, Dublin; J. M. Tabuteau, Portarlington; R. M. Taggert, Monkstown; J. W. Usher, county Dublin; and J. L. Walshe, Kilmacthomas. *Auditors:* Dr. Albert Croly, Rathfarnham; Dr. H. Colpoys Tweedy, Dublin.

COLLEGIATE LECTURES.

PROFESSOR HUTCHINSON, F.R.S., will deliver a course of six lectures, "On certain Diseased Conditions of the Tongue, with especial reference to their Meaning as Symptoms," in the theatre of the Royal College of Surgeons, on Wednesdays, Fridays, and Mondays, at 4 p.m., commencing on Wednesday, June 13. The following is the syllabus of the two lectures to be delivered next week:—Lecture I. (Wednesday, June 13)—Definitions and General Statements: introductory; topography of tongue; terms in use; anatomical explanation of various typical states; fur on tongue; unilateral fur; absence of fur; fur in patches; bald tongues; bald patches; the "parrot's tongue"; the beefy tongue; dryness of the tongue; leucomata (two forms); sulci; fern-leaf pattern; indentations; unilateral atrophy; circinate or "ringworm" tongue; black tongues; speckled tongues; congenital and family peculiarities in the tongue. Lecture II. (Friday, June 15)—States of Tongue in association with various Acute Diseases: after accidents; in various forms of fever; ptyalism; herpes; septicæmia; gloss-anthrax; acute glossitis; glossitis and stomatitis; with eruptions on the skin; clinical account of a peculiar group of cases.

THE IRISH REGISTRAR-GENERAL'S RETURN FOR THE DECEMBER QUARTER, 1882.

THE Registrar-General for Ireland, in his return for the fourth or December quarter of 1882, reports that during that period the number of births registered was 27,971, equal to an annual birth-rate of 22·0 in every 1000 of the estimated population; and the number of deaths recorded was 22,636, representing an annual rate of 17·8 per 1000. In the same period the emigration returns give the number of persons emigrated as 10,946; it would therefore appear that a decrease of 5611 has taken place in the population during the fourth quarter of the past year, which was estimated in the middle thereof to be 5,088,079. In England during the corresponding quarter the birth-rate represented was 33·0 in every 1000 of estimated population, and the death-rate 20·2. The birth-rate in Ireland during this quarter was slightly under the rate for the corresponding quarter of 1881, and 0·9 per 1000 under the average of the five years 1877-81. The deaths were above those registered in the corresponding quarter of 1881, to the extent of 2859; the death-rate is 2·4 per 1000 above the rate for that quarter but only 0·6 over the average for the fourth quarter of the five years 1877-81. The county death-rates ranged from 11·3 in Mayo to 25·0 in Dublin: between these rates the lowest five were Leitrim (12·6), Roscommon (12·7), Galway (13·5), Donegal (13·8), and Clare (14·0); and the highest five were Antrim (23·3), Carlow (22·2), Wexford (21·2), Armagh (21·1), and Westmeath (19·7). The Registrar-General remarks that the returns for the December quarter of 1882 cannot be considered favourable when compared either with the previous quarter of the same year, with the corresponding quarter of the preceding year, or with the average of the previous five years. Thus, while in each of the first three quarters of the year 1882 the death-rate was below the average, in the fourth quarter it rose above the average. This sudden increase of the relative death-rate at the end of what was otherwise a favourable year must be attributed, he goes on to say, to the sudden and excessive cold which was experienced in Ireland on December 5 last, extending without intermission to the 15th of the same month. A reference to the Registrar's notes shows that in a large number of cases the increased death-rate is attributed to this cause; the excessive cold fell with the greatest severity upon persons of advanced age. In the fourth quarter of 1881 the deaths of those over sixty years of age numbered 7763, or 39·3 per cent. of the total deaths, while in the corresponding quarter of 1882 they numbered 9707, being 1944 more, and equal to 42·9 per cent., or 3·6 per cent. more. A reference to the returns published weekly for the large towns shows that this excessive mortality chiefly occurred during, or immediately after, the period of intense cold referred to. The fatal cases of zymotic diseases, too, show a slight increase as compared with the previous quarter, but do not form so large a percentage of the total deaths. There was an increase in all

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the principal forms of zymotic disease, except fever and diarrhœa, the former showing a slight, the latter a considerable diminution. Only six deaths from small-pox were registered during the quarter, five of which occurred in Belfast Union, and one in Londonderry. The registrars of the 800 sub-districts in Ireland, in their notes, report the prevalence during the quarter under notice of the following diseases: small-pox in 3 districts; measles in 62; scarlet fever in 44; diphtheria in 6; whooping-cough in 24; and fever in 57 (typhus in 22, enteric in 24, and fever in 11).

THE STROUD URBAN AND RURAL SANITARY DISTRICTS.

The appointment of Medical Officer of Health for the Stroud Urban and the Stroud Union Rural Sanitary Districts is held by Dr. Thomas Partridge, and in his ninth annual report for the year 1882 he records that the birth-rate of the former for the period was 32·7, of the latter 29·08 per 1000; and the death-rate 23·8 in the former, and 15·4 in the latter. In the Urban District the highest rates of mortality were during the first, second, and fourth quarters of the year, and were chiefly due to chest affections and deaths amongst old people. A study of the meteorology of the period named shows that cold and wet were the distinctive features of the past year, and these, while not favourable to the propagation of miasmatic affections, had nevertheless a bad effect on old people and those with chest complaints. The town of Stroud has, the report says, an excellent supply of good water, and the new reservoir, which is in course of construction, will give an ample quantity. This is of the more importance, as a great deal of the water now used locally is obtained from wells, nearly all of which are polluted. In the Rural District, Dr. Partridge points out the number of uncertified deaths amounted to twenty-eight, or about 6·2 per cent. of the total deaths—a large proportion, he thinks, to be recorded on the very doubtful testimony of friends or nurses. Nearly one-half were infants under one year, and the statements of death were as vague as "probable inflammation," "probable convulsions," etc. For the Urban District four of the deaths recorded were uncertified, one of them being returned as "rheumatics of heart." There can be no doubt, Dr. Partridge thinks, that if many of these cases had been submitted to proper medical treatment, life would have been either saved or prolonged.

PAPILLITIS AS AN EARLY SIGN OF SYMPATHETIC OPHTHALMITIS.

In the May number of the *Ophthalmic Review*, Mr. A. H. Benson asks whether papillitis is present in all cases of sympathetic affection of the eye, and if so, whether it is the earliest pathological manifestation of that condition, or whether it appears after the uveitis has shown itself, or if it is only secondary to this. Mr. Benson quotes Mackenzie and Leber as believing that papillitis is the earliest symptom, and he proceeds to show that neuro-retinitis is almost constantly found in the damaged eye after enucleation. Such being the case, there is no difficulty in admitting the great probability that the inflammation would travel through the commissure to the other eye. Mr. Benson concludes with the following suggestions:—1. It is probable that most cases of sympathetic inflammation are ushered in by a more or less marked papillitis. 2. That it is advisable, in all cases where sympathetic inflammation is feared, to examine systematically and at short intervals the papilla of each eye, and to note its condition. We think the subject is one of considerable importance, and some allusion was made to it during the discussion on Mr. Milles's paper at the last meeting of the Ophthalmological Society. Doubtless the present communication will stimulate observers to take note in future whether papillitis is present or not in sympathetic ophthalmitis whenever they feel that they can do this without risk of injury to the patient.

THE HEALTH OF CYPRUS.

Though somewhat late in making its appearance, the report of Dr. Barry, late Sanitary Commissioner of the island of Cyprus for the year 1881, will be perused with interest. It is not possible for us to give anything approaching to a summary of this report, and we must be content with briefly noticing one or two points. The public health throughout the island was satisfactory. Ague and remittent fever were prevalent during the autumn, but in a mild form. Ophthalmia seems very common, and one of the district medical officers attributes it to atmospheric influences. It is interesting to note that the people willingly submit to vaccination; the only time when there is any prejudice against it appears to be during the winter months. Of the primary vaccinations 87·3 per cent. were reported to be successful, 9·5 per cent. to be unsuccessful, and 3·1 per cent. did not present themselves for examination on the eighth day. The leper farm affords accommodation for about fifty patients. Dr. Barry was much impressed by the amelioration of some of the symptoms from the use of the chaulmoogra oil—*e.g.*, the absorption of the tubercles and the healing of some of the ulcers,—and he considers that a great improvement would probably take place if the patients were properly dieted. The outdoor dispensaries were attended by much larger numbers than during the previous year, and Dr. Barry expresses his belief that they are regarded by the inhabitants as one of the greatest boons conferred by the British occupation. A complete census was taken of the island on April 4, and rough tables of the result are given pending the publication of the full report. It is noteworthy that though this was the first census ever taken there was no opposition to it amongst the inhabitants. After a residence in Cyprus of nearly two and a half years, Dr. Barry thus speaks of the island: "From a careful observation of the country and climate, I have no hesitation in saying that, with proper precautions as to dwellings, food, and sanitary arrangements, it is well fitted for the residence of English people. From its physical features the island possesses the advantage of offering the choice of a variety of climates. Persons preferring a damp atmosphere can have it by remaining at the coast, whilst those to whom a drier air is more suitable can reside at or near Nikosia, and both may retire from the heats of summer to the bracing heights of Troodos. For phthisical cases Cyprus is a station second to none in the Mediterranean, and there can be no doubt that when the reformed municipalities have thoroughly attended to the wants of their respective towns, Cyprus may look forward to becoming one of the favourite health-resorts of the Mediterranean."

At a congregation of the University of Cambridge, held on June 1, the following degrees were conferred:—Doctors of Science—Edward John Routh, St. Peter's; and William Henry Besant, St. John's. Bachelor of Medicine—Adolphus James Richardson, King's.

The following have been appointed electors to the Professorship of Surgery in the University of Cambridge:—Mr. W. Bowman, LL.D.; Mr. William Cadge, F.R.C.S.; Mr. Timothy Holmes, M.A., F.R.C.S., late of Pembroke College; Sir James Paget, F.R.C.S., F.R.S., LL.D.; Mr. Michael Foster; Mr. Joseph Lister, F.R.C.S., F.R.S., LL.D., Professor of Clinical Surgery, King's College, London; Professor Paget; and Dr. Ferrers, Master of Gonville and Caius.

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In order to raise the whole question of the efficiency and services of the Army Medical Department during the campaign in Egypt, it will be proposed, when the Army Estimates are considered, to reduce Vote 4.

Dr. G. Ernest Herman has been appointed Obstetric Physician to the London Hospital, and Lecturer on Midwifery in the School, in place of the late Dr. Palfrey.

Mr. Knowsley Thornton, M.B., C.M., has been elected an Honorary Fellow of the American Gynæcological Society.

Professor James Dewar, M.A., F.R.S., has been reappointed as Fullerian Professor of Chemistry at the Royal Institution of Great Britain.

The Weekly Board of Governors of St. George's Hospital, having heard that the question of the removal of the institution is being considered by some of the governors, have passed a resolution stating that, in their opinion, "such a step would be most undesirable and prejudicial to the interests of the Hospital, and cannot be entertained."

The Duke of Westminster will contribute £500 to the Smoke Abatement Fund recently opened by the Council of the National Smoke Abatement Institution.

The subscribers to the Rolleston Memorial Fund have offered £1200 to the University of Oxford for the institution of a biennial prize for original research in subjects comprised under the heads of Animal and Vegetable Morphology, Physiology and Pathology, and Anthropology, to be selected by the candidates: the prize to be open to members of the Universities of Oxford and Cambridge, of not longer standing than ten years after the date of matriculation.

MEDICAL MATTERS IN PARLIAMENT.

House of Lords—Thursday, May 31.

The Disused Burial-Ground of St. James's, Westminster.—On the motion for the second reading of the London and North-Western Railway (Additional Powers) Bill, Lord Mount-Temple moved—"That it be an instruction to the Committee to which the Bill is referred that the railway company shall not be empowered to appropriate a larger portion of the parochial burial-ground of St. James's than is proved to be absolutely required for the necessary convenience of the travelling public, by means of the enlargement of the railway-station and of the substitution of a new street in lieu of the existing street which is to be absorbed in the process of the enlargement of the station." The question which he desired to raise was, he said, one of policy and principle, and ought therefore to be decided by the House, and it would not, without an instruction, be entertained by the Committee. An open space in London ought not to be sacrificed unnecessarily; and the Metropolitan Board of Works desired to take charge of the burial-ground, and to maintain it as a place of public recreation. The railway company sought to take two portions, one of which they did not require, for they admitted they hardly knew what to do with it, and proposed to utilise it for stabling and the storage of omnibuses.—Several of the peers spoke against the proposed instruction, and in support of the railway company.—The Earl of Dalhousie observed that the company had originally asked for only a small portion of the ground, but the trustees of St. James's parish insisted on the company taking two-thirds of the ground, and paying £15,000 for it, which sum would be devoted to ecclesiastical purposes in St. James's parish. The neighbourhood of the burial-ground was a very populous and very poor one, and greatly needed open spaces.—Lord Fortescue, Lord Carnarvon, and Lord Camperdown also strongly supported the motion for the instruction.—Lord Cairns objected to it, on the ground that an instruction to a committee was necessary to enlarge the power of a committee and to enable them to do that which otherwise they could not do. There was no precedent for an instruction to limit the powers of a committee and to require them to do their duty in a particular way.—The Lord Chancellor thought the principle laid down by Lord Cairns a very dangerous one; but the Marquis of Salisbury supported it as stating what had been the practice; and eventually Lord Mount-Temple's motion was negatived by a large majority.

The Earl of Rosebery introduced a Bill for the Better Protection of Young Girls; and it was read a first time.

House of Commons—Monday, June 4.

The Indian Medical Service.—Mr. Leamy asked the Under-Secretary of State for India whether, seeing that there is an exceptionally large number of junior medical officers in India drawing unemployed pay, the India Office intended to throw open five appointments to competition in August next.—Mr. Cross replied that it had been decided, the present exceptional state of affairs notwithstanding, not to put an entire stop to the admission of officers to the Indian Medical Service for two reasons—(1) in order to insure hereafter an equable succession of officers to the higher posts; and (2) because an entire stop would inflict hardship on the large number of students who had been reading with this Service in view. The number of appointments had this year been reduced to the lowest point compatible with those objects. The average number of appointments in the last five years had been thirty-three; this year it had been reduced to ten.

Tuesday, June 5.

Vaccination Prosecutions.—Mr. P. A. Taylor asked the President of the Local Government Board whether he knew that Mr. C. J. Neale was, on the 24th ult., fined by the Bristol magistrates £6 and costs for the non-vaccination of six of his children, while he had previously paid about £90 fines and costs on account of the same children; and whether he would take such steps as had been taken by the Board in 1875 in deprecation of repeated prosecutions.—Sir C. Dilke replied that he did not know the exact amount of the fines inflicted in the case mentioned, but he believed they were of considerable amount. The Local Government Board were considering whether they should send to the Bristol Guardians a circular similar to that sent in 1875 to the Evesham Guardians in deprecation of these repeated prosecutions.

FROM ABROAD.

Treatment of Nævus Maternus.

Dr. Little, Professor in the New York Post-Graduate Medical School, in a recent lecture (*Phil. Med. News*, May 19) thus describes his mode of treating nævi:—

"I have met with a large number of examples of this disease, and I have never failed to cure the cutaneous variety by the introduction of heated needles into the base of the tumour. If this be small, one operation is generally sufficient; in larger tumours several operations may be required before the cure is complete. I will now proceed to operate upon this case. But first as to the needles used. It has always been my practice to employ a shoemaker's awl, which is slightly curved at the point and flattened. Such an instrument is much larger than the needles that are generally used for this purpose. My assistant holding the child, I place the head (face upwards) between my knees, as in this way I have perfect control of its head. Another of my assistants holds the alcohol lamp at my right side, in which I heat the end of the awl to redness, and then plunge it into the tumour. The manner of introducing the awl is of importance. It should be thrust into the base of the tumour and towards the centre—not into the top. Holding it there a moment, I withdraw it, and re-heat it preparatory to a second introduction. There is scarcely any bleeding. This procedure is repeated until the entire circuit of the base of the tumour is completed. Please observe that I

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plunge the awl in at the juncture of the skin with the tumour, and push it downwards and inwards. If punctures are made only at the top of the tumour very little is gained by the operation. You should strive to destroy the vessels at its base. Having completed the circuit, I now make a few punctures in the most prominent part, over the surface of the nævus. The swelling has now become very much reduced in size. One of the punctures which I have just now made into the surface of the tumour is followed by a free flow of blood almost equal to an arterial jet. A second introduction of the needle fails to arrest the hæmorrhage. Under such circumstances you will find that the best method of arresting the bleeding will be to make firm pressure over the bleeding point with a sponge for a few minutes. This I have never known to fail in stopping it. The needle is introduced at a black heat—that is to say, although heated to redness in the flame of the lamp, before you reach the tumour the redness has disappeared. Although the child cried during the operation, it did not seem to be suffering very much, and now that I have completed the operation the patient has ceased crying. No special dressing is required; I generally advise, however, that the part be covered with a light compress wet with cold water during the first night.

"Two weeks later the patient was again brought to the clinic, when it was observed that a decided change for the better had taken place, the tumour having shrunk to less than a third of its former size. It was much flatter, and the redness over its surface had almost entirely disappeared, except at one or two points. Two or three additional punctures with the hot awl were made, it being introduced as before into the base of the vascular prominences rather than into their summits. It was predicted that this second operation would be all that was necessary to effect a cure, and that only a very slight cicatrix would remain. There are two other methods of heating needles, namely, by means of galvano-cautery and Paquelin's thermo-cautery. The points coming with these apparatuses, however, are larger than those made by the awl, and the apparatuses themselves are clumsier and much more expensive than the simple alcohol lamp and shoemaker's awl."

A Combatant Anti-Vivisectionist.

The *Gazette Hebdomadaire* (June 1) gives the following exact version of an occurrence which we referred to in our last, page 632:—"Towards the end of his spring course Prof. Brown-Séquard had commenced a series of experimental lectures in order to demonstrate the new facts which he had adverted to. It is well known that he has discovered that general analgesia (without loss of tactile sensibility) may be produced by irritating the laryngeal mucous membrane by carbonic acid gas or the vapour of chloroform, when certain precautions are taken to prevent these substances entering the lungs. He had prepared for an examination of the sensibility in a little monkey, who three days before had been submitted to an experiment of this kind; but a few minutes before commencing the lecture he was about to divide the sutures of a wound near the larynx, when a young lady gave him a rap on the knuckles with her parasol. Requested to leave the theatre, the lady refused to do so, declaring that by virtue of the Grammont law she had full right to prevent the perpetration of cruelty against an animal in a 'public place.' The Professor having recommenced his procedures, she endeavoured to strike him again, but this time the blow was arrested by the bystanders, and she was consigned to the police. It has been said that M. Brown-Séquard was about to divide the vocal cords, in order to 'prevent the fearful cries of the poor brute'; but he would have been very careful not to do that, seeing that his object was precisely to assure himself of the sensibility of the monkey, which after all uttered no cries at all, in spite of the return of this property. The question to be resolved was to ascertain whether the analgesia by carbonic acid (which in the monkey continues for at least twenty-four hours after irritating the laryngeal mucous membrane) still lasted at the end of three days. The sensibility, as stated, had returned. This incident led to Prof. Brown-Séquard delivering, on another day, a lecture on 'The Utility of Vivisections,' on which occasion the theatre was crowded to overflowing, the lecture being received with the warmest applause."

REVIEWS AND NOTICES OF BOOKS.

The Pathology, Diagnosis, and Treatment of the Diseases of Women. By Graily Hewitt, M.D. Lond., F.R.C.P., Professor of Midwifery and Diseases of Women, University College, and Obstetric Physician to the Hospital; formerly President of the Obstetrical Society of London, etc. London: Longmans, Green, and Co. 1882. Pp. 908.

This book may be said to be the organon of the mechanical pathology of the diseases of women.

According to it, the most prevalent source of disease of the female generative system is found in the changes of shape and position to which the uterus is liable. It is assumed that the uterus ought to be almost mathematically straight, and that it ought to occupy a median position in the pelvis. If it is bent to an extent more than nominal, or if it leans forwards so that its anterior surface can be felt, or backwards to the extent that the finger can explore its posterior aspect, a morbid condition is present. If the bending or the turning be slight, the symptoms produced may be only slight; but if considerable, the effects will be proportionately grave. We say "assumed," because the weak point of the theory is the want of evidence in support of the premises upon which it rests. It is admitted by all, even by Dr. Hewitt, that flexions and versions may occur without symptoms. Dr. Hewitt takes for granted that these are exceptional cases—like, for instance, cases of peritonitis without pain,—but there are others who say, and have brought forward much evidence to prove, that such cases are the rule; that the so-called flexions and versions are common in healthy women, and they often coincide with symptoms due to other causes, simply because they are so common. This view, for anything that this book contains, would seem never to have occurred to its author, for he offers no facts showing, and does not seem to have tried to find out, in what proportion of healthy women flexions and versions occur. It is also assumed that when flexion is present the patency of the uterine canal is interfered with, producing retention of menstrual and other secretions, and secondary morbid changes due to such retention, and that the vessels get strangulated, leading to congestion of the organ. When the uterus is retroverted and anteverted, congestion and all sorts of other troubles in some way result. These results of changes in the shape and position of the uterus are so exceedingly common that their correction constitutes three-fourths of the work of the gynæcologist. Those who reject this view point out that (with the exception of cases in which adhesions have fixed the uterus—cases in which the labour of the mechanical gynæcologist in rectifying the position of that organ is quite in vain), in spite of the great frequency of these imagined morbid processes, no one has ever yet found any trace of them on post-mortem examination. This objection, also, Dr. Hewitt either overlooks or thinks unworthy of notice. His great, indeed almost his only, argument (for we do not call argument the description of processes which, upon hypothesis, ought to take place) is the effect of treatment. He finds patients get well in whom the flexions are treated; and therefore infers that the flexion is the essential cause of the derangement of health. The argument is one of *post hoc, ergo propter hoc*, and would be cogent enough if every other cause of amelioration of the patient's condition were excluded. But Dr. Hewitt holds that the great cause of flexion is chronic starvation, which leads to softening of the uterus, permitting flexion to take place, and he treats it by feeding the patient and keeping her in bed. Is it not usual for patients suffering from starvation and overwork to get well when they are given abundant food and rest? We think so, and therefore it seems to us the beneficial effect of such treatment does not demonstrate that the state of the uterus was the cause of ill-health.

We have indicated Dr. Hewitt's general line of argument, and the objections that seem to us to account for the fact that his views are not universally accepted. It is impossible in the space that we can spare to follow out either aspect of the subject in detail. Dr. Hewitt regards the opposition to his views, which some workers at the subject offer, as illustrative of the slowness with which truth finds acceptance. There may be some who would think the facility with which his theory has been adopted by many of his brethren

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an example of the readiness of the unthinking to accept a plausible hypothesis without investigation. Whichever view be nearer the truth, we must leave our readers to judge for themselves. We will only say this, that Dr. Hewitt's dispassionate, ingenious, courteous, and temperate advocacy, with his high professional character and extensive knowledge, forms an introduction for his views of the most favourable kind.

The Students' Guide to Surgical Diagnosis. By CHRISTOPHER HEATH, F.R.C.S. Second Edition. London: J. and A. Churchill. 1883. Pp. 240.

IN noticing the first edition of this work we alluded to the value, as well as the defects and dangers, of such text-books as the one now before us. We expressed a want of sympathy with "the dogmatic and hard-and-fast method of clinical teaching," scuh as is necessarily implied by the aphorismic style in which this and similar works are written. As a guide, however, to students engaged in note-taking in the wards, or as a summary of points which have been more fully studied in some text-book—purposes which the author had distinctly in view—this book has had, and will have, its uses. Mr. Heath's experience as a clinical teacher for some years has taught him that even a well-read student often finds a difficulty in bringing his knowledge to bear promptly and efficiently upon the patient before him; this work is intended to help him over the difficulty. The need of a new edition amply testifies that the book has been appreciated, and justifies its *raison d'être*; and, if studied as a summary of knowledge learned from some larger text-book, it will be found most useful, and we doubt not will continue to be largely used.

Refraction of the Eye: its Diagnosis, and the Correction of its Errors; with chapter on Keratoscopy. By A. STANFORD MORTON, M.B., F.R.C.S. Ed. Second Edition. London: H. K. Lewis. 1882. Pp. 60.

THAT this little book supplies a distinct want is shown by the rapidity with which it has run through its first edition. It contains a large amount of condensed information, carefully brought up to date, and wonderfully free from ambiguities. The method of examination recommended is —after having heard the patient's complaint, and tested his near and distant vision without glasses—to "examine the refraction with the ophthalmoscope, and then, having by these means arrived at a conclusion, proceed to confirm the opinion by means of test-glasses." This order of examination may be convenient enough in the hands of an expert, but would be apt often to mislead the general practitioner, for whose guidance this work is intended. We believe, however, that a careful study of the book during attendance at an ophthalmic clinic will be of decided service to the student or young practitioner in enabling him to understand and correct the ordinary errors of refraction. Mr. Morton uses italics liberally, not to say superfluously. Such stimulants to attention lose their effect when too often repeated.

Politzer's Text-book on the Diseases of the Ear and Adjacent Organs. Translated and edited by JAMES PATTERSON CASSELLS, M.D., M.R.C.S. Eng. London: Baillière, Tindall, and Cox. 1883. 8vo, pp. 779.

WE are glad to see a translation of Professor Politzer's book on Diseases of the Ear, and we congratulate Dr. Cassells on the admirable manner in which he has done his work. The translation presents to the English practitioner the most complete treatise on aural surgery we have in the language.

Every page shows not only Professor Politzer's grasp of his subject, but the patient care he has taken to let no point, however small, escape him. The author commences with a detailed account of the various structures of the ear, and shows the bearing of anatomical relations to the pathological processes which take place in the organ of hearing. Next follows a full account of the various methods pursued in the examination of the ear; and as illustrating how carefully each point is dwelt upon, we quote the following. After describing the various appearances presented by the membrana tympani, the Professor adds—"It must, however, be distinctly noted that alterations in the membrana tympani are observed in a considerable number of persons of normal hearing, without the least disturbance of function. These alterations are to be considered as inherent anomalies, or as the residue of some pathological process which had ended in complete cure. On the other hand, the membrana tympani is perfectly normal in a considerable number of persons whose hearing is disordered to a high degree."

The chapters on diseases of the middle ear are those which will possess the greatest interest for practical surgeons, and it is here we confess to a slight disappointment that Professor Politzer is unable to give any more definite opinion on the vexed question, in what cases of dry or proliferous catarrh the membrana tympani should or should not be perforated, than was elicited in the discussion at the International Medical Congress of 1881. When we have said this we have said all we have to say against the chapters on the treatment of middle-ear diseases. Finally, the author brings together in a condensed form all that is known on the obscure subject of diseases of the internal ear. The book will well repay a careful perusal. It would, we think, be in a more convenient form if bound in two volumes.

The Report of the Inspector of Lunatic Asylums for the Colony of Victoria.

IT appears from this Report that there are in the five public asylums and four other institutions for the reception of the insane in this colony a total of 3179 lunatics, of whom 1769 are males and 1410 females—the latter forming, therefore, the minority, instead of the majority as here. The statistics are far less elaborate than those of the English Association tables, but are probably sufficient. From them we learn that the death-rate for 1881 was 7·05 per cent. of the average number of lunatics resident in asylums, the corresponding percentage for English asylums during the same period being 9·24—a result upon which we must congratulate our cousins.

Brain. April, 1883.

THIS number is marked by the accession of an additional editor—Dr. A. de Watteville, who has been a frequent contributor, and whose work has been distinguished by thoroughness and originality. Dr. Wilks contributes a chatty article on the pupil in emotional states, which is scarcely up to the level that he has accustomed us to expect from him. Professor Erb has an elaborate report of a case—the first on record—of chronic anterior poliomyelitis in a child, with special reference to the electric reactions of degeneration. A paper on epilepsy in its relations to ear disease, by Dr. Ormerod, contains many important facts and some valuable suggestions, and shows in places sound psychological knowledge; but it appears discursive, perhaps from treating a large subject in too small a place. A very carefully written paper by Dr. Judson Bury, of Manchester, on the influence of hereditary syphilis in the production of idiocy and dementia, conducts us to the conclusions that it is an active cause of these conditions, that from the fact that the mental defect may come on at a time when the manifestations of syphilis are latent, it is in danger of being overlooked, and that when syphilis acts as a cause of idiocy it is by some demonstrable structural changes in brain, and not by a hypothetical weakness inhering in the nerve elements. Professor Ferrier has some observations on a rather remarkable case of glioma cerebri, and Dr. Mercier propounds a definition or explanation of the nature of incoördination. An important article by Dr. Paul M.Chapman, on Thomsen's disease, or tonic spasm at the commencement of voluntary movements, is among the Abstracts.

The Journal of Nervous and Mental Disease. January, 1883.

A JOINT paper by MM. Charcot and Richer in this number of the *Journal* is of unusual interest even for this interesting subject. By taking a series of tracings with a pneumograph and a Marey's tambour, first on a hypnotised patient in the cataleptic state, and afterwards with a normal person who endeavoured to simulate the phenomena, the authors have demonstrated beyond the possibility of doubt that the states of the muscles in the two cases are radically different. Another set of observations was very remarkable. Having found that if they arranged the cataleptic limbs of a hypnotised patient in the position characteristic of a certain emotion, the face soon assumed an expression characteristic of the same emotion, they then reversed the process. Para-

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dising the muscles of the face by the method of Duchenne. they produced the physiognomy of various emotions; and in each case "in proportion as the movements of the features became marked, the entire body, spontaneously as it were, entered into action and completed by its attitude the expression of the face." Once produced, both the expression of the face and the corresponding attitude remained immobile in the cataleptic condition for an indefinite length of time. The subject was thus transformed into a sort of expressive statue—a motionless model—representing with striking accuracy a variety of emotions. Dr. Jas. Putnam follows with a very complete record of the spinal-cord changes found in a case of acute poliomyelitis of the adult. Dr. Jas. Kingsbury gives a most interesting description of the microscopic appearances found in the brain and spinal cord of an epileptic. Unfortunately, however, the clinical record is very meagre. The value of the case would be immensely enhanced by a full description of the character of the fits. Dr. Bannister brings forward some figures—few, but suggestive—to indicate that there is a tendency for persons with an inherited liability to mental disease to marry each other; the number of instances of insane people who inherit their insanity from or through *both* parents being disproportionately large. The *Journal* also contains an obituary and an exquisitely engraved portrait of the late Dr. Beard, of New York, whose work is well known and whose early death is much regretted in this country.

The American Journal of Neurology and Psychiatry. February, 1883.

An article in this periodical on the Bearing of Hallucinations and Illusions on Testimony, written by a professor of operative surgery, strongly suggests a certain proverb about the cobbler and his last. It discovers a total absence of any discrimination between hallucinations and illusions on the one hand, and mistakes and errors of judgment on the other,—a confusion common enough and pardonable enough among those who have not made a special study of psychology, but which we do not expect to find in a journal devoted to the speciality. It is surely advisable to master the rudiments of a subject before writing a paper on it. In an account of the case of Maggie Keppel, a child-abductor, Dr. L. C. Gray gives some interesting particulars of what may be called the pre-criminal stage of the career of a criminal lunatic. Dr. S. N. Leo relates two important cases of trephining for traumatic epilepsy, both of which were successful to the extent that the patients recovered from the operations and the fits became much less frequent. The present state of our knowledge as to the differential diagnosis of coma due to uræmia and that due to cerebral hæmorrhage is summarised by Dr. T. A. McBride in his remarks upon two cases of the latter. Stress is mainly laid first upon the temperature, and second on the presence of localising symptoms. After a hæmorrhage the temperature at first falls, then rises several degrees above normal, and, if death is about to occur at this stage, may attain a very high point. If the patient does not die, it then falls again, and after a few oscillations either remains normal as the patient convalesces, or runs up again to a high point with a fatal event. In uræmia the temperature has no constant course, but is often high from the first. Localising symptoms point, of course, to hæmorrhage. They include, besides paralysis, an exaggeration of the deep and a diminution of the superficial reflexes, together with a higher temperature, on the paralysed side. An article by Dr. Jas. Kiernan on Attacks on Asylum Officials will be interesting to those immediately concerned.

Sanitary Assurance Association.—The third of a series of Wednesday evening lectures was given last night at 9, Conduit-street, W., by Captain Douglas Galton, on the subject of Co-operation in Sanitary Matters. Captain Galton instanced the advantages which had resulted from co-operation in connexion with life and fire insurance, and argued in favour of the same principles being applied for the preservation of life from preventable diseases. The insurance company enables the provident person, by payment of a moderate annual premium, to secure for his family a provision against his death; the sanitary assurance association enables the wise householder to have the sanitary condition of his dwelling assured for a similarly small annual premium.

GENERAL CORRESPONDENCE.

AN INDEX OF COMPARATIVE THERAPEUTICS.

Letter from Dr. S. O. L. Potter.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your issue of December 9, 1882, reviewing my "Index of Comparative Therapeutics," you do me an injustice in making the assertion that I am a homœopath. I have only just seen the number of your journal quoted, or would have corrected this statement earlier.

I was a graduate of a homœopathic college in 1878, but never was a homœopath. Being dissatisfied with my position, I went back to college at considerable pecuniary sacrifice, and went over the course a second time in Jefferson Medical College, Philadelphia, under the teaching of a Gross, a Pancoast, and a Da Costa, and my present position as a medical officer in the United States Army should of itself be sufficient to purge me of the imputation.

Again, you are unjust in making me say that glasses for myopia are only used by homœopaths. In the preface it is stated that the measures peculiar to either school are placed in *italics*. As the use of glasses is referred to in small capitals, it does not come under the remedial measures peculiar to either school, and its place in the right-hand column is simply a matter of mechanical necessity—to even up the matter in both columns. The same is true of the question of diet in diarrhœa.

I am, &c.,

Samuel O. L. Potter, M.D.,
A. A. Surgeon U.S. Army.

U.S. Post Hospital, Fort Douglas, Salt Lake City, Utah, May 16.

[We had inferred from Dr. Potter's reference to, and connexion with, the Milwaukee Test, that he was a homœopath, and found nothing in his book to show the contrary; but we are glad to hear that we were wrong. As to the other grievances, if, for the sake of appearance or to economise space, notices recommending modes of treatment are taken from homœopathic authors only, he must look to be now and then misunderstood by the average reader—on this side of the Atlantic, at the least.—Ed. *Med. Times and Gaz.*]

The Health of Glasgow.—The Medical Officer in his report states that, for the fortnight ending May 26, 1883, 664 deaths were registered—an increase of 53, and representing a death-rate of 33·9, in place of 31·2, per 1000 living. The number of deaths from infectious diseases of children was 140, in place of 105—viz., 86 from measles, 37 from whooping-cough, and 17 from scarlet fever. There was an increased fatality from each of those diseases, but especially from measles, which had steadily increased during the last four fortnights—viz., 38, 51, 65, and 86 deaths. The death-rate from measles and whooping-cough alone in the fortnight was 6·2 per 1000. The report goes on to say:—"The object in recording such facts fortnight after fortnight, as those regarding measles and other diseases of children, as they were from time to time epidemic, was, so to speak, to increase the respect of the people and also of the medical profession for such diseases in a sanitary aspect. It was only on the basis of a conviction of the gravity of such diseases that preventive measures, which alone would restrain epidemics, could be enforced in detail. As each practitioner and each parent could only see a small part of this wide field, and consequently was cognisant of what seems an insignificant mortality, there was a tendency to make light of the disease, to be lax in advising precautions, and ready to resent interference."

Charitable Bequests.—Legacies amounting to £350, bequeathed by the late Mr. William Searcy, Ardenadam, have just been paid by the trustees to the Royal and Western Infirmaries and other charitable institutions; and by the death of Miss Jean Balfour, the Glasgow Royal Infirmary is to receive the sum of £100, and the Glasgow Blind Asylum £100, under the will of her mother, Mrs. Balfour.

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REPORTS OF SOCIETIES.

THE OPHTHALMOLOGICAL SOCIETY.

THURSDAY, MAY 10.

WM. BOWMAN, F.R.S., President, in the Chair.

REMARKS ON THE IMMEDIATE CAUSATION OF OPTIC NEURITIS IN CASES OF INTRACRANIAL DISEASE.

DR. WALTER EDMUNDS and Mr. J. B. LAWFORD made a communication which was based on the examination of the optic nerves in the following series of cases – namely, eight of head injuries, two of tubercular meningitis, two of tumours of the dura mater at the base of the brain, two of cerebellar tumour, and two of cerebral tumour. The cases occurred consecutively at St. Thomas's Hospital. The examination of the optic nerves showed inflammation when they were affected at all, often more intense at the peripheral part and in the meninges of the nerves. The authors inferred from this that the inflammation was communicated to the nerve from its meninges, down which it extended from the meninges at the base of the brain. This view was further supported by an analysis of the cases. The alternative theory of a descending cerebritis was criticised, and considered to be less well founded. Microscopic sections and drawings were exhibited.

The PRESIDENT remarked that the communication which they had just heard was a very valuable one both for the number of facts it contained, and for the careful analysis of those facts. He wished to ask the authors of the paper whether in any part of the course of the nerves the conditions they had described were found to be more marked on the outer surface than on the inner side, as that would be an argument in support of the theory that the lesion had spread from the outside.

Dr. EDMUNDS replied that such was the case, and it was well seen in one of the sections under the microscope on the table.

Dr. BRAILEY thought that the evidence that had been brought forward that evening was of great value. The question could only be decided by a careful balancing of microscopical specimens. He believed that the swelling of the disc probably arose from œdema in the neighbourhood, the actual inflammation of the nerve not having been traced so far. Swelling of the nerve-fibres would be the result of their remaining soaked in serum; in fact, papillitis was an inflammatory œdema.

CASES OF RECOVERY FROM MILD SYMPATHETIC OPHTHALMITIS.

Mr. JENNINGS MILLES read notes of five cases, the clinical characters of which were very similar. In all the cases there was a wound of the cornea, in conjunction with a wound of the ciliary region or entanglement of the iris. The attack of sympathetic inflammation was of a very mild type, consisting of iritis serosa, without any posterior synechiæ. There was very slight ciliary congestion, and no pain. In every case the sympathising eye made a rapid and uninterrupted recovery. In three cases the exciting eye was enucleated directly symptoms of sympathetic inflammation manifested themselves. In one case excision was not performed till twelve months after all symptoms had disappeared; and in one case excision was performed twenty-two days before sympathetic inflammation appeared. This last case was also remarkable from the fact that the exciting cause of the disease was an extraction of cataract, which had been performed fifteen days previous to the excision. Mr. Milles showed some micro-photographs, illustrating the conditions of irido-cyclitis and neuro-retinitis found in the excised eyes. He stated that he was indebted to Mr. Watson Cheyne for being able to exhibit them. On the question of treatment, the cases were opposed to the dictum of Mauthner, that "one dare not excise in serous iritis," and clearly proved that excision did no harm. On the other hand, they did not support the view that excision had any power in modifying or arresting the progress of sympathetic ophthalmitis, when once started. Stress was laid on the great importance of the constant use of atropine, and the removal of all sorts of irritation, chiefly by the rigid exclusion of light, and by keeping the patient in a dark room with a bandage over the eyes.

Mr. NETTLESHIP referred to a case of Mr. Snell's which, but for an accident, would have been read that evening. The patient was a man who received a punctured wound in the left ciliary region: the wound was a small one; there was prolapse of the iris, but the lens was uninjured. Sympathetic iritis developed in the right eye in a few weeks. The treatment adopted was absolute rest and the free use of atropine. The pupil did not at first dilate. Later, Mr. Snell operated on the injured eye, performing a kind of sclerotomy. A free opening was made into the anterior chamber, and the prolapsed portion of iris removed; the sympathising eye then rapidly recovered.

Mr. POWER said he had had a very large experience of injuries to the eye amongst the operatives in the dockyard at Chatham, especially from portions of iron getting into the eye. Where serious damage was done, such as rupture of the globe, he thought it right to remove the eye at once. In the case of a punctured wound with prolapse of the iris his practice was to perform a large iridectomy with a keratome, taking care that the iris was quite free everywhere. There was then no danger of the iris afterwards becoming impacted in the wound. Both eyes should be bandaged, and the patient kept from two to three weeks in a darkened room. If the lens was damaged it was very apt to get into the wound and swell, setting up a variety of troubles; if, after the first operation, the lens became cataractous it should be removed. In no case should the mere prolapsed portion of iris be snipped off only; it should be freely excised.

Mr. COUPER said that the question of treatment was of great importance. Two of the cases narrated by Mr. Milles perhaps pointed to the possibility of recovery without treatment. He would ask whether an early excision arrested an attack. Three of the cases recorded that evening seemed to bear this out. It never could be foretold how soon a severe inflammation might be set up.

Mr. ADAMS FROST referred to the case of a little girl, aged ten, who received a punctured wound in the right eye from a pair of scissors, the cornea and lens being injured. In seven weeks' time the lens was partly absorbed and the iris was adherent to the wound. There was no tenderness. A week later she complained of dimness of vision with the other eye, and there was a slight blush but no synechiæ. Six weeks later there was optic neuritis. Six weeks after this the optic neuritis was well marked; the cornea was clear; vision normal; pupil well under the influence of atropine, which had been regularly instilled up to that date, but was then omitted. Ten weeks later there were numerous tough adhesions of the iris to the cornea all round. Atropine had no effect. Fresh opacities formed on the cornea, but this again became clear. At the end of fifteen months the vision was good. There were slight corneal opacities, and there was still papillitis. Mr. Frost concluded by referring to a paper he read on this subject before the Society last year.

The PRESIDENT said that this was a subject of undying interest to all engaged in the practice of ophthalmic surgery. He regarded the absolute exclusion of light, and the continued use of atropine when not causing irritation, as of immense importance. He referred to the case of a child that had come under his observation. The injured eye was hopelessly damaged, and the other eye was tense, the iris bulging, and the cornea covered with dots. Immediately after excision of the bad eye the tension of the sympathising eye became normal. The posterior chamber was completely shut off by synechiæ, and the iris was bulging forwards. Absolute rest to the eyes by darkness and atropine were the only remedies used. A year later no trace of the above-mentioned conditions was found, the iris and pupil being perfectly movable. He quite agreed with Mr. Power as to the mode of iridectomy to be adopted; it should, if possible, extend beyond the site of injury. At any rate, great care should be taken to detach the iris from the wound, so that no dragging should occur from any synechia. Anterior synechiæ should always be cut through.

A NEW REGISTERING PERIMETER.

Mr. PEARSTLEY SMITH exhibited an improved form of the perimeter described by him a few months ago in the *Ophthalmic Review*. In the original instrument, the sight-object traversed the visual field in concentric circles. This method, though advantageous in certain cases—namely, wherever the limiting line of the field runs in a meridional direction

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—was not universally applicable. With the instrument as now constructed, the field would be traversed either in meridians or in circles; it was thus more efficient, as well as being simpler in construction. The axis which carries the quadrant had fixed to its posterior extremity a wooden disc or hand-wheel, balanced so that the quadrant would stand in any position without fixing. The chart was placed upon the posterior surface of the hand-wheel, and rotated with it. Behind the chart was a bracket carrying a horizontal fixed scale, the divisions of which corresponded with the circles on the chart; and when the instrument was rotated, whatever position the quadrant assumed, the corresponding meridian of the chart stood against this scale. In consequence of this automatic movement of the chart, the readings obtained on the quadrant were very easily pricked off upon it by a steel pencil held in the hand of the operator. The advantages of the arrangement were that the chart was visible to the operator throughout, and indicated by its own position the exact position of the quadrant. Thus any particular part of the field could be at once brought under examination by bringing that point on the chart round to the scale, and re-examination could be made of any point at any time by placing the original chart in the instrument. The perfected instrument was in the hands of Messrs. Pickard and Curry.

Peculiar Changes at the Yellow Spot.

Mr. J. E. Adams showed drawings of a peculiar appearance at the yellow spot. The patient was a woman. There was a small, slightly raised disc in each eye; the nature of this was very uncertain—very probably it was a physiological peculiarity.

A New Refraction Ophthalmoscope.

Mr. Couper exhibited a refraction ophthalmoscope containing seventy-two lenses, which was extremely simple in its mechanism, and seemed to be very easy to use.

A Case of Pseudo-Glioma.

Dr. Brailey read notes of a case illustrating the development of the condition known as pseudo-glioma. The disease began with an acute febrile attack, with swelling and redness of the lid, and proptosis and injection of the globe. Afterwards the eye became slightly shrunken, the iris-periphery was retracted, and a whitish reflex was visible from behind the clear lens. Dr. Brailey judged the case to be one of spontaneous suppurative hyalitis.

Cases of Asthenopia.

Dr. Brailey also made the following communications:—1. The case of a delicate child aged seven years, in whom asthenopic symptoms were immediately and perfectly relieved by the use of a 4°-prism, base in, divided between the two eyes. Both internal and external recti were absolutely weak, the latter apparently even more so than the former. There was no hypermetropia. 2. A case in which a prism, placed vertically, relieved symptoms of asthenopia. Correction by sphericals and cylinders gave partial relief, which was rendered complete by the addition of a prism of 3°, placed before the left eye with the apex down. The case was very like one reported to the Society by the author in 1881.

THE CLINICAL SOCIETY OF LONDON.

Friday, May 25.

Andrew Clark, M.D., President, in the Chair.

Cases of Nystagmus Infantilis.

Dr. Robert Lee said that the first case was one of instrumental delivery with consequent asymmetry of the cranium, atrophy of the right hemisphere, ventricular effusion, and other changes of the right side of the brain. The chief symptoms were frequent attacks of excitement and active movement of the head and body of a few minutes' duration; also nystagmus with left internal strabismus. The question discussed was the value of nystagmus as a measure of central lesion, and its help in prognosis. Other cases were mentioned where nystagmus had followed convulsions, falls on the head, or were traced to maternal influences preceding birth.

Dr. Clark inquired whether any microscopical examination had been made.

Dr. Money said that no obvious sclerosis was to be found in stained sections from the cervical enlargement of the spinal cord; the case was interesting more from a point of view of cerebral atrophy, probably due to hæmorrhage, the result of a forced instrumental delivery.

Mr. Bernard Roth said that he had seen nystagmus in an albino, and inquired whether the child would lose this form of involuntary movement as it grew older.

Dr. Lee, in reply, said that he thought we had, as physicians, rather neglected the symptom of nystagmus, and relegated it to the ophthalmic surgeon. He was of opinion that intra-ocular conditions were rarely the cause of nystagmus. He did not think that effusion into the ventricles could be regarded as the cause of nystagmus, because it was found in many cases where no ocular movement was observed during life. He considered that two classes of cases could be distinguished—in one there was rapid oscillation, in the other only slow jerkings.

Dr. Clark said that ophthalmic surgeons had not denied that central changes could cause nystagmus, but that in the majority of cases they found an adequate explanation in the intra-ocular structures.

Dr. Hadden said that there was great atrophy of the right temporo-sphenoidal lobe. Whether this atrophy was the cause of nystagmus or not, there was no doubt of the importance of the case.

Excision of Small Goitre—Recovery.

Mr. Barker read the following notes:—The case brought forward is one in which a small goitre produced great difficulty of breathing on exertion. Excision of the tumour was required, and this operation was followed by complete relief. The patient was a woman, aged twenty-one, who had noticed a swelling in her neck first when fourteen years old. Two years later she began to suffer from difficulty of breathing. Three years ago she was under treatment for a considerable time at a special "throat hospital." This treatment consisted, in the first place, of simple puncture of the tumour, with evacuation of about half an ounce of brown fluid. Then leeches were applied. Thirdly, injections of tincture of iodine were tried at intervals for three months. Fourthly, a seton was passed through the tumour, and left in situ fourteen days. It had to be removed on account of constant vomiting. After this, she was treated by "electricity" at another hospital. Ever since, the tumour had increased. It measured, at time of operation, three inches in transverse diameter, and two in the vertical, and reached to the top of the sternum. It was firm and elastic, but not fluctuating; was movable, and marked by dilated veins. It moved upwards with the larynx in the act of swallowing, and slight pressure upon it produced considerable distress of breathing. The patient was unable to follow her calling as domestic servant, on account of the difficulty in breathing, which was greatly aggravated on exertion, and became, by her own account, paroxysmal at times. There was no exophthalmos. As all the ordinary means of relieving the condition had failed, Mr. Barker removed the tumour on August 24, 1881. This was done with all Listerian precautions as to asepticity. A median incision, about four inches long, gave access to the tumour, which was cautiously dissected out as much as possible with blunt instruments. It proved to be the enlarged right lobe of the thyroid body, the left lobe and isthmus being normal. The latter was ligatured and divided, and the left lobe was not removed. During the dissection the vessels were tied with double ligatures, and divided between the latter. In this way seventeen silk and six catgut ligatures were used and left in the wound. Hardly any blood was lost, and the important structures around were not interfered with in the dissection. A drainage-tube and gauze packing completed the operation. The next morning all the dressings were found to have slipped and become loose during the night, and salicylic wool was substituted without the spray. The wound healed almost entirely by first intention and without any inflammatory reaction, and the patient left the hospital well on September 14. On her return from the country she was found to be quite relieved of her former trouble. The patient has been under constant observation now for nearly two years, and has had none of her former distress, though she has returned to service. She has had

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some neuralgia in the neighbourhood of the wound at one spot, which is also a little tender to the touch. Not one of the ligatures left in the wound has ever come away or shown signs of its presence unless the neuralgia alluded to be taken as such. As the patient suffers from amenorrhœa, however, neuralgia might well be due to other causes. The author suggests the importance of collecting evidence as to the behaviour of aseptic silk in wounds of parts easily accessible to examination, seeing that, as regards security and uniformity of texture, most surgeons would prefer it to catgut; and if it be shown to be tolerated by the tissues as well as the latter, the choice of ligatures would be simplified. This case offers in this direction several points for reflection. The author further points out that this is one of those cases which are probably far less uncommon than is supposed, where small bronchoceles have produced very serious symptoms. He draws attention to other cases recorded or referred to, where small tumours of the kind have produced fatal attacks of dyspnœa, and he concludes by suggesting much earlier operation for such bronchoceles than has hitherto been customary.

Dr. Clark remarked that it would be interesting to know whether any other symptoms of Graves's disease were present, either anæmia, nervousness, or vascular excitement, with acceleration of circulation.

Mr. Barker said that anæmia and vascular excitement were present. The full notes described accurately the condition of the various functions of the different systems.

Mr. Sydney Jones referred to a case of severe dyspnœa, threatening dissolution, in which a goître existed. In this case he removed the isthmus; this was exposed by a cutaneous incision and then dissected off the trachea. The rings of the trachea were closely approximated, and tracheotomy would have been impossible. Complete success attended the operation, not only at the time, but permanently. Atrophy of the lateral lobes after removal of the isthmus was known to occur, and this happened in the case narrated. There was no doubt that atrophy of the cartilages of the trachea occurred after prolonged pressure by an enlarged thyroid on each side of the trachea. The operation mentioned had been done on the Continent a few times, but not previously, so far as he knew, in England.

Mr. Howard Marsh thought the case of great interest, and he mentioned an instance which occurred in St. Bartholomew's Hospital, of great dyspnœa due to the condition of the thyroid. Tracheotomy was performed. The trachea was much flattened from before backwards. The dyspnœa was considerably relieved, but not removed. The patient subsequently died in a severe breathless paroxysm. He considered it to be quite clear that the removal of the isthmus was called for, because it was this structure which led to the secondary changes in the trachea. He fully agreed with all the remarks of Mr. Sydney Jones. He could also believe with Mr. Barker that silk ligatures may be tolerated by the tissues; and spoke of a deligation of the subclavian which he had performed with a silk suture—the tissues tolerated its presence apparently without limit in time. Other examples from the practice of Mr. Lister, illustrating the tolerance of the tissues for various sutures, were mentioned.

Mr. Pearce Gould thought that the operation performed by Mr. Sydney Jones was much to be preferred to the larger operation; the lateral lobes would act as good splints, and prevent the collapse of the trachea, which was so liable to occur after the entire removal of a goître. The outlines of a case in which sudden death occurred after an apparently successful removal of a bronchocele, was given as an example. A short time ago he had ligatured the femoral artery with silk; the suture was retained and tolerated by the tissues. In a similar way silver-wire would be tolerated, as happened in a case where Mr. Gould wired together the fragments of an old fracture of the olecranon.

Mr. R. W. Parker assisted Mr. Reeves in the removal of a thyroid gland from a child. The operation was carried out without trouble, but the dyspnœa was not relieved. He thought that in these cases there was an implication of the recurrent laryngeal nerves, and the dyspnœa was not due to the mere mechanical pressure on the trachea. If the plan of Mr. Jones had been adopted, it might have been more successful than the selected operation. The goître was a vascular solid growth, not cystic. The difference in result might be explained sometimes by the nature of the bronchocele.

Mr. Warrington Haward thought it would be generally allowed that the small bronchoceles are those which cause dyspnœa, also that it is the fibrous variety which surround the trachea and produce atrophy of that tube as well as involve the laryngeal nerves. The lateral grasping of the trachea seems to be more frequent than the backward tension, except in those examples where the thyroid spreads down beneath the manubrium.

Dr. Lee said that iodine was painted on bronchoceles for long periods without sufficient reason; he mentioned one case which entirely disappeared in nine months whilst hot-water ablutions only were applied.

Mr. Barker, in reply, said that he found no difficulty in believing that it was not always pressure which caused dyspnœa. He was glad to find that his experience was borne out by other surgeons of larger practice in goîtres, to the effect that it was rather the smaller tumours which were accompanied by dyspnœa. Everything had been tried, and nothing had succeeded, unless it were the seton in his case; but the seton could not be continued. It must be remembered that one lobe only was enlarged. He believed there was no alteration in the condition of the trachea. Dr. Poore had found that there was considerable bulging backwards of the anterior wall. The incision was perfectly median in position. He concurred with Mr. Jones that a milder operation was to be preferred; but a great number of cases would be required to prove that this simple operation was always followed by a successful result. Microscopical examination showed that the goître was chiefly fibrous in structure, with a small amount of colloid degeneration of the alveoli. It was certainly possible that the anatomical structure might be of importance in the clinical aspect of different bronchoceles.

Dr. Clark said that Mr. Barker would have gathered that it was the general opinion that the operation was quite as justifiable as it was successful.

Ulceration at the Pylorus, situated at the Valve; the Floor of the Ulcer being formed by the Neck of the Gall-Bladder.

Dr. Habershon said that this case occurred in a gentleman, aged sixty, who began to suffer about nine months before death from pain at the stomach and vomiting; the pain was very severe in character, but most irregular in its onset, and the point of great clinical interest in the case was that "at no time during his illness did food aggravate the pain." The words were quoted from a letter of his medical attendant, Dr. Archibald. There were considerable intervals of relief, and after some weeks of comparative comfort, he was suddenly seized, after taking luncheon with his family, with intense pain in the abdomen, followed by collapse and death in about fourteen hours. The ulcer had extended through the coats into the peritoneum, and thus extravasation of the gastric contents caused fatal peritonitis. The absence of one of the most prominent symptoms of gastric ulcer—viz., pain produced by food—was remarkable. It was stated that the pain of gastric ulcer ceases from varied causes, such as the healing of the ulcer, the relief of congestion from hæmorrhage, the division of the nerve from sloughing, or from the position of the patient. In the case narrated there was no evidence of hæmorrhage, nor was there any destruction of the nerve connexion. The ulcer was situated at the pylorus itself, and it was doubtful at first whether it was on the duodenal or the gastric side of the valve. It was divided into two parts by a central contraction as if there had been a healing process, or as if the ulcer had been double. The base of the ulcer was formed by the neck of the gall-bladder, and it was at this part that perforation had taken place. The walls of the stomach were not thickened, as if there had been pyloric obstruction. It was suggested that the situation of the ulcer had to do with the absence of pain, and that when food was taken the pylorus contracted and the pain ceased.

Dr. Clark inquired whether there was any pain referred to the back, and received a negative answer.

Dr. Mahomed had a similar case in a man, aged twenty, who also had a sensation as of a ball, and a tumour the size of a cricket-ball could be seen at the epigastrium. It was clear that the swelling was due to pyloric contraction. In this patient also the food did not cause much pain. The man surreptitiously ate large quantities of food, and one day, after a large meal of shrimps, signs of perforation occurred.

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At the autopsy a perforation of the œsophagus was found, and a healing ulcer at the pylorus.

Dr. DREWITT asked whether it was not possible that a large number of out-patients really suffered from gastric ulcer, when they were merely treated for dyspepsia; food, by causing rupture of an abscess in the wall of the stomach, might relieve distress.

Dr. HADDEN said that when the stomach was empty the ulcerated surfaces were in contact; the ingestion of food led to their separation, and consequent relief from pain.

Dr. MONEY thought that the presence of various curious phenomena might point to a nervous origin of trophic sort for gastric ulcer.

Dr. HABERSHON had seen such cases as Dr. Mahomed had mentioned; there was no distension in this case, however, and nothing like an hour-glass contraction. He could not agree that gastric ulcer was of frequent occurrence. He concurred with the remarks of Dr. Hadden.

In the course of the evening a curious case of bony deformities about the joints, disease of the ungual phalanges and nails, with atrophy of the left deltoid and other muscles, and other remarkable associations, was exhibited in the large room before the members of the Society by Mr. LUNN. This case was referred to a committee consisting of Drs. Coupland, Dyce Duckworth, Messrs. Howard Marsh and Gould, and the exhibitor.

LIVING SPECIMENS.

Dr. DREWITT—Case of Retarded Congenital Syphilis with Perforations of Soft Palate.

Dr. DREWITT—Case of Myxœdema.

Mr. LUNN—Case of Myxœdema.

Dr. FREDERICK TAYLOR—Case of Infantile Hemiplegia with unusual reflex phenomena. In this case a clap of the observer's hands set up a tonic contraction of the affected limbs.

The PRESIDENT said that the report of the Committee on Spina Bifida would not be ready for this session: the Committee desired it to be understood that they will be very glad to receive and acknowledge accounts of any cases of the affection from members of the profession.

NEW INVENTIONS AND IMPROVEMENTS

LIQUOR ERGOTÆ PURIF. (HEWLETT'S).

A TRUSTWORTHY preparation of ergot is one of the greatest boons which can be bestowed on the medical man. This "liquor purificatus," which we have received from Messrs. Hewlett and Son, seems to us to supply this need. Without disparagement of the productions of other firms, we may say that it appears to us a very excellent preparation of the drug.

KOLANA.

THIS drug, prepared by Mr. J. Thompson, Lodge-lane, Liverpool, from the kola nut (*Sterculia acuminata cola*), is described as a tonic and invigorator. Its chief active principles are caffeine and theobromine. It is said to support the strength, assuage thirst (more particularly subduing the craving for drink), and promote digestion. It is a tincture the dose of which is ʒss. to ʒj. We believe it will be found useful.

MEDICAL NEWS.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 31:—

Bentlif, Philip Barnett, Winchester-street, Salisbury.
Brenton, William Hore, John-street, Plymouth.
Morgan, George, Salop-street, Market Drayton.
Ogle, Arthur Wesley, Sevenoaks.
Sumner, William John, Holme-lane, Hillsbro', Sheffield.
Wise, Walter, Duke-street, Manchester-square.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Barnett, Frank Septimus, St. Bartholomew's Hospital.
Clapp, William Murray McQueen, University College Hospital.
Cooper, John Wilford, Charing-cross Hospital.
Draper, James William, University College Hospital.
Hall, William George, London Hospital.
Jackson, William Edward Gillson, Westminster Hospital.
Richards, Edwards, London Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

GRANT, DAVID, M.A., M.B. Edin.—Resident Medical Officer, Royal Infirmary, Manchester, *vice* Graham Steell, M.D., appointed Assistant-Physician.

BIRTHS.

ADAM.—On June 1, at 70, Fernhead-road, St. Peter's-park, W., the wife of Caleb Donovan Adam, L.R.C.P., of a son.

DON.—On May 29, at Sevenoaks, the wife of Arthur G. Don, M.R.C.S., L.R.C.P., of a son.

DOUGHTY.—On June 1, at Friern Lodge, Lordship-lane, Dulwich, the wife of W. Doughty, M.R.C.S., of a son.

FINCH.—On May 31, at Colchester, the wife of Henry Finch, M.D., prematurely, of a son.

OWEN.—On May 29, at The Hollies, Shore-road, Hackney, the wife of William Owen, M.R.C.S., of a son.

RATTON.—On May 7, at Chittoor, Madras Presidency, the wife of Surgeon-Major James J. L. Ratton, M.D., of a son.

THOMPSON.—On June 3, at 40, Wellington-square, Oxford, the wife of Harold Thompson, M.R.C.S., L.S.A., of a son.

WRIGHT.—On May 28, at Spring-gardens, Gainsborough, the wife of Henry Wright, L.R.C.P., M.R.C.S., of a daughter.

MARRIAGES.

COBBOLD–PHILLIPSON.—On June 5, at Weston-super-Mare, the Rev. Francis E. D. Cobbold, third son of the rector of Ross, to Maggie Frances, youngest daughter of Richard Phillipson, retired Army Surgeon, Bengal Staff.

GASTREN—DYAS.—On May 24, at Dublin, William Charles Gastren, M.B.T.C.D., Surgeon-Major A.M.D., to Margaret Adelaide, eldest daughter of Henry Dyas, Esq., of Castlepole, Kells, Meath.

GILL—TURNER.—On June 5, at St. Marylebone, Walter George Gill, Esq., only son of Walter Battershell Gill, M.D. Lond., of 9, Cambridge-terrace, Regent's-park, to Alice, daughter of the late Charles Augustus Turner, Esq., of Jersey.

MATHESON—MCKENZIE.—On May 30, at New York, John McLeod Matheson, of Edinburgh, to Frances Theresa, only daughter of John C. Mackenzie, M.D. Edin., of New York.

ROSS—LOCKWOOD.—On June 2, at Brighton, John Harris Ross, M.D., of St. George's-place, Brighton, to Susie, daughter of Philip Cautley Lockwood, C.E., of Brighton.

STEIL—CHAPMAN.—On May 31, at Marylebone, George R. Steil, L.R.C.P., M.R.C.S., to Minnie, youngest daughter of the Rev. C. Chapman, M.A.

DEATHS.

BOASE, HENRY S., M.D., F.R.S., F.G.S., etc., at Seafield House, Magdalen-place, Dundee, on May 4, aged 83.

BRINE, JOHN EDMUND, M.R.C.S., L.S.A., at Rowlands, Wimborne, Dorset, on June 4, aged 61.

CLERIHEW, GEORGE, M.D., Inspector-General of Hospitals, at 43, Addison-gardens, Kensington, on May 30, aged 72.

DUDGEON, ELSIE ROSALIND, daughter of R. E. Dudgeon, M.D., at 53, Montague-square, W., on May 31, in her 8th year.

HOLMES, WILLIAM, M.R.C.S., at Pennice, Cavendish-road, Sutton, on May 29.

JONES, ROBERT EDWARDS, M.R.C.S., late of Long Melford, at 5, Cambridge-road, Hastings, on May 29, aged 57.

PAIN, GEORGE, Surgeon-General, late 11th Hussars, at 28, Liverpool street, Dover, on June 3.

VACANCIES.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. Salary £100 per annum, with board and apartments. Candidates must be unmarried and have registered qualifications both in medicine and surgery. Applications, with certificates, to be sent to the Hon. Secretary, on or before June 15.

DEVON COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary £120 per annum, with board and residence. Candidates must be unmarried. Further particulars may be obtained from Dr. Saunders, the Medical Superintendent, or from Mr. T. E. Drake, solicitor, Exeter, the Clerk to the Committee, to whom applications, stating age, with testimonials, are to be sent before June 18.

DOWNHAM UNION.—District Medical Officer. (*For particulars see Advertisement.*)

GLASGOW ROYAL INFIRMARY MEDICAL SCHOOL.—Teachership of Physiology (*For particulars see Advertisement.*)

GLASGOW ROYAL INFIRMARY MEDICAL SCHOOL.—Teachership of Chemistry. (*For particulars see Advertisement.*)

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. (*For particulars see Advertisement.*)

QUEEN'S HOSPITAL, BIRMINGHAM.—Resident Physician. Salary £80 per annum, with board, lodging, etc. Candidates must hold a registered medical qualification. Applications, testimonials, and certificates of registration, to be sent, under cover to the Secretary, from whom all further information may be obtained, on or before June 20.

ROYAL HANTS COUNTY HOSPITAL, WINCHESTER.—House-Surgeon. Salary £100 per annum, with board and lodging. Candidates must possess a diploma from the Royal College of Surgeons in England, or the surgical diploma of a Royal College or a University in England, Scotland, or Ireland, and also a degree in medicine from one of the said universities, or a license from the Society of Apothecaries; they will not be eligible without unexceptionable testimonials as to moral character. Applications, with testimonials, to be sent to the Secretary, at the Hospital, on or before July 4.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, June 2, 1883.

BIRTHS.

Births of Boys, 1322; Girls, 1300; Total, 2622.
Corrected weekly average in the 10 years 1873-82, 2554·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	754	651	1405
Weekly average of the ten years 1873-82, corrected to increased population ...	767·5	706·2	1473·7
Deaths of people aged 80 and upwards ...	...	...	47

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	5	...	7	5	...	...	1	2
North ...	905947	1	15	5	2	7	...	4	1	6
Central ...	282238	...	7	1	1	2	...	1	...	2
East	692738	...	20	6	3	8	...	...	...	2
South	1265927	1	20	12	4	10	1	5	1	4
Total	3816483	2	67	24	17	32	1	10	3	16

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer ... ... 29·916 in.
Mean temperature ... ... 58·1°
Highest point of thermometer ... ... 74·4°
Lowest point of thermometer ... ... 40·8°
Mean dew-point temperature ... ... 48·0°
General direction of wind ... ... S.W.
Whole amount of rain in the week ... ... 0·00 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 2, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending June 2.	Deaths Registered during the week ending June 2.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2622	1405	18·5	74·4	40·8	58·1	14·50	0·00	0·00
Brighton	111262	53	28	13·1	69·6	43·8	54·3	12·39	0·00	0·00
Portsmouth ...	131478	105	44	17·5	...	...	...	...	...	...
Norwich	89612	76	38	22·1	...	...	...	...	...	...
Plymouth	74977	43	25	17·4	63·9	43·8	54·0	12·22	0·16	0·41
Bristol	212779	144	77	18·9	69·6	41·2	53·3	11·84	0·05	0·13
Wolverhampton ...	77557	66	30	20·2	68·3	38·2	51·9	11·06	0·16	0·41
Birmingham ...	414846	299	133	16·7	...	...	...	...	...	...
Leicester	129483	114	45	18·1	72·5	42·2	55·5	13·06	0·07	0·18
Nottingham ...	199349	159	63	16·5	74·0	40·2	55·5	13·06	0·32	0·81
Derby	85574	50	27	16·5	...	...	...	...	...	...
Birkenhead ...	88700	68	37	21·8	...	...	...	...	...	...
Liverpool	566753	397	273	25·1	64·1	47·5	55·0	12·78	0·26	0·66
Bolton	107862	87	38	18·4	66·0	40·3	51·9	11·06	0·00	0·00
Manchester ...	339252	255	164	25·2	...	...	...	...	...	...
Salford	190465	127	63	17·3	...	...	...	...	...	...
Oldham	119071	91	42	18·4	...	...	...	...	...	...
Blackburn	108460	93	48	23·1	...	...	...	...	...	...
Preston	98564	78	32	16·9	...	...	...	...	...	...
Huddersfield ...	84701	43	34	20·9	...	...	...	...	...	...
Halifax	75591	44	21	14·5	...	...	...	...	...	...
Bradford	204807	138	70	17·8	65·4	42·3	54·2	12·33	0·11	0·28
Leeds	321611	254	141	22·9	68·0	42·0	54·7	12·61	0·07	0·18
Sheffield	295497	202	115	20·3	69·0	41·0	54·3	12·39	0·00	0·00
Hull	176296	117	91	26·9	78·0	38·0	54·9	12·72	0·00	0·00
Sunderland ...	121117	94	36	15·5	...	...	...	...	...	...
Newcastle	149464	104	60	20·9	...	...	...	...	...	...
Cardiff	90033	69	32	18·5	...	...	...	...	...	...
For 28 towns ...	5620975	5092	3212	19·4	78·0	38·0	54·4	12·44	0·09	0·23
Edinburgh	235946	161	95	21·0	60·8	39·3	53·4	11·89	0·28	0·71
Glasgow	515589	396	271	27·4	62·6	37·0	52·9	11·61	0·94	2·39
Dublin	349885	196	213	31·8	65·3	33·0	53·4	11·89	0·21	0·53

At the Royal Observatory, Greenwich, the mean reading the barometer last week was 29·92 in. The lowest reading was 29·56 in. at the beginning of the week, and the highest 30·06 in. on Thursday morning.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

MOORE FUND.

The Rev. F. R. Miller begs to acknowledge with thanks the following additional contributions:—

	£	s.	d.		£	s.	d.
F. Smith, Esq.	3	3	0	T. C. Beatty, Esq.... ...	0	10	0
J. P. B.	0	10	0	Dr. Coombes	0	10	0
Beta	2	2	0	H. Harvey, Esq.	0	10	0
Poor Apothecary	0	5	0	J. Watts, Esq.	1	0	0
Charles Young, Esq. ...	0	10	0	Anon (Sunderland) ...	0	10	0
Dr. Holden	0	5	0				

Dr. J. Drysdale, Port Chalmers, Otago, New Zealand.—Letter and enclosure received with thanks.

The Conciliatory Manners of Anti-vivisectionists, Edinburgh.—The conference held lately at Edinburgh of those opposed to vivisection, at which there was rather a meagre attendance, adopted a resolution to the effect that the conference viewed with alarm the statement by the Home Secretary that he had accepted the assistance of the "Association for the Advancement of Medicine by Research" in carrying out the duties imposed on him by the Vivisection Act, 1876, and disputing the statement that under the Act demonstrations in illustration of lectures were prohibited. A Dr. Bowie said that, judging from the way Sir William Harcourt intended to work the Vivisection Act, the sooner he was relieved from his present responsible and irksome duty, the better would it be for society, morality, and humanity. No statement had ever been made more flagrantly incorrect than that with reference to experiments not being allowed in class-rooms.

Beneficence.—A lady, residing in the neighbourhood of Stratford-upon-Avon, has given £6000 for the purpose of erecting a new infirmary in the town. This generous donor has contributed £10,000 to charitable objects in Stratford within the last four years.

An Unsuccessful "Circular Letter."—A circular letter has been addressed by the authorities at the Kent County Lunatic Asylum at Chartham, near Canterbury—an institution which was erected a few years since, at a cost of upwards of £350,000—to the various boards of guardians in the eastern division of the county, asking them to receive a number of harmless patients, who are not likely to benefit by remaining in the Asylum, into their workhouses, to relieve the pressure on the female side. This proposal has been discussed by the Board of Guardians at Milton-next-Sittingbourne, who received it with expressions of surprise and animadversion. The application, it is said, has been generally declined.

Mr. Manning, St. Bartholomew's.—The extract is too long; but you will find a biographical notice of Mr. John Painter Vincent in the *Medical Times and Gazette* for July 24, 1852, page 101, containing the opinion of that gentleman formed by Leigh Hunt when a "Blue-coat boy." Mr. Vincent was twice President of the College.

Convalescent Hospital, Darenth.—The Managers of the Metropolitan Asylums District have decided to establish a convalescent small-pox hospital at Darenth, near Dartford—a provision for the reception of small-pox patients which became imperative in consequence of the report of the Royal Commissioners on the fever and small-pox hospital. The sanction of the Government has been given to the arrangement, which will be forthwith carried out. It is proposed that the patients shall be taken down the river by boat, and then conveyed in ambulances to the hospital.

Cholera, Bombay.—The deaths in Bombay from cholera during the week ending the 29th ult. were only nine in number, against an average mortality of fourteen in the corresponding weeks of the last five years.

Milk Adulteration, Greenwich and Plumstead.—The Plumstead District Board of Works has decided to call the attention of the police magistrates to the annual report of the Board's analyst, stating that milk adulteration is more frequent in the Greenwich and Plumstead districts than in any other part of the metropolitan area, owing to the low fines inflicted on the offenders. The quality of the milk in these districts is the worst in the area. A copy of the report was ordered to be sent to the Home Secretary and magistrates.

Thrift.—Last year's deposits at the Post Office Savings Bank in London amounted to the enormous sum of £12,821,230, or at the rate of 8s. 8d. per head of the population.

"Complained of for Years."—At the last meeting of the Exeter Town Council it was reported that typhoid fever had broken out in a court in that city, which was described as being in "a most deplorable condition." In this court was a stable occupied by horses and donkeys, and over the stable, hemmed in on all sides by houses, several persons lived. The court had been complained of for years, and notice had been given to the owner, but little had been done to abate the nuisance. It was resolved by the Council to take proceedings forthwith. This pestiferous den, the subject of complaint for years, allowed to exist! What a satire on the utility and efficiency of the sanitary authority!

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German Sausages.—The Corporation of Brighton prosecuted a German sausage maker for having on his premises the carcase of a pig which was unfit for food. The prosecutors urged the Bench to send the man to prison, so as to stamp out the traffic in unwholesome meat, but it appeared that the animal showed no signs of disease, and that the flesh was bad only from having been kept too long. The magistrates, consequently, imposed a fine of £10 and costs.

A Young Surgeon.—You will find a case of traumatic tetanus successfully treated by the sulphate of quinine in the *Medical Times*, vol. xxvi., page 188. Consult "Curling on Tetanus."

Query, Parsimony?—It was reported at the meeting of the West Bromwich Board of Guardians, held on the 28th ult., that nineteen new cases of small-pox had occurred during the previous week, making fifty-two then existing. Dr. Underhill had complained that a relieving officer had refused to give a note for admission to the infectious hospital. It appeared that a barber and his wife occupied a house and had four lodgers—a man and his wife and three children, a single woman with two illegitimate children, and a young single man. Eight of the persons were suffering from small-pox. The hospital authorities called attention to this overcrowding as small-pox was present in the house, and they complained that the relieving officer would not give a note for the man's admission to the hospital, as the expense would have to be defrayed by the guardians. No action was taken on the subject.

Felt Hospital Tents.—These transportable dwellings—the invention of an officer in the German cavalry—are watertight, being impregnated with substances which render them impervious to water, cool in hot weather, and to some extent are able to moderate a severely cold temperature. They can be packed into a few comparatively small boxes, and ventilation is duly provided for. Their erection and removal are very simple, and their cost is said to be small in comparison with that of linen tents. They have been permanently introduced into the Danish army. The *Vossische Zeitung* says that leading medical authorities have approved of them.

Removing Infectious Cases in the Metropolitan Area.—The Metropolitan Asylums Board have informed the Bethnal Green Guardians that, on the consideration of a communication they had received from the Local Government Board on the subject, although the Managers were willing to do all they could to assist the boards of guardians in the metropolitan area with regard to infectious cases occurring in the district pauper schools, they could not undertake to remove ordinary cases of an infectious nature, as they were of opinion that accommodation should be provided at the schools for these.

A Fellow.—The *conversaziones* at the Royal College of Surgeons, on Wednesday, June 20, for which cards of invitation have been sent out by the President of the College and Lady Wells, is a private matter, but a large number of Fellows and Members have been invited.

Friendly Societies: Medical Attendance and Medicines.—At a meeting of the members of the Cannon-street Male Adult Provident Institution, held at the Birmingham Town Hall, to consider the report of the representatives of friendly societies appointed to discuss the best system of medical attendance and medicines to the members of these societies, a resolution was adopted pledging the meeting to support the objects of the Institution.

The South London Fish Market.—This market has been opened. It is situated in the New Kent-road, near the "Elephant and Castle." The enormous population of the surrounding district could well support an undertaking of this kind, and its locality is most eligible, being easy of access from so many points. We trust this market may prove a real benefit to a large class of persons by affording them the opportunity of buying fish at prices which will induce them to avail themselves of a cheap and wholesome diet.

A Fellow by Exam.—Your letter should have been addressed to the journal in which the statement appeared. It is well known that Fellows of the College are freely admitted to *all* examinations on sending in their card to the chairman. We have seen several there who can judge for themselves as to the manner in which the examinations are conducted, not only for the membership, but also the fellowship.

COMMUNICATIONS have been received from—
Mr. T. J. Barnard, London; Mr. K. Millican, Kineton; Messrs. Kelly and Co., London; Dr. Cassels, Glasgow; The Director of the Anthropological Institute, London; Messrs. Krohne and Sesemann, London; The Registrar of the Apothecaries' Hall, London; Dr. S. O. L. Potter, Salt Lake City, Utah; Dr. Sutherland, London; Dr. F. W. Barry, Reading; Mr. J. Chatto, London; The Honorary Secretary of the Royal Medical and Chirurgical Society, London; Mr. W. W. Reeves, London; The Registrar-General for Scotland, Edinburgh; Dr. Hardwicke, Sheffield; The Clerk of the Grocers' Company, London; Mr. Wm. Joynson, Liverpool; Dr. J. W. Moore, Dublin; Dr. C. Mercier, Dartford; Mr. Cantlie, London; The Secretary of the Royal Institution of Great Britain, London; Dr. Cullingworth, Manchester; Mr. J. Hadley, London; The President of the Royal College of Physicians, London; Mr. Rushton Parker, Liverpool.

BOOKS, ETC., RECEIVED—
Du Diagnostic de l'Ectopie Rénale, par le Dr. Frédéric Buret—Annual Report of the General Hospital and Dispensary for Sick Children, Pendlebury, and Garside-street, Manchester—Abstracts of some of the Medical and Surgical Cases treated at the General Hospital for Sick Children, Pendlebury, Manchester, during 1882—The Life and Work of St. Paul, by F. W. Farrar, D.D., part 17—Annual Report of the Royal Edinburgh Asylum for the Insane for 1882—Notes on Books, by Messrs. Longmans and Co.—History of Rome (part 5), by Victor Duruy—Transactions of the Sanitary Institute of Great Britain, vol. iv.—Kalks, by a Fellow of the Royal College of Surgeons—Report of the Mortality, &c., of the City and County of Newcastle-on-Tyne for 1882—Insanity, by Henry Putnam Stearns, M.D.—Analysis and Adulteration of Foods, by James Bell—The International Encyclopædia of Surgery, vol. iii.—Traité Pratique des Accouchements, par le Dr. A. Charpentier—Die Allgemeine Elektrisation des Menschlichen Körpers, etc., von Sigmund Theodor Stein—Report on the Health, Sanitary Condition, etc., of Kensington from April 22 to May 19.

PERIODICALS AND NEWSPAPERS RECEIVED—
Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—Le Progrès Médical—Pictorial World, June 2, 1883—Lavos de Hipocrates—The Veterinarian—Ophthalmic Review—Manchester Guardian, May 31—Edinburgh Medical Journal—Philadelphia Medical Times—Band of Hope Review—British Workman—Revue Mensuelle de Laryngologie, etc.—Glasgow Medical Journal—Deutsche Medicinal-Zeitung—Archives Générales de Médecine—L'Impartialité Médicale—Birmingham Medical Review—Australian Medical Gazette—Analyst—Practitioner—Morningside Mirror, March 15 and April 16.

APPOINTMENTS FOR THE WEEK.

June 9. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Turner, "On Russian Social Life."

11. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Mr. Frederic S. Eve, "On Cysts and Cystic Tumours in General."

12. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal College of Surgeons of England, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

Anthropological Institute (4, St. Martin's-place, W.C.), 8 p.m. Mr. E. B. Tylor, "On Old Scandinavian Civilisation among the Modern Esquimaux." Mr. A. W. Howitt, "On some Australian Beliefs."

Royal Medical and Chirurgical Society (Ballot, 8 p.m.), 8½ p.m. Dr. George Thin, "On the Bacillus of Leprosy." Dr. Colcott Fox, "On Urticaria Pigmentosa." Sir Henry Thompson, "On Twelve Cases of Tumour of the Bladder, and the Operation for the Removal of the Growth." Dr. F. Warner will give a demonstration of a Method of obtaining Graphic Records of the Movements of the Fingers, etc., and for Enumerating such Movements." Dr. Barlow will show a Case of Osteitis Deformans.

13. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

Royal College of Surgeons of England, 4 p.m. Prof. Jonathan Hutchinson, "On certain Diseases of the Tongue."

Hospital for Consumption and Diseases of the Chest, Brompton, 4 p.m. Dr. J. E. Pollock, "On Hæmoptysis."

Parkes Museum of Hygiene, 5 p.m. Prof. T. Hayter Lewis, "On the Employment of Artistic Materials in the Architecture of Houses and Hospitals." The lecture will be illustrated by objects in the Museum.

Royal Microscopical Society, 8 p.m. Prof. F. Jeffrey Bell, "Note on the Spicules of *Cucumaria calcigera*, *C. hyndmanni*, and of Two Allied Forms." Mr. Conrad Beck, "On some New *Cladocera* of the English Lakes." Herr J. Flogel, "On Cutting Sections of Diatoms."

14. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

Parkes Museum of Hygiene, 8 p.m. Prof. W. H. Corfield, "On Common Defects in the Sanitary Arrangements of Houses, and their Remedies."

15. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. Jonathan Hutchinson, "On certain Diseases of the Tongue."

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ORIGINAL LECTURES.

ADDRESS

ON EYE SYMPTOMS IN DISEASES OF THE SPINAL CORD.

Delivered before the Ophthalmological Society, June 7, 1883.

By W. R. GOWERS, M.D., F.R.C.P.

Mr. President and Gentlemen,—In the memoranda which, at the request of the Council, I have drawn up to serve as a guide to the discussion this evening, I have mentioned certain points regarding two classes of eye symptoms met with in spinal disease, to which, it seemed to me, the attention of the Society might with advantage be chiefly directed. These are "optic nerve atrophy" and "internal ocular paralysis." These topics do not comprehend the whole of the subjects announced for discussion. There are many others, such as optic neuritis, nystagmus, and palsy of the extra-ocular muscles, which equally deserve attention. But optic neuritis is extremely rare in association with spinal disease, the meaning of nystagmus is uncertain, and the subject of the palsies of the external muscles is so large that, while we shall, I am sure, welcome any new facts regarding these points which may be brought forward, it seems better to reserve their special discussion for a future day, and to consider to-night those topics on which we have all had some experience, and about which our knowledge is sufficient to define our ignorance, to indicate the new facts we most need, and the direction in which they must be chiefly sought.

The two subjects to be considered accord conveniently with the composition of our Society. Optic nerve atrophy, affecting vision, falls chiefly under the notice of the ophthalmic surgeon; while the most common intra-ocular palsy, that of the iris, causing no symptoms of which the patient is aware, comes as an isolated eye symptom under the attention of the physician. At the same time, the ophthalmic surgeon, with his exact study of all the morbid elements in the eye, is able to correct and supplement the observations of the physician on intra-ocular palsies; and the medical observer can perhaps supply facts regarding some points connected with atrophy which rarely come under the ophthalmic surgeon's notice.

Two general facts respecting these symptoms deserve attention. The first is that we must regard them as associations, and not effects, of the spinal lesion. The evidence of this is—1. That disease of any nature may exist in any part of the spinal cord without the occurrence of ocular symptoms, if we except the very rare paralysis of the dilators of the pupil in disease of the sympathetic tract in the cervical region. 2. The ocular symptoms, which may be absent when the cord disease is advanced, may exist in extreme degree when such disease is in a very early stage. 3. With the single exception of the sympathetic symptoms just mentioned, we know of no anatomical connexion or functional mechanism by which the spinal cord disease can produce the ocular symptoms.

The second general fact is that these associated ocular symptoms are always the result of degenerative processes, and their presence shows that the cord disease is also essentially degenerative in its nature. In many cases we do not need the eye symptom to tell us this. The slow progressive character of the spinal symptoms is sufficient evidence of the fact. But it is not always so. Degenerative processes of the cord sometimes present sudden exacerbations which may conceal the nature of the underlying process. In these cases the eye symptoms give us information of the highest importance. Their significance in this respect is not confined to spinal disease, and it is difficult to exaggerate the practical value of symptoms which, so readily ascertained, at once put us on the track of the morbid tendency from which a patient is suffering.

It may seem surprising, numerous as are the degenerative diseases of the spinal cord, that the chief association of eye symptoms should be with one of them alone—with locomotor ataxy, tabes dorsalis. But recent pathological discoveries, if they have not penetrated the mystery, at least enable us to comprehend it. As long as ataxy was believed to be a disease limited to the posterior columns of the spinal cord, the association with it of a peripheral degeneration in the optic nerve was an anomaly. But the brilliant researches of Pierret, confirmed as they have been in part by Déjerine, and anticipated in a slight degree by Westphal, have enlarged, and by enlarging altered, our conception of the malady. Pierret has shown that the degeneration in the optic nerve is not the only peripheral lesion, and that that in the cord is not the only central change in this remarkable disease. He has demonstrated that there is, often at least, an independent degeneration in the cutaneous nerves, commencing in their extremity, to which the optic change is strictly analogous. He has shown, moreover, that there may be a degeneration at the central termination of the optic as well as of other cranial nerves, analogous to that in the posterior columns of the cord. He has thus enlarged our conception of the affection from a limited disease of the spinal cord to a "wide sensory neurosis," as he aptly terms it, in which the optic nerve atrophy falls into its definite place. The relation which the intra-ocular palsy bears to the other symptoms of the disease is a point to which I shall return presently. To what extent the degeneration ordinarily preponderates in the central or in the peripheral sensory tracts, only future observation can show. At present we have no means of ascertaining during life the occurrence of the peripheral spinal, or the central optic changes. We must still therefore in our clinical study content ourselves with observing the relation between the two which we can recognise.

What proportion of cases of primary atrophy of the optic nerves are connected with spinal disease? So rarely is atrophy associated with other lesions, that the question may practically stand, In what proportion of the cases of atrophy are there indications of ataxy? As the earliest of these, the loss of the knee-jerk may be conveniently taken without risk of more than the most trifling error. The answers which have been given to the question have varied between wide limits. It is only from ophthalmic surgeons that an answer can be looked for, and the combined experience of the members of this Society would certainly yield a result very near the truth. For my own part I will only venture on one very general statement. It is certain that atrophy may precede the symptoms of ataxy which bring the patient under the physician's care. I have seen one case in which the atrophy existed for twenty, and another in which it existed for fifteen years previous to the locomotor symptoms. But we know that the loss of the knee-jerk may exist for an almost indefinite time before locomotion suffers. It has not, I think, yet been proved that atrophy ever precedes the loss of the knee-jerk or lightning pains in the limbs, and we are not justified, in an inquiry into facts, to assume that any case will be followed by spinal symptoms in which none are present at the time of observation.

The converse question—In what proportion of cases of tabes does optic nerve atrophy occur?—is one to which an answer is difficult to obtain. It is difficult to obtain because the optic and spinal symptoms tend to separate the patients, and often to keep them separate. My own statistics yield about 20 per cent. of atrophy, but I think it is probable that this has been increased by accidental circumstances, and that the estimate, which I gave some years ago, of 15 per cent. will not be found far from the truth.

The period of the disease at which atrophy commences is a point of very great practical importance. For the purpose of ascertaining facts, we may conveniently divide the course of the disease into three stages—first, in which there is no affection of the patient's gait; the chief symptoms are the loss of the knee-jerk, rheumatoid and lightning pains, and often unsteadiness in standing with bare feet, toes and heels together, and closed eyes. Second, in which there is a distinct ataxic gait, but the patient is able to walk alone or with the aid of a stick. Third, in which the patient is no longer able to walk except with the assistance of another person. There is no doubt that it is common for atrophy not only to commence, but to advance to a considerable degree, in the first stage of the disease. In the cases which have come under my own observation atrophy has commenced twice as

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quently in the first as in the second stage, and very rarely in the third; but I think it would be found, from a comparison of the experience of ophthalmic surgeons and of physicians, that the real excess in the first stage is still greater than this. Moreover, I think that there is a peculiar relation between the symptoms, which increases the difficulty of arriving at a conclusion from partial statistics. It is that when atrophy commences in the early stage the progressive tendency of the atrophy is often strong, and that of the spinal disease is slight; and conversely, when the atrophy commences later in the disease, after the alteration of gait has become well marked, the tendency of the atrophy to progress is much less marked. Of course, exceptions are not rare, but I have seen many cases which illustrate the statement. In some early cases atrophy has progressed to complete loss of sight, and for two, three, and even five years there has been no increase in the spinal symptoms, no affection of gait, even after the steadying influence of vision has been withdrawn. On the other hand, in several cases, amblyopia, coming on during the second stage, has remained stationary for one or two years, and in some has even improved. For instance, a man came under treatment with the second stage well developed, but still able to walk. Vision had lately failed. There was no affection of accommodation, no distinct limitation of the fields, but acuity was reduced to $\frac{1}{7}$ R. and $\frac{1}{10}$ L. Two years later the spinal symptoms had increased, so that he was scarcely able to walk without help, but vision had improved to R. 1-3½ and L. 1-4½.

I have not succeeded in tracing any relation between the character of the spinal symptoms and the occurrence of atrophy. It is well known that the atrophy usually commences in one eye before the other, and sometimes reaches a considerable degree before the second eye suffers. I have not met with any case in which sight was entirely lost in one eye while the other was unaffected. Which eye usually suffers first can only be decided by the collection of cases on an extensive scale. The symptoms of the atrophy, the characters of the impairment of vision, their uniformity or diversity, constitute a problem of some practical, and still greater pathological, interest. It is frequently said that colour-vision becomes impaired and the field limited before central vision fails. Certainly, however, the field for white does not always become limited before acuity of vision is reduced. I have seen several cases in which, when roughly tested with a small object, no peripheral limitation of the field could be found, although acuity and colour-vision were considerably impaired. I may mention one case, in the first stage of tabes, with grey atrophy of both discs, apparently equally advanced in the two. There was a considerable difference not only in the degree, but in the mode in which vision was affected in the two eyes. In the right there was only qualitative perception of light, and even this was limited to a narrow zone around the fixing point. With the left eye only No. 16 Jäger could be read at eighteen inches. No green field could be found. That for red was much limited. Those for yellow, blue, and white appeared to be normal. Carefully tested with a white object, half a centimetre square, the patient's field for white was the same as my own. A year later acuity had failed still further. He could only read No. 50 Jäger. Colour-vision was nearly the same as on the previous occasion. The field for white presented only a slight peripheral limitation on the inner and lower part. There was no central loss. I suspect that a careful examination of the mode of failure would show that it presents many variations, just as does the loss of sensation in the legs. Pain may be lost before touch, or touch before pain. The loss may be confined to the soles of the feet, or the soles may alone retain sensibility, which is impaired elsewhere.

Irregular defects in the fields of vision are of considerable interest in connexion with another question. Do the symptoms ever suggest that the process which impairs vision is greater in extent and intensity behind the eyeball than at the visible extremity of the nerve? Two cases of ataxy have been recorded, in which there was temporal hemiopia, and one of them I showed to this Society, and have recorded another in which there was a defect in each inner and lower quadrant—viz., partial nasal hemiopia. These cases suggest that the damage to the nerves reached its chief degree at the chiasma. In connexion with this question of retro-ocular damage another condition deserves notice—the occurrence of amblyopia without any change in the appearance of the optic discs, or of much greater loss of sight in one eye than the other when the ophthalmoscopic appearances are slight and equal in the two. I have more than once seen this. One patient, for instance, who had no affection of accommodation, and whose discs had a perfectly normal appearance, could only read with one eye No. 2, and with the other No. 10 test type. These cases certainly deserve study.

The impairment of vision sometimes increases very rapidly. A similar rapid increase is occasionally observed in the spinal symptoms. I have more than once known a patient who could walk fairly well lose in a day or two all power of locomotion. Do the cases with sudden failure of sight, or of rapid but steady course, present any differences in the aspect of their discs from those in which the downward progress is slow? In some patients the disc is clear and excavated; in others it appears to be occupied by a grey, soft, gelatinous-looking tissue, and the vessels are sometimes slightly narrowed. Does any difference in course correspond to this difference in aspect? In the patient with temporal hemiopia the loss came on very rapidly, and the gelatinous aspect of the disc was very conspicuous. Is the colloid-looking tissue seen between the fasciculi in sections of the nerve more abundant in these cases than in others?

Regarding the connexion of optic nerve atrophy with other spinal diseases, I have little to say. I have only twice seen it in cases of slight lateral sclerosis, and three times in insular sclerosis, never in progressive muscular atrophy or myelitis. Doubtless the slight frequency with which it occurs in these affections, compared with ataxy, is to be associated with the fact that they for the most part affect the motor, and tabes the sensory, nervous tracts. In general paralysis of the insane atrophy is somewhat more common, and may be an early symptom; but the question of its frequency, and the spinal symptoms with which it is associated in this disease, I will leave to those who have had larger opportunities of watching the course of the affection.

I pass next to the second part of the subject—the conditions of the internal muscles of the eyeball, of the iris, and ciliary muscle, which are met with in spinal disease. These conditions and their probable mechanism have been more than once brought before the notice of the members of this Society. Of the four muscular actions—contraction of the ciliary muscle on accommodation, contraction of the sphincter iridis occurring with accommodation, contraction of the sphincter iridis on stimulation of the optic nerve, and contraction of the dilator fibres of the iris on stimulation of the skin—of these actions some or all may be lost in association with spinal disease. They depend on at least three centres capable of separate action and liable to separate disease, all of which probably lie in a tract beneath the aqueduct of Sylvius below the front part of the corpora quadrigemina. The experiments of Hensen and Voelcker make it probable that the anterior portion of the tract governs accommodation, and the centre next behind it the reflex contraction of the iris. To the outer side of the latter is a centre on which depends the reflex sensory dilatation of the iris. The efferent paths of the two former are through the third nerve. We as yet know little as to the centre and path for the contraction of the iris which is associated with accommodation. We do not know whether the nucleus for the ciliary muscle is connected with the mechanism for contraction of the pupil at the centre, or in the lenticular ganglion, or in the ganglionic mechanism within the eye. The latter is, on the whole, unlikely, and it is not improbable that the connexion is established in the lenticular ganglion. If the connexion were at the centre—that is, if the centre for the ciliary muscle caused contraction of the pupil by acting on the adjacent centre for reflex contraction,—the pupil ought not to preserve its action on accommodation, when it no longer acts to light. But, as is well known, the light reflex is lost when the associated action is preserved. The path by which stimulation of the skin causes reflex dilatation of the iris is more circuitous. The afferent impulse reaches the centre by the cervical part of the spinal cord when the skin of the neck is stimulated, and the efferent impulse descends the cervical cord, probably passes through a subsidiary centre in the lower part of the cervical enlargement, and passes to the superior thoracic ganglion of the sympathetic, and then ascends the sympathetic to the eye.

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Like atrophy of the optic nerve, paralysis of the internal muscles of the eyeball are as frequent in locomotor ataxy as they are rare in other diseases of the spinal cord. The most frequent condition is loss of reflex action to light, while the pupil still contracts on an effort at accommodation, reflex iridoplegia, the Argyll-Robertson phenomenon, as it is termed. With this is often associated, as Erb first pointed out, a loss of the dilatation on stimulation of the skin. How far the association is invariable will be presently considered. Next in frequency, but very much less common, is paralysis of all the muscles within the eye, both cycloplegia and iridoplegia, the "ophthalmoplegia interna" of Hutchinson. The rarest of all is loss of accommodation, cycloplegia, without loss of reflex action. How frequently are these conditions met with in ataxy? Of seventy-two cases of primary degenerative ataxy of which I have notes, the internal muscles of the eyeball were normal in only six; some defect existed in sixty-six, or 92 per cent. Loss of reflex action to light was the only condition in forty-eight; but to these should probably be added six others, in which action to light was very slight, although just recognisable, and one in which the loss existed in one eye only. Thus there was total loss of the light reflex in about two-thirds, and either total or partial loss in about three-quarters of the whole number of cases. In the remaining eleven cases (15 per cent. of the whole) the pupil did not contract on an effort at accommodation, and in most of these it was clear that accommodation was also lost. In six there was total loss of accommodation and the light reflex, ophthalmoplegia interna. In two cases accommodation was lost in one eye, and action to light in both. In ten cases accommodation was lost in both eyes, and the light reflex in one only. In two cases accommodation was lost, but the action to light was perfect.

It is well known that these intra-ocular paralyses often occur early in the course of tabes, but the point deserves more exact examination. Of the seventy-two cases, twenty-five were in the first stage, twenty-nine in the second, and eighteen in the third. The percentage of the cases with intra-ocular palsy was in the first stage eighty-four, in the second stage ninety-three, and in the third 100. Thus in no case in the third stage were they absent. These facts show that in the majority of cases (four-fifths) these ocular complications occur early, but also that cases which escape in the early stage usually suffer during the subsequent course of the disease.

Do these paralyses precede the earliest symptoms of ataxy —occur before even the loss of the knee-jerk? To prove this it is not enough to find, for instance, the loss of light reflex without spinal symptoms, because we are not justified in assuming, any more than in the case of optic nerve atrophy, that the spinal symptoms will follow. Proof of the sequence can only be supplied by the demonstration of its occurrence, by the observation, for example, of a case in which loss of the light reflex at first existing alone was succeeded by the loss of the knee-jerk. Such a case has not come under my own observation. The nearest approximation to it was supplied by two cases in which there was total loss of the light reflex and an unequal knee-jerk; and in one of these, two months later, the knee-jerk could no longer be obtained on the side on which it was, at first, the slighter.

When the light reflex is lost the pupils are often, but not invariably, small—a point to which attention has been directed by Mr. Hutchinson. In two-thirds of the cases they were below 2½ mm. in diameter. In the remainder they were larger, 3 mm. or 3½ mm., and occasionally 4 mm., 4½ mm., or 5 mm. When there is loss of accommodation they are rarely very small, rarely less than 2½ mm., and they are often 4 mm. or 5 mm. in diameter. Inequality in size is common in both conditions, and so also is slight irregularity in shape. I have not succeeded, as a rule, in tracing any relation between the size of the pupil and the other symptoms of the disease. One exceptional case deserves mention. In this, on the side on which the pupil was the smaller, there was unilateral sweating over the head and face; this may be taken as evidence of lessened action of the sympathetic, which, it will be remembered, supplies also the dilator fibres of the iris. In the conditions in which we meet with loss of the light reflex it is sometimes modified in a peculiar manner. The pupil contracts under the influence of light, but immediately dilates again to its previous size, and this is maintained often after a few conspicuous oscillations. Does this condition pass into total loss of the reflex?

The reflex dilatation of the pupil when the skin is stimulated has risen into importance since Erb pointed out that its loss is associated with the loss of the light reflex. It still remains rather a matter of curiosity than of practical value, but certainly deserves further study. It is a phenomenon closely allied to the contraction of arteries which may be produced in animals by the stimulus of pain. The dilatation of the pupil may be obtained by stimulation of the skin of the face as well as of the neck, and also from other parts, but the neck is the most convenient place. Erb employed the faradaic brush, but the phenomenon can be obtained with equal readiness by any other painful stimulation. The point of a quill pen, for instance, answers well. Like the light reflex, it is double; stimulation of one side causes dilatation of both pupils. It is not always easy to recognise, and is certainly sometimes absent under normal conditions, especially in persons beyond middle life. In testing for it care must be taken that the pupils are not contracted either under the influence of a strong light or of accommodation. Without doubt the statement of Erb, that this skin reflex is usually absent when the light reflex is lost, is true of the majority of cases, but it is not true of all. I have seen several cases in which there was no contraction to light, but well-marked dilatation on stimulating the skin. In these cases the pupils were large; but the skin reflex may be lost even when the pupils are not below middle size. The skin reflex may be preserved when the accommodation is lost. Thus, in one patient there was loss of accommodation and no contraction, on an attempt to accommodate, in either eye. The right pupil, 4 mm. in diameter, did not act to light, while the left, 2 mm. wide, did contract. Both pupils dilated when the skin was stimulated.

A peculiar interest attaches to the early occurrence of these intra-ocular palsies in tabes. Almost all the other symptoms are on the side of the sensory system. Here only have we an early lesion in motor structures. It is true the loss of reflex action may be regarded as due to a lesion on the sensory side of the reflex mechanism. But this is improbable, because the loss of accommodation sometimes associated with it can only be due to a degeneration in motor structures. It is extremely probable that the loss of the skin reflex is of the same nature. Hence, while recognising the peculiar interest which, as Dr. Buzzard has pointed out, attaches to the coincidence of the loss of the knee-jerk and of the light reflex as early symptoms of tabes, we must also recognise the difference which almost certainly exists between them, the one being due to a sensory, the other to a motor, lesion.

I have met with this affection of the intra-ocular muscles in no other disease limited to the spinal cord but ataxy, if I except one singular case of old-standing wrist-drop, the origin of which was obscure. In lateral sclerosis, insular sclerosis, spinal muscular atrophy, and various forms of myelitis they have been absent. Even in cases of combined lateral and posterior sclerosis, in which there is ataxy of gait, inability to stand with the eyes closed, weakness and excessive knee-jerk, these pupil states are absent—evidence, with other differences, that the process of posterior sclerosis is not the same in site or character as in ordinary tabes.

On the other hand, in general paralysis of the insane, these ocular conditions are frequent, at least in hospital cases. The examples of this disease which are most frequent among hospital out-patients present certain apparent peculiarities. The physical symptoms are the same as in the classical form, indications of spinal degeneration are frequent, especially of lateral sclerosis, but the mental symptoms are less characteristic. There is usually some mental failure, loss of memory, etc., but there are rarely the optimism, delusions, and expansive delirium, so common in asylums. It may be said, and perhaps it is true, that these are merely cases of the classical form in an early stage, but certainly their progressive character is little marked. I have watched a few of these cases for a year and a half or two years without being able to observe any considerable increase in the mental symptoms. In this form the affection of the pupils is almost as frequent as in tabes. Of nine cases, in all of which tabetic symptoms were absent, in six the light reflex was lost, and in one other it was lessened. In no instance was accommodation lost. Of the frequency of these

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symptoms in asylum cases of general paralysis I hope we shall hear more to-night.

Intra-ocular palsy may occur without spinal disease (as Mr. Hutchinson has shown), and such cases deserve careful study. I have notes of fifteen, in eleven of which there was loss of reflex action to light, accommodation being preserved. In four accommodation was also lost. Two patients were the subjects of epileptoid attacks, with some indication of brain failure. In four there had been slight hemiplegia, and in two of these there was also some mental change. In two there was optic nerve atrophy, unequal in the two eyes, and slight enough in one eye to establish the independence of the reflex loss. In two there was no other nervous symptom, and in the rest only slight and indefinite symptoms. Mr. Hutchinson has shown how frequently syphilis is to be traced in the past history of the subjects of ophthalmoplegia interna, and the same lesson is taught by the cases now under consideration. In no less than seven of the fifteen there was a history of constitutional syphilis; two others had had suspicious sores; and in another, syphilis, although not proved, was in a high degree probable. I may mention a striking instance of this relation. A woman whose husband had had constitutional syphilis came under treatment for an attack of hemiplegia, followed by chronic mental disturbance and weakness of one third nerve. In each eye there was total ophthalmoplegia interna, with large pupils. The husband, who presented no nervous symptoms, had very small pupils, with loss of the light reflex. The relation of these symptoms to syphilis is of special interest on account of their frequency in ataxy, and of the much disputed relation of ataxy and syphilis. Like tabes, the pupil symptoms are doubtless due to a degenerative process; but we are on that account as little justified in denying as we should be in affirming a causal relationship. It is a question of fact, and not of theory as to what syphilis can or cannot cause, or at least only so far of theory as it may be necessary to modify our theories in harmony with the facts.

I regret that I am unable to offer any fresh contribution to our knowledge of the pathological anatomy of these affections; but I trust that the deficiency may be supplemented by others. I have thought it better to keep to the region of clinical observation, than to venture into the fair but infertile field of speculation as to the causes which determine the association of the symptoms. For these we must still wait for facts, and we may reasonably anticipate that they will come. In few departments of medical ophthalmology has progress been more rapid, and, it may be added, in few has it been more rich in its practical applications.

THE MEDICAL PROFESSION IN THE UNITED STATES.—According to the "Compendium of the Tenth Census," the total number of physicians and surgeons in the United States in 1880 was 85,671, of whom 2432 were women; the number of lawyers was 64,137, of whom 75 were women; and the number of the clergy was 64,698, of whom 165 were women. From a table that is given, it is found that more of the clergy survive their sixtieth year than any other professional persons; physicians rank next, and lawyers last, with a large gap between them and physicians. The agricultural classes have nearly as good lives as physicians, while of those engaged in trade and transport a very small proportion continue in activity after the sixtieth year. Artists of all kinds have a short working life.—*New York Medical Record*, March 10.

INJECTION OF CARBOLIC ACID IN NEURALGIAS.—Dr. Schrumpf publishes in the *Gazette Médicale de Strasbourg* an account of the success which he has met with from the hypodermic injection of carbolic acid in seventeen cases of sciatica, lumbago, cervico-brachial neuralgia, pleurodynia, and muscular pains. Pains which may have lasted for weeks or months are soon relieved, sometimes by a single injection, and at others by four or five, and never requiring more than nine injections. The usual dose was three centigrammes, but in obstinate cases this was doubled or trebled; and Dr. Schrumpf believes that much larger doses may be employed with impunity. He has never found any ill-effect result from the injections, but they are only useful in idiopathic neuralgias, and not in those which are due to spinal disease, compression of nerves, or deeply seated varicose swellings.—*Bets Mémorabilière*, 1883, No. 2.

ORIGINAL COMMUNICATIONS.

IRRITABLE BRAIN, CURED BY REST AND HYDROPATHY.

By CHARLES R. FRANCIS, M.B.

F. C., an Indian medical officer, aged thirty-three, married, of nervo-bilious temperament, active habits (bodily and mental), rather given to having too many irons in the fire at once, complained, when at Banda in 1850, of great mental confusion, and of his brain working, as it were, in a fog. He could not even read a newspaper without effort, and the effort soon became too great—he had to lay the paper down. F. C. was otherwise well, and he looked it. The appetite was good, and all the functions were naturally performed. F.C. was, however, much alarmed about himself, fancying that his brain was softening. It was pointed out to him that red softening was out of the question, his build and circulation being unfavourable to it; and for white softening he was too young. There were in truth no real indications of either. One symptom troubled him very much—viz., a sensation as of "pins and needles" in his right arm and leg, sometimes throughout the limbs, sometimes only at one part; but very seldom in both at once. These sensations were not persistent. Synchronous with them there was some tinnitus in the left ear. It was noticed, however, that both the tinnitus and "pins and needles" would appear after exposure to cold, as riding on a cold morning against the wind. F. C.'s habits were exceedingly regular in every way. His duties confined him to the plains, whilst his wife and family were in the hills. He had been a remarkably steady youth, working hard at his medical school, and gaining several prizes. He passed three examinations—for a diploma, a licence, and a university degree—all within a few months of each other, and used at this time to go to bed late, drinking strong tea to keep himself up to the mark. He was practically a total abstainer from alcohol. It was only after he had been a few years in India that his head began to trouble him. On first arrival in the country he had suffered severely from malarious (remittent) fever, followed by dysentery; and for this he was sent home about two years afterwards. He returned to India, at the end of a three years' furlough, in fair health. The extreme heat of the plains was a great trial to him. During the hot weather he would be much prostrated, and troubled with various dyspeptic symptoms. The mental confusion, which had been slowly creeping upon him, was most conspicuous in the cold season. He was worse on first going to the hills, where he was sent on medical certificate on account of the dyspepsia, but gradually became accustomed to the rarefied atmosphere, and eventually had even better health there than in the plains.

F. C. naturally consulted every medical officer of experience that he met. All agreed that the case was one of "irritable brain," the result of over-excitement, with an occasional tendency to congestion. F. C. was better on first rising in the morning—better, too, when he was lying down. His brain required rest and soothing, he was told. Said one, "Use your brain as little as possible, and take aloes"; which was sound advice, as far as it went. Said another, "Drink only water; give up even the ten ounces of bottled beer that you have with your dinner." A third—a non-medical friend—strongly advocated mesmerism; fourth, also a layman, tobacco. The soundest advice of all, as it proved, was to take another holiday, and, spending a few months at Malvern, to try hydropathy. This last adviser quoted the case of a Scotch professor who had suffered from precisely the same symptoms in a worse degree, and who was obliged to give up his chair at the university. He too, and his friends with him—medical men, even—feared softening of the brain. He went to a hydropathic establishment in Scotland—these institutions were genuine(a) sanitaria in those days (thirty years ago), and not the hotels without alcohol they are now—and in due time became perfectly well. Subsequently he was able to resume his chair. F. C. was much cheered by the history of this case, and deter-

(a) Early meals were provided, and early hours were kept—a system more in keeping with the laws of nature, and more conducive to a speedy recovery, than that now in force.

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mined, when he again went to England, to give hydropathy a trial. Meanwhile, he must be content to rub on as best he could.

Eight years after the expiry of his last furlough, F. C. returned to Europe on medical certificate on account of his head. On arriving in England he at once consulted a London surgeon celebrated for his knowledge of the brain and its diseases. This gentleman doubtless diagnosed the case correctly. "Your brain," he said to F. C., "is like that of some reporters to newspapers in the House of Commons, only not so bad; *their* brains are on the stretch for many hours together, and at last they break down. . . . Put flying blisters behind your ears, and take gr. v. of blue pill occasionally. As you *are* on furlough make the most of it, and you'll soon be well." This advice was supplemented by that of a physician familiar with the disorders of Anglo-Indians. "Go," he said, "to Carlsbad, or drink the Carlsbad waters in England." F. C. applied one blister and swallowed one blue pill; but, finding himself rather worse than better afterwards, he abstained from both for the future. He drank several pints of Carlsbad waters at Brighton with a similar result. Then his wife took him in hand. "Mental effort *must* be given up—that is clear. Read a little every day, by all means, but avoid whatever involves mental exertion. We dine early with the children, and our fare is plain enough. Take half a tumbler of bottled beer, such as we have in India, with your dinner, (b) and afterwards sit in the arm-chair and read a light, amusing book. If you can have a siesta, so much the better." This plan answered well. F. C.'s brain, however foggy in the forenoon, was clear by tea-time, and remained so during the evening, which then became his best time. The afternoon sleep did not tend to diminish that at night. The confusion, great during the day but passing off after sunset, however, is constantly seen in these "heads" from India, whether the individual has been out of the house, or remained all day within; but the heat of the sun undoubtedly aggravates the fogginess, as does glare (persons so affected should walk on the shady side of the road), or even a cup of hot fluid, as tea or coffee, taken before sunset. A heavy meal, too, will make it worse, and induce post-prandial sleepiness. F. C. carried out the idea of going to Malvern; and returned to India at the end of his two years' furlough, having forgotten all about his head troubles, which, with occasional intervals of freedom, had been a source of such anxiety and worry to him for seven years. I have stated that F. C. is now, though past sixty years of age, able to do more brain work than he could thirty years ago. But this, however, is not illimitable. If, forgetting that his youth is gone, he works too many hours consecutively, especially at night (he was always a night student), or thinks very deeply—as at a game of chess—the old symptoms return, and remain for two or three days, or longer. The tinnitus in his left ear then becomes again very conspicuous. So that F. C. is compelled to be very careful.

Remarks.—The case is encouraging, as showing the value of what is so frequently lost sight of in the treatment of disease, viz., physiological rest; and that, if this rest be insisted upon, good results will generally follow. No treatment in such a case as this, however judicious, could be expected to succeed without it. This kind of "head" is not at all uncommon in India, especially after sunstroke; and the most economical remedy, I believe, is to leave India at once for a prolonged sojourn at home. Lord (when Sir John) Lawrence used to divide his executive officers in the Punjab into two classes—men with brains but no stomachs, and men with stomachs and no brains. The extreme heat of the Punjab, co-operating with much mental labour, is apt to induce a train of symptoms in the brain similar to those from which F. C. suffered; and persons so suffering are said to have the "Punjab head"—a man feels that he *has* a head. It may here be stated broadly, that those who are at all liable to "go in the head" should avoid India. F. C. should never have gone. His nervo-bilious temperament was not suited for the country; and he never became acclimatised. He was always more or less prostrated by the heat during the hot season. In the course of any illness (and he had his share of tropical diseases) the nervous symptoms were exalted, conveying an idea of danger that did not exist. Even in England, when quite a youth, he could not study long without an inclination to micturate. This symptom has become intensified with advancing years. It is not always easy at first to diagnose a case like F. C.'s correctly, though the history usually throws much light upon it. Patients naturally fear the worst; and certainly "pins and needles" may indicate the approach of something more serious than the congestion which sometimes, as with F. C., co-exists, but which, being induced by a known cause—as cold,—passes off with its removal. I believe that hydropathy is well suited for these "heads," though the addition of the lamp-bath is, in my experience, decidedly injurious.

Clapham Common, S.W.

(b) Of questionable efficacy. F. C. is now an abstainer and a sexagenarian; and able to do more brainwork than he could thirty years ago.

PHTHISIS, BRONCHITIS, AND PNEUMONIA: ARE THEY EPIDEMIC DISEASES?(a)

By G. B. LONGSTAFF, M.B., F.S.S., etc.

THE author explained that his object was to examine the Registrar-General's Returns in such a way as would make clear their bearing on the solution of the question propounded.

As in previous papers relating to summer diarrhœa and the diseases allied to erysipelas respectively, he exhibited diagrams graphically representing the death-rates for England and Wales from the diseases in question, and certain others in various ways allied to them, during a period of twenty-five years; also showing the same death-rates in London for thirty-three years compared with a curve expressing the number of cold days in each winter. Many other curves had been planned out by the author, but only a few had proved useful for the purpose in hand. This diagram showed that the death-rate curve of phthisis deviates but very little from a straight line, resembling in this respect those for cancer, apoplexy, paralysis, convulsions, and fractures. The curves of tubercular meningitis (hydrocephalus), and to a less degree tabes mesenterica, resembled the phthisis curve. The phthisis death-rate had fallen 20 per cent. during the last twenty years. The bronchitis curve exhibited considerable fluctuations, but on the average it had risen 81 per cent. during twenty years. Pneumonia gave a curve closely resembling that of bronchitis in many respects, but the average mortality had fallen 20 per cent. The total mortality from all diseases of the respiratory organs, together with phthisis, showed an increase of 5 per cent.; indicating that probably many deaths formerly returned as due to phthisis or pneumonia were now classed with bronchitis. Pleurisy appeared to be more allied to rheumatism than to respiratory diseases. From the curves relating to London deaths it appeared that bronchitis and pneumonia corresponded with the coldness of the winters, but not so closely as might have been expected. Phthisis was but little affected.

Curves derived from Messrs. Buchan and Mitchell's paper on "The Influence of Weather on Mortality," showing the average weekly fluctuations of the death-rate from various causes in London during thirty years, strongly confirmed the author's conclusions, with the single exception of tabes mesenterica, which gave an entirely different curve from that of phthisis.

In another diagram were exhibited the week-to-week fluctuations of the deaths from bronchitis and pneumonia during the last five winters in London, and their relation to cold; also the same for phthisis during two of the winters. This diagram showed clearly that the pneumonia death-curve had a general correspondence with the bronchitis death-curve, but it differed in two particulars, viz., the fluctuations were much less, and while it rose in the autumn rapidly, it fell in the spring more gradually. In the spring of 1879 there was a prolonged high mortality from both bronchitis and pneumonia, out of proportion to the severity of the cold; and during the whole winter 1878-79 the two curves of bronchitis and pneumonia corresponded less closely than in the others. The effect of two hard winters upon the phthisis mortality was shown to be remarkably slight. It was noted that for every 1000 females that died of pneumonia no less than 1460 males died, whereas

(a) Abstract of a paper read before the Epidemiological Society of London, Wednesday, April 4, 1883.

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in the case of bronchitis the numbers were 1000 females to 1104 males, and in the case of phthisis 1000 females to 1046 males.

Bronchitis caused nearly three times as many deaths in proportion to population in Lancashire as in Gloucester. The mortality was also very high in Metropolitan Surrey, Metropolitan Middlesex, West Yorkshire, Warwick, and Monmouth. It was very low in Cornwall, Sussex, Norfolk, Extra-Metropolitan Surrey, Cambridge, and Gloucester.

Pneumonia was most fatal in Lancashire, Monmouth, South Wales, West Yorkshire, Stafford, Metropolitan Middlesex, and Metropolitan Surrey; least fatal in Sussex, Wilts, Hants, Bucks, Oxford, North Yorkshire, and Westmoreland.

In eight registration counties, pneumonia was found to be comparatively much more fatal than bronchitis—viz., South Wales, Gloucester, Rutland, Extra-Metropolitan Surrey, Bedford, Cornwall, Monmouth, and Cambridge. In ten registration counties, bronchitis was found to be relatively much more fatal than pneumonia—viz., North Yorkshire, Warwick, Wilts, Metropolitan Surrey, Cumberland, Nottingham, Westmoreland, Cheshire, Somerset, and Oxford.

The author's main conclusions were:—

1. That the mortality statistics of England and Wales did not give any evidence in favour of the view that phthisis is communicable; but they showed, on the other hand, that weather had very little influence on the phthisis death-rate.

2. That while bronchitis and pneumonia were both greatly influenced by meteorological conditions, it was difficult to explain, by those conditions only, all the phenomena.

3. That common catarrh was a communicable disease, and that it was probable that very many cases of bronchitis and pneumonia might be looked upon as complications of that or some similar disease of mild character when uncomplicated.

4. That the different incidences of bronchitis and pneumonia on the two sexes pointed to some difference in the causation of the two diseases.

5. That there would appear to be some common factor in the causation of phthisis and tubercular meningitis.

PREPARATIONS OF GOLD IN SYPHILIS.—In a discussion at the Société de Thérapeutique (*Bulletin de la Société*, April 30), Dr. Martineau stated that in inveterate syphilis he had found preparations of gold very useful. He has given it with success in cases which had proved rebellious to mercurial frictions and subcutaneous injections. He prescribes the following mixture, giving three teaspoonfuls of it daily:—Water 1000 grammes, chloride of gold, chloride of sodium, of each 1 gramme. Dr. Gougenheim, however, believes that the employment of gold should in these cases be quite exceptional, and some instances of their success should not divert us from the classic treatment of old syphilides by the iodide of potassium, which is thus far the most powerful and certain remedy that we possess. He always finds it of avail in deep-seated syphilitic lesions, and also in syphilitic affections of the eye. But it must to this end be given in massive doses, and in this way he has often ordered as much as ten grammes *per diem*.

SUDDEN DEATH FROM CEREBRAL INHIBITION.—Under the name of inhibition, Dr. Brown-Séquard designates the arrest or suspension of function in a nervous centre, muscle, or nerve—an arrest which takes place without visible organic change, following immediately upon irritation of some point of the nervous system more or less distant from the part in which the effect is observed. It is to cerebral inhibition that he attributes a form of sudden death, called formerly by him "death without agony," which is analogous to the sudden loss of intellectual activity that occurs in epilepsy. This death is easily produced in animals by a simple prick of the ventricle of Arantius in the floor of the fourth ventricle. The animal falls motionless at once, with complete loss of consciousness. The heart continues to beat, but the respiration is arrested. The reflex action of the cord is increased. The cause of death is nowhere apparent. At least, there are no visible changes to account for it. In the absence of any other explanation, Dr. Brown-Séquard arrives at the conclusion that loss of cerebral function and of activity, in certain cases, is the pure effect of inhibition proceeding from some more or less distant irritation.—*New York Medical Record*, May 19.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

EAST LONDON HOSPITAL FOR CHILDREN.

BRONCHO-PNEUMONIA—ABSCESS IN LUNG—DEATH—AUTOPSY.

(Under the care of Dr. EUSTACE SMITH)

[For these notes we are indebted to Mr. J. SCOTT BATTAMS.]

GEORGE C., aged five years; admitted March 16, 1883.

The boy was brought as out-patient to Dr. Warner on February 25. The only history that could be obtained was to the effect that he had been ill a month, complaining of pain in the chest, that he had a cough, and was wasting, and sweating at night.

On admission, Dr. Smith noted—"Child rather thin; respiration somewhat laborious with some recession of soft parts on inspiration. There is complete dulness over the lower half of the right chest, back and front, with greatly increased sense of resistance. Respiration weak, high-pitched, and bronchial at back; very weak in infra-axillary region and at base in front. Heart's apex in fifth space, half an inch outside nipple line; sounds healthy; no friction. Right shoulder lower than left. Spine a little curved in the dorsal region, concave to the right. Left lung normal."

March 27.—Still dulness lower half of right side, back and front. Respiration very weak and bronchial; blowing below nipple. Complexion is very straw-coloured. Intercostal spaces on the right side are more distinct and sink in with inspiration more than on left side. The fingers are clubbed.

April 3.—Heart's apex in fifth space, half an inch outside nipple line. The dulness extends to the spine of scapula behind and to the third rib in front. An exploring syringe only withdrew a little blood and a drop of what appeared to be very thick pus.

6th.—Dulness the same. Respiration everywhere weak and blowing; neither friction nor rhonchi are heard. The temperature, which up to April 1 was normal, now rises to 102° or 103° at night, becoming normal in the morning.

17th.—The child is going downhill and getting thinner. There is some œdema of the feet, and the evening temperature rises to 103° or 104°, becoming 98° or 99° in the morning. The urine is thick, and deposits lithates with nitric acid. Dr. Smith noted—"Deficient expansion of right side, and the spaces sink in more deeply than on the left. The spine still curved, with concavity to the right. There is now dulness over the whole of the right chest, quite complete from spine of scapula downwards. The percussion note is tubular in front and in axillary region; over the back axillary region and the base in front the respiration is loud and cavernous. There are some loud metallic clicking sounds with inspiration and expiration, especially over the back—they sound very superficial. Vocal resonance is slightly ægophonic. There is general hyper-resonance over the left side, the respiration being loud and coarse. Three exploratory punctures were made, but with no result except a very little bloody fluid."

23rd.—Is much emaciated; looks pinched and pale. The high evening temperature is reduced two or three degrees after five-grain doses of quinine. To-day an abscess broke over the seat of the last puncture, and is discharging thin, unhealthy pus. It is not evident whether it communicates with the pleural cavity or not. The pulse is rapid and small; respirations 60, nares acting. The abdomen is rather full, but moves in respiration; it is a little tender over right side. After coughing the child often retches, bringing up yellow, offensive, non-aërated matter as if from pleural cavity.

27th.—The child has been gradually sinking, and died to-day.

Autopsy.—Body extremely emaciated. On separating the skin from the chest-walls, an abscess cavity was found communicating with the right pleural cavity by a very small opening in the sixth space, through which very thin dirty fluid exuded. A probe passed in entered a cavity within the chest. The right lung was closely adherent to the ribs and to all neighbouring structures. There was no special thickening of either pleura, and no sign of pus. The lung was

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large, heavy, and completely solid throughout. The middle lobe was broken up into a cavity filled with detritus and thin dirty fluid (some of which had exuded through the costal opening into the abscess cavity outside the chest). The rest of the lung was completely solid, yellowish grey, and not unlike almond-rock on section. The changes were more advanced below than above. Left lung was adherent at the base. The lower lobe was solid, sinking in water, and in the same condition as the right, but less advanced. The upper lobe contained a few yellow nodules, and small grey granulations could be seen and felt over the surface. The costal pleura was studded with yellow nodules. The bronchial glands were large and caseous, and many were breaking down. Spleen contained several yellow nodules the size of peas. There was no peritonitis, but the liver was adherent to the diaphragm. Other organs apparently healthy.

Remarks.—The post-mortem examination revealed very extensive disease in both lungs; yet, if the history given by the lad's parents was correct, the illness had only lasted two months. The physical signs at one time rather suggested an empyema; but an exploratory puncture negatived this idea. At the same time, the presence of disease in the left lung and the boy's general condition quite contra-indicated any of those operative measures which have occasionally been attempted for the relief of abscess in the lung. The autopsy showed how hopeless they would have proved in this case, even had they been successful in a local sense.

CASE OF GENERAL TUBERCULOSIS ASSOCIATED WITH MITRAL DISEASE AND RICKETS—DEATH—AUTOPSY.

(Under the care of Dr. DONKIN.)

Charles B., aged nine years; admitted under the care of Dr. Donkin, May 16, 1883.

Family History.—Father suffers from rheumatism, his family healthy. The mother is said to suffer from her liver and heart. No history of consumption or syphilis. Mother has had six children; three have died from convulsions during teething. This boy was born healthy; he was suckled for twelve months, and cut his first teeth at eighteen months with bronchitis. He used to suffer from "catching of breath" at night, and go blue in the face. When two years and a half old had a fit, and has never spoken distinctly since. Had croup and bronchitis last year, also measles. The boy is brought on account of diarrhœa and vomiting. The former began three weeks ago, and the latter has lasted a week, the vomiting commencing about an hour after meals. His bowels act four or five times daily; the stools are pale straw-coloured, and very offensive. Appetite very bad; complains much of thirst, and sleeps a great deal. No blood in the stools.

Condition on Admission.—The boy was extremely excited and frightened during examination. He had a thick upper lip, and a pale, "muddy" complexion. The tibiæ and fibulæ had well-marked rickety curves. He had a very slight cough and a well-marked "pigeon" chest. No dulness over lungs; respiration normal; there were a few bronchitic râles. Respirations 30 to 40; temperature 99°. The abdomen was distended, resonant, and apparently not tender. The liver and spleen could not be felt. Tongue slightly coated behind, red at the tip, with prominent papillæ. Heart's apex half an inch below and in nipple line. There was a short rough murmur just preceding the apex-beat, and only heard over this area. Urine acid; no albumen. Body was much wasted.

May 21.—Continues much the same. Does not seem very ill, though he looks so. Bowels open two or three times daily; stools large and loose, containing yellowish-white lumps; no blood.

24th.—Dr. Donkin found a high-pitched resonance under left clavicle and in the supra-spinous fossa behind. Respiration is harsh, but there are no râles. Motions are still loose, large, light in colour, and offensive.

31st.—There seems very little change. The abdomen is still distended and evidently a little tender. Stools still loose, light, and pea-soupy. Has been taking mist. catechu c. hæmatoxyli. There was a gain in weight of one pound the last week. The skin is everywhere dry and harsh. The temperature went up to 100° last night.

June 1.—This morning the hands were noticed to be in the convulsive attitude, and there was apparently complete anæsthesia of hands and forearms; but no evidence of any paralysis. He took his dinner and tea well. At 6 p.m. he suddenly called out, and was found very pale, and unable to sit up. His speech, always indistinct and "explosive" in manner, had become quite unintelligible. The pallor of the face gave place to a vivid flushing, and a profuse sweat stood on the forehead. A convulsion succeeded: the eyes and mouth were screwed up; the nostrils dilated enormously; the arms were flexed, and the hands tightly clenched; the lower limbs were also rigid; he foamed slightly at the mouth, and died in a few minutes.

Autopsy.—Brain substance generally rather soft; no excess of fluid in the ventricles. The membranes along the longitudinal fissure rather thickened. No apparent abnormality of the frontal lobes. No tubercle, hæmorrhage, or emboli. Thorax: Each pleural cavity contained about ten ounces clear fluid. There were a few yellow tubercles over costal pleura. Both lungs contained small masses of greyish pigmented tubercle, none being on the surface except a mass the size of a small egg at the left apex. The bronchial glands were very large, and on section like masses of Gorgonzola cheese. The calibre of the right bronchus was much narrowed at one spot by a surrounding mass of such glands. There was considerable injection of the main bronchi and larger divisions. Mediastinal glands were large and cheesy. Heart: Right ventricle flabby and empty; left ventricle thickened and dilated. The mitral valve was considerably thickened, the aortic flap being almost cartilaginous; the valves appeared to meet fairly well. The other valves were healthy. Abdomen: The abdominal cavity contained about a pint of turbid fluid. The coils of intestine were matted together. The abdominal peritoneum was a mass of yellow tubercle. The liver was densely adherent to the diaphragm by similar material. The mesenteric glands were large and caseous. There were several small ulcers in the intestine. There were no tubercles in the liver, spleen, or kidneys. The kidneys were much injected.

Remarks.—This case was interesting on account of the extensive peritonitis which was found. During life he had not complained of pain when the abdomen was examined, and it did not appear tender. On the other hand, he had a peculiar pallor, which, together with diarrhœa, some fitful vomiting, and distension of abdomen, were very suggestive of tubercular peritonitis. He had some impediment in his speech, which appeared to have followed a convulsive "fit." We could not discover any brain condition to account for this; for beyond a little softness there was no other abnormality either in the conformation, the vessels, or the substance proper of the brain.

PROVING ONE'S OWN TESTAMENTARY CAPACITY.—The new law of Michigan seems based on marvellously good common sense, and will avoid a deal of annoying *post-mortem* litigation over wills, by establishing *ante mortem* the testamentary capacity of the testator. It provides that the testator may go into court, giving notice to all concerned, and have his own will proved. Any doubt as to his sanity must be settled then and there. Nor will the opinion of any supposed heir be warped by a question as to his personal interest, for the contents of the will need not be divulged. The only question is, whether the testator is mentally fit to make a will. What flaws our legal friends may find in the method, we do not know, but it certainly commends itself to the common mind as a most excellent way of preventing trouble and unseemly conflicts in expert testimony. —*Phil. Med. News*, May 26.

FOREIGNERS IN PARIS.—According to the census of 1881, the Parisians born in Paris are the exception. There were found to be enumerated per 1000, only 322 born in the town, 38 born in other communes of the department of the Seine, 565 in other departments or the colonies, and 75 born abroad. In 1881 there were in Paris 45,281 Belgians (34,192 in 1876), 31,190 Germans (19,024 in 1876), 21,577 Italians (11,536 in 1876), 20,810 Swiss, 10,789 English, 9250 Dutch, 5927 Americans, 5786 Russians, and 3616 Spaniards. The number of foreigners has rapidly increased, having been only 119,349 in 1876, and in 1881 being 164,038—this increase of 44,689 constituting about a fifth part of the total increase of the Parisian population. The number of Germans and Italians has singularly increased since 1876.—*Union Méd.*, May 22.

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Medical Times and Gazette.

SATURDAY, JUNE 16, 1883.

THE ARMY MEDICAL STAFF AND THE EGYPTIAN CAMPAIGN.

Referring again to the serious complaints brought against the Army Medical Department, and the condition of the army hospitals during the campaign in Egypt, it has to be considered where the blame of those shortcomings, the existence of which was in any degree proved, should really lie. During the rapid advance of the troops the hospital accommodation was, in some points, not wholly satisfactory, but this was an accident of war. You cannot make omelettes without breaking eggs, and the sick and wounded are but a secondary consideration when the battle is raging. Everything is subordinate to the necessities of the fighting column. Personal assistance is then all that the doctors can give their patients; and no one ventures to say that this aid was not freely and fully given on the battle-field. But when the fight is over the claims of the sick and wounded become paramount. In Ismailia and in Cairo there was delay in furnishing the hospitals and in providing for the comfort of the sick. It is impossible to read the evidence without coming to that conclusion. Lord Wolseley lays the whole blame of this upon the doctors. He does so deliberately, and at great length, before the Committee, and he raises the really most important question that will have to be settled, which is this —Have doctors the power to override all regulations, and purchase at any cost whatever may be necessary for the treatment of their patients? And have they the power not only to do this when the stores are deficient or have not been supplied, but should they purchase duplicates when supplies have been provided already by the British Government, and are daily expected to reach their destination? It is Lord Wolseley's opinion that the doctors should use this power, whether they have a right to do so or not. His words are clear enough, and his opinion is very forcibly expressed. We just now speak only of Lord Wolseley's "opinion," and not of his evidence of what he "saw" or "said" on his visits to the hospitals. His imagination, no doubt, sometimes carried him away, and his poetical pen sometimes gave to airy "nothing" a local habitation and a name. His denunciations of individual doctors appear really to have been afterthoughts only; and his celebrated declaration that "It is a matter of indifference whether a loaf costs a shilling or a pound if a sick man needs it," is an outburst that deserves to be bracketed with such fine sayings, whether mythic or not, as "The Guard dies, but never surrenders!" and the courteous invitation, "Gentlemen of the French Guard, fire first!" But to return to his opinion. The Director-General asks him (6278), "Do you think it would be wise on service in any country—take Egypt for example—to saddle the medical officers with the responsibility of going to the market and finding what they required, and allowing the officers of the Supply Department, whose business it is to supply the hospitals with what is necessary, to escape that duty simply by saying, 'I have not got it, and you can go and purchase it'? Do you think that that would be a wise thing to adopt?" And here is Lord Wolseley's answer: "I think that so long as a medical officer has given to him the position which has recently been given to him, by the great desire of the Medical Department, which is that he is to be supreme in everything, a man who is put in that position ought to accept the immense responsibilities which that position involves. The members of the Medical Department have obtained for themselves a great position of independence, and a very high position in the Army, but they have not at the same time assumed the responsibilities which their high position carries with it." Question and answer show that to take at all risks the power of purchase would be an unauthorised *assumption* of power. Deputy Surgeon-General Hanbury was evidently not disinclined to spend money on his own responsibility, but he could not forget that he ran a risk He says (11,250), in answer to the Director-General, "I never had any power given to me to make any purchases whatever. On the contrary, there is a distinct order against it, and I have in my possession a distinct order against it." He goes on to say that the order would not have *prevented* him from going into the market and purchasing what he thought necessary. The difference between Lord Wolseley and the doctors seems to lie in the limit assigned of the power to purchase. Lord Wolseley says he would have authorised, on one of his visits to the Cairo Hospital, the expenditure of £1000 on necessaries, but it does not appear that he *did* anything of the kind; and Brigade Surgeon O. Barnett explains in his evidence (9924) that, as to a great many articles needed, he did not purchase them, "because many of these things were on board a store-ship, and he daily expected to have them." We suppose the War Office will, in the end, express some clear and definite opinion as to the limits of expenditure by medical officers in times of emergency. We almost suspect it is a question of *time*. While the cries of the wounded and the shouts of the victors are in our ears, no doubt England would be very tolerant of expenditure, but this state of feeling never lasts long.

Lord Wolseley's evidence before the Committee of Inquiry, however, clearly shows, we think, that the shortcomings of which he complains were not due to the Medical Department. He says that the fact of the hospital at Ismailia being a field, and not a base hospital, "is a technical way of getting over a great number of difficulties, but it is more a fiction than a reality; whatever it may have been actually called, according to the regulations, it was actually a base hospital." But could his opinion that it was really a base hospital have changed the arrangements, originally made with his sanction, for its equipment as a field hospital? Again, he "cannot

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tell" why there was a delay in the arrival of the *Carthage* with hospital equipments and medical comforts. But who but Lord Wolseley was responsible for the sudden movement of the troops from Alexandria to Ismailia? Is it not clear that the responsibility for the delay—however necessary on military grounds it may have been—rested with him, or his staff? The medical officers had no power in the matter. In the case of the unwholesome bread, again, Lord Wolseley makes bitter complaint against the medical officer for not having gone into the bazaars and bought better bread. But he must have been aware of the War Office order that "there should be but one purchasing department in the local market, and all articles required should be provided by means of requisitions upon the Commissariat Department." There is no proof, so far as we can see, that he ever complained to or of the Commissariat Officer; nor that he ever gave the medical officer a written authority to go into the local market and purchase food or other necessaries. Nor does it appear that at Cairo he did anything to help the medical officers to overcome the difficulties they encountered, beyond authorising the Principal Medical Officer to hire a civilian cook. In the debate in the House of Commons, on the 11th inst., on "Lord Wolseley's Grant Bill," Dr. Cameron objected to the vote "on general and specific grounds," and spoke at length on the grave charges the Commander-in-Chief had brought against the Medical Department. He contended that if there had been any break-down in the medical arrangements it had been owing to the conduct of the Commander-in-Chief. That officer had a right, of course, to keep his arrangements secret, but ought not on that account to blame the medical officers for a want of provision beyond their control. The greatest credit was due, Dr. Cameron said, to the Medical Department for the way in which they had discharged their duties throughout the campaign; one fact alone affording ample proof of this, namely, that notwithstanding the trying and arduous character of the expedition, and the unhealthiness of the climate, they had brought the army through with a rate of mortality per 1000 no higher than the normal rate of mortality among the civil population of London. He complained that Lord Wolseley should have telegraphed from Egypt flattering accounts of the Medical Service, and should then on his return home have turned round and thrown on the shoulders of the medical officers the responsibility for shortcomings which were the result of his own peculiar mode of conducting the medical arrangements of the campaign. The Marquis of Hartington, in replying to Dr. Cameron's speech, said that it was possible that the medical officers might have been impeded and embarrassed by the absolute secrecy observed as to Lord Wolseley's movements; but that secrecy was necessary, and of the utmost importance for the successful conduct of the campaign. All the information as to the war showed that Lord Wolseley was amply justified in the secrecy he maintained, even though it had the effect of throwing out the departmental arrangements. He himself might regret the terms in which Lord Wolseley had referred to some of the medical arrangements, but he denied that anything had been brought forward which should dissuade the House from ratifying the thanks which had been voted to Lord Wolseley, and from rewarding him by a pecuniary grant. Very true; and no one denies that a commander-in-chief has full right to observe secrecy as to the arrangements of a campaign. But that was not nor is the question. The point is that Lord Wolseley throws on the medical officers the blame of the shortcomings and difficulties that necessarily resulted from his secrecy, although he did nothing to help them; and it was natural that any occasion that offered should be seized for exculpating the medical staff from the grave charges brought against them. Lord Wolseley himself must by this time, we venture to think, regret his ungenerous treatment of the medical staff, and the sensational and highly exaggerated tone of his evidence against them before Lord Morley's Committee.

THE OUTBREAK OF TYPHUS FEVER AT NAZARETH HOUSE.

It will be in the recollection of our readers that in February of the present year a grave scandal was caused by the statement of a medical officer of health that an outbreak of typhus fever had occurred in a home in Hammersmith owing to neglect of cleanliness and overcrowding. The matter was mentioned in the House of Commons, and excited much public attention; and Mr. John Spear was sent to inquire into the case on behalf of the Local Government Board. His report, which was laid upon the table of the House of Commons a few days ago, is now before us. Nazareth House, the home in question, is maintained and managed by Sisters of the Order of Nazareth, and is intended for the succour of the aged poor, and of destitute children up to the age of sixteen years. Of the latter, at the time this report was drawn up, there were 175 in the home. The outbreak of typhus fever seems really to have commenced as far back as last October, but for some months no suspicion as to the true nature of the cases was aroused. It is highly probable, though not capable of actual proof, owing to the length of time that had elapsed before the inquiry was made, that the fever was introduced by two relatives of the child first taken ill. The second case did not occur until after the first child was convalescent and back in the class-room again, and after this the disease gradually spread, so that by the first week in January eight children in all had been ill. In the course of the next three weeks seven fresh cases occurred, and in one a fatal result ensued. By this time the medical officer to the home had come to the conclusion that the disease was typhus fever, and had caused all the sick and convalescent to be isolated, and established strict measures of quarantine. Cases, however, continued to occur, and some of the sisters also fell ill, so that on February 21, the day on which Mr. Collier (the Medical Officer of Health for Fulham) visited the home there were seven fresh cases amongst the children, and three sisters ill. The last case occurred on March 19, making a total of thirty-one, to which should be added two priests who attended the Christmas entertainment at the home on January 9, and were both taken ill with fever (presumably typhus) about a fortnight afterwards, and a nurse at the hospital to which the children were removed, who contracted the disease. Mr. Collier, after his visit on February 21, reported to the Board of Works, Fulham, that he had been asked to see seven children suffering from fever at Nazareth House, and that owing to the dirty condition of the bodies of the patients he could not form any opinion as to the nature of the fever, and referred to a previous report of his in which he had stated that the rooms were so overcrowded and ill-ventilated as to be injurious to health, and that at that time he had informed the Mother-Superintendent that a space of 2000 cubic feet should be allowed to each inmate in the sleeping wards, and not less than 200 cubic feet in the day wards. Dr. Sweeting, the Medical Superintendent of the Western Fever Hospital, to which institution the seven children already referred to were transferred on February 22, reported to the Managers of the Metropolitan Asylums District that all the cases were on admission dirty in the extreme and infested with vermin, and he added that he had been informed by the Medical Officer of Health for Fulham that only ninety cubic feet of air-space was available

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for each girl, and that there had been more than sixty girls previously ill. The nurses of the Fulham Fever Hospital all told Mr. Spear that there were lice in the children's heads, and that their knees and feet were ingrained with dirt. Five of these children had been seen before their removal by two perfectly independent witnesses—viz., Messrs. Barnes and Walker, both practitioners in Hammersmith; and three of them had also been seen by Dr. Mahomed, Physician to the London Fever Hospital. These three gentlemen all stated in writing to Mr. Alderton, the medical attendant at the home, that they saw nothing in the condition of the bodies of the children to cause any difficulty in the diagnosis; and Dr. Mahomed said, "I did not find their persons unclean, nor their surroundings dirty. They appeared to me to be thoroughly well cared for." This evidence practically disposes of the charge of neglect of personal cleanliness which Mr. Collier brought, for it should be remembered that these children who were last taken ill, and were the ones especially referred to, had for some weeks enjoyed unusual opportunities for getting dirty, inasmuch as all lessons had been given up, and the four sisters who usually had charge of the class-rooms (from which, with a single exception, the patients were derived) had all been taken ill with the fever, so that the point fairly to be considered was not whether the children were or were not absolutely clean, but whether their state indicated habitual neglect, or merely such a relaxation of the usual discipline as would be rendered unavoidable by the peculiar circumstances of the case. The charge of overcrowding was practically answered by Dr. Sweeting himself, for after a visit to Nazareth House he reports:—"I am of opinion that the alleged overcrowing is incompatible with the structure and arrangements of the institution." In the second part of his report Mr. Spear describes the structural and sanitary arrangements of the building, which seem to be in every respect satisfactory, and, so far from there being any overcrowding, he shows that the air-space in the dormitories ranges from 400 to 600 cubic feet per head, the class-rooms for the children averaging nearly 300 cubic feet per head, and being well ventilated. The conclusions arrived at in the report are: "(1) That the spread of typhus fever at Nazareth House was not attributable, in any sense, either to overcrowding or to dirt, but that it spread because, occurring at first in a mild form amongst children, the disease remained for some three months unrecognised, the sick, the convalescent, and the healthy mixing together;" and "(2), That the sanitary condition and the management, so far as sanitary affairs are concerned, of the institution are excellent, and that the care habitually bestowed upon the children is worthy of special remark." We think that the authorities at Nazareth House are entitled to much sympathy on account of the grave charges brought against them—charges which have, on thorough investigation, been shown to be, if not wholly groundless, at any rate not quite fair in the circumstances; and it is obvious that Mr. Collier was entirely mistaken in maintaining that there was any overcrowding.

MODERN ADVANCES IN THERAPEUTIC SCIENCE.

In all really progressive undertakings, whether civil, military, or scientific, the necessity is acknowledged of holding frequent reviews of the positions arrived at, and inspections of the fresh materials introduced to aid in that progress. To relegate to their true positions the new elements that from time to time present themselves, to discard the misleading or useless factors, and to establish a basis for further progressive efforts, must be the aim of all to whom it occurs to assume the position of reviewer. Of all the great family of sciences which combine to assist the ever onward course of medicine and surgery, there are few which need more frequent and more careful inspection than the science of therapeutics. Just as in early times a squire who could bring to the standard of his chief a certain number of followers obtained rank and position for himself in consequence, so, it is to be feared, the ranks of our *medicamenta* are sometimes recruited without due investigation into the character and capabilities of individual recruits.

A review, then, of the present position of therapeutic science must be cordially welcomed, and especially so when the critic is a man of such position and reputation as Professor Rossbach, of Jena. In an address delivered in November, 1882,(a) he claims for this science, with which his name is particularly associated, a better recognition from the medical profession generally, but especially from the teachers in hospitals and universities. Contrasting the rise and progress of medicine with that of surgery, he shows by interesting historical references that whilst in its infancy surgery failed to assert for itself a position even of respectability, it threatens in its manhood to overshadow the sister science, which in her turn has perforce to recognise the presence of an increasing number of sceptics, unbelievers, and even scoffers. The cause of this cannot be found in the greater necessity for surgery during the great wars of our time. More men have succumbed to disease than to wounds, both in former and recent wars. A comparison of the relative advances made by medicine and surgery during the last fifty years, alone can prove whether the progress has been sufficiently unequal to account for their altered positions, or whether we must look to external influences to account for it. "It is an interesting fact," the Professor says, "and one worth laying to heart, that the Vienna School, in justifiable disgust at the senselessness and destructiveness of the old methods of treatment, renounced them as a whole, and gave itself up to an absolute scepticism and nihilism in therapeutics, turning the full force of its important intellectual energy towards pathological anatomy and physical diagnosis." As an outcome of this a firm basis was established, especially by the labours of Skoda and Rokitansky, for the subsequent development of a scientific method of treatment. The investigation of the physiological action of drugs must be regarded as the principal advance hitherto made in this direction. Formerly an equal uncertainty existed as to how or why certain tissues became diseased, and how or why certain drugs appeared to influence them for good or evil. Not only the general action, but also the effects on special organs of many well-known remedies are now clearly shown. The uncertainty of the older remedies was in a great measure due to the inactivity or the variable composition of the drugs themselves. Raw natural products, whether mineral or vegetable, can never have an exactly uniform physiological action, occurring as they do in such vast varieties of impurity. In many instances the results assumed to be due to some particular drug have been subsequently discovered to be due to more potent substances occurring in composition with it. Chemistry and pharmacy have now provided the means of using the active principles in a state of chemical purity; and as a consequence the therapeutic value of all drugs so obtainable can now be estimated with precision. The number of new drugs or preparations which deserve a permanent place in our pharmacopœias is steadily increasing, and, further, the physiological and therapeutic action of many of the older preparations are thoroughly established. Physical and physiological remedies now bear a great part in the art of healing. The improved knowledge of electro-therapeutics

(a) "On the Present Position of Medical Therapeutics, and the Teaching of Therapeutics in the German Schools." An address delivered at Jena, November, 1882, by Professor M. J. Rossbach. Hirschwald, Berlin.

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forms a remarkable instance of this. Now also we may claim to know something of the physiological action of food. "Therefore," Professor Rossbach observes, "we may say with pride that in the treatment of internal diseases we are no longer busy about digging the foundations and laying the corner-stones of the temple of therapeutics, but that the building in many places already towers high in air." The gradual discarding of former errors of excess either in activity of treatment or persistence in expectancy, and the improved methods of administering drugs, lead him to prophesy still more rapid advances in the future. Local treatment has of late years greatly supplanted the general administration of remedies by the mouth; "no longer, to moisten a small patch of garden ground, do we find it necessary to flood the whole country-side." The introduction of remedies subcutaneously marks a new departure in the progress of the art, and promises to make greater strides still if the present experiments of injection into internal organs prove successful. Concluding a very ample *resumé* of all the points here briefly touched upon, Dr. Rossbach returns to his original comparison of the relative advances made by medicine and surgery respectively. He awards the palm unhesitatingly to the former. He considers that, even including the subject of operative surgery, there has been but one really great advance in the latter. But, regarded, as it now may be, without prejudice, he points out that the introduction of antiseptic methods of treating wounds cannot be regarded as active treatment, but only as a prophylactic against possible infection of the wounds themselves; and he contends that "this advance which surgery has made in the last ten years—namely, to do as little harm as possible in diseases, and to keep them free from attack from without—began in medicine some forty years ago." The far wider nosological area of medicine prevents the conclusion that surgery presents a greater number of good results. A relative comparison of the results of medical and surgical treatment of similar diseases would alone be trustworthy. But scanty success has followed the efforts of surgery to remove portions of internal organs, or to influence their diseases by such operations as nerve-stretching. Medicine and therapeutics, then, have now attained to a position where ridicule can no longer assail them with impunity: "any surgeon nowadays, who continues to make sport of internal medical treatment, only succeeds in demonstrating the fact that he himself knows nothing of it, and desires to hide his ignorance under cover of his jest." And yet, while acknowledging these facts, it cannot be denied that there was hardly ever a period when the standing army of quacksalvers of every description was more popular in all grades of society than at the present. What is the reason? Professor Rossbach finds it in the want that exists for proper instruction in the groundwork of therapeutics in the universities; and, as a consequence, the insufficient skill and experience with which every young medical man enters his profession. Notwithstanding the advances made in the knowledge both of the nature and treatment of such diseases as those of the eye, the nose, larynx, ears, etc., each demanding special therapeutic knowledge and skill, the teaching of the schools remains where it was thirty years ago, "when a hopeless therapeutic nihilism governed both clinical teachers and practising physicians." The persistent teaching of students in hospital wards, where diseases are for the most part seen only when far developed, prevents the value of early therapeutic treatment from ever becoming known to them. What wonder, then, that when called upon in practice to deal with the onset of disease, they so acquit themselves as to cause their patients to turn to homœopathy or any other possible source of relief, rather than to the school of which they are the representatives!

THE WEEK.

TOPICS OF THE DAY.

A MEETING, convened by the promoters of the Metropolitan Provident Medical Association, was recently held at the residence of Sir C. Trevelyan, "to consider the progress which had been made in establishing self-supporting medical institutions for the industrial classes throughout the metropolis and its environs." The meeting had special reference to the working of the Association, which, since April, 1881, has established six provident dispensaries, and acquired three pre-existing dispensaries. Three of these are stated to be now entirely self-supporting, and the whole of them afford medical relief to about 15,000 persons of all ages and both sexes, of which number 1813 are members of recognised friendly societies. In order that the Association may "proceed with confidence," it is necessary that a further sum of £5000 should be subscribed, and towards this £1000 has already been promised. Mr. W. H. Smith, M.P., presided at the meeting. Mr. Stansfeld, M.P., moved —"That this meeting is of opinion that great public advantage has attended the successful establishment of self supporting, self-governing provident dispensaries by this Association, and that exertion should be made to obtain the moderate sum required to extend the system throughout the metropolis and its environs." Mr. J. G. Talbot, M.P., seconded the motion, which was spoken to by several gentlemen present, and carried unanimously.

The opponents of the Contagious Diseases Acts have every reason to congratulate themselves on the astute manner in which they passed a vote for rendering the Acts practically useless, without rousing the suspicions of the House of Commons sufficiently to insure defeat; but if the moderate portion of the party should come across a letter published in some of our daily contemporaries, their feelings must be the reverse of satisfactory. This letter, from Dr. A. Conan Doyle, of Portsmouth, runs thus:—"As an ounce of fact is proverbially superior to an indefinite quantity of theory, I think that I am justified in citing one or two instances of the effects of the present suspension of the Acts. Being in practice as a medical man in the town most affected by the measure, I am able to speak with some authority on the subject. Last week a large transport entered Portsmouth Harbour with time-expired men from India. Upon the same day several diseased women left the hospital presumably with the intention of meeting that transport, and there was no law to prevent it. I say that if an unfortunate soldier, coming home to his native land after an absence of years, and exposed to such temptations, should yield to them, and entail disease upon himself and his offspring, the chief fault should not lie at his door. It surely emanates logically from those hysterical legislators who set loose these bearers of contagion, and their like, upon society. For fear delicacy should be offended where no touch of delicacy exists, dreadful evils are to result, men to suffer, children to die, and pure women to inherit unspeakable evils. Loose statements and vague doctrines of morality may impose upon hasty thinkers, but surely, when the thing is reduced to its simplest terms, it becomes a matter of public calamity that these Acts should be suspended for a single day, far more for an indefinite period. The apostles of free trade in infection have worked to such good purpose that within a few weeks the streets of our naval stations have become pandemonia, and immorality is rampant where it lately feared to show its face. Property has depreciated near all the public-houses since the suspension of the Acts, on account of the concourse of vile women whose uproar and bad language make night hideous. I venture to say that, were the old laws enforced again to-morrow, there would

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still in a hundred years' time be many living who could trace inherited mental or physical deformity to the fatal interregnum which the champions of the modesty of harlots had brought about."

In his monthly return for April last the Registrar-General for Scotland shows that in the eight principal towns of North Britain during that period there were registered the births of 3766 children, and the deaths of 2849 persons; allowing for increase of population, this latter number is 162 above the average for the month of April during the last ten years. A comparison of the deaths registered in the eight towns shows that the mortality of this month was at the annual rate of 20 deaths per 1000 persons in Aberdeen, 22 in Edinburgh, 23 in Paisley and in Perth, 27 in Leith, 28 in Greenock, 29 in Dundee, and 34 in Glasgow. The miasmatic order of the zymotic class of diseases proved fatal to 484 persons, and constituted 17·0 per cent. of the whole mortality. This rate was, however, exceeded in Glasgow and in Leith, where measles and whooping-cough were prevalent. Whooping-cough was the most fatal epidemic, having caused 180 deaths, or 6·3 per cent. of the whole mortality. Fever caused 38 deaths; of which 8 were tabulated as typhus, 25 as enteric, and 5 as simple continued fever. Measles caused 127 deaths, diarrhœa 42, and scarlet fever 38. The deaths from inflammatory affections of the respiratory organs (not including consumption, whooping-cough, or croup) amounted to 641, or 22·5 per cent. Those from consumption alone numbered 347, or 12·2 per cent. Four males and five females were aged ninety years and upwards, the eldest being a male aged 103 years.

If it should eventually be proved to have done nothing else, the proposed Medical Act Amendment Bill will at least have brought before the public a body whose existence has, perhaps from motives of modesty, been kept very much in the background. We allude to "The Society of Medical Herbalists of Great Britain," a deputation from which recently waited upon Mr. Mundella at the Privy Council Office, with reference to their status under the projected Bill. The deputation stated that the body had been subjected to prosecution and persecution by allopathists when they were prescribing as medical botanists and medical herbalists, and they were afraid that this Bill would still continue these enactments against them. Mr. Mundella, in reply, said that all the Government provided for in this Bill was that the future medical practitioners of England should be better educated, that instead of a half qualification or a single qualification, every one should have a three-fold qualification before he could be put upon the Register, and that he must register all the titles. But the Bill, as far as he could see, did not affect the deputation at all. They could call themselves medical botanists or medical herbalists, and they would not be prosecuted so long as they did not take improper titles in the sale of the articles in which they dealt.

A scientific journal of Boston discusses the lack of accord between the readings of standard thermometers owned by persons living at a little distance from the heart of the city, and the published observations of the Signal Service observer of their locality. The reason for this discord is shown to be the disturbing action of the heat which the city emits; and it is observed that it is very little to the credit of the Weather Bureau that this particular source of error was not long since recognised and avoided. Professor Whitney has made some interesting remarks on this subject, relating to observations made in London. "It is a well-known fact," he says, "that cities are considerably warmer than the more thinly inhabited country, otherwise under similar climatic conditions. Statistics prove this to be true, and there could be no doubt that such would be the effect of an immense aggregation of population within a limited space, even if there were no statistics bearing upon this question. Many millions of tons of coal are burnt in and about London during every year; and the whole mass of brick of which the city is built is heated during the entire winter, and more or less in the summer, many degrees above the natural temperature. There can be no question that conditions such as are here indicated vitiate all observations made, in or near large cities, with a view to the determination of any possible secular (periodical) variation of the temperature."

It has been decided henceforth, the Cairo correspondent of the *Standard* says, to use Mount Troados, in Cyprus, as a health-station for the British force now serving in Egypt. This station, which is distant only thirty hours by sea from Alexandria, presents many advantages for the treatment of invalids, and is specially suited as a residence for the wives and families of officers employed in the army of occupation, its close proximity to Egypt representing a great saving both of time and expense. The health of the troops is, it is stated, at the present time excellent; and General Stephenson, who has just completed a close inspection of all the barracks, has expressed himself highly satisfied with the result of his inquiries.

Mr. Broadhurst, M.P., has secured the first place in the evening sitting of the House of Commons on July 4 for a resolution proposing to make municipal bodies responsible for providing a sufficient choice of suitable dwellings for persons or families displaced by demolition in connexion with borough improvements, and also to give civil corporations the same power as railway companies and school boards to purchase land compulsorily for the purpose.

Since we last reported the Royal Commission on Metropolitan Sewage Discharge has held several meetings, attended by nearly the whole of the members, and generally presided over by Lord Bramwell. Upon each occasion further evidence has been given on behalf of the Metropolitan Board of Works.

THE METROPOLITAN ASYLUMS BOARD MEETING.

At the usual fortnightly meeting of the Managers of the Metropolitan Asylums Board, held on Saturday last, a letter was read from the Local Government Board, approving the expenditure of £5500 for the purchase of the twin-ship *Castalia* for the purposes of a hospital-ship for the accommodation of small-pox cases. A letter was also read from the Hampstead Vestry, protesting against any further litigation by the Board in the matter of the Hampstead Hospital case at the expense of the ratepayers. Mr. Galsworthy, the Chairman, said the Board would only undertake further litigation in self-defence. They were desirous of avoiding it, but since he had had an interview with their chief opponent, Mr. Hill, at which it was decided to settle the matter on the lines laid down by the Royal Commission, a letter had been received from that gentleman requesting the Asylums Board to sell their property and remove from the locality. The Board would not consent to this arrangement, although it was willing to act upon the recommendations of the Royal Commission. Sir E. H. Currie agreed with the views expressed by the Chairman, and the letter was ordered to be acknowledged. The fortnightly return of the number of fever cases under treatment in the several hospitals of the Board showed a total of 265 patients, as compared with 279 for the previous two weeks, or a decrease of 14. The number of small-pox cases under treatment was shown to be 71, as against 74, or a decrease of 3 for the two weeks just concluded.

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THE SUFFICIENCY OF THE ARMY HOSPITAL CORPS IN EGYPT.

In the House of Commons, on Monday last, Sir Trevor Lawrence questioned the Secretary of State for War as to the efficiency of the Army Hospital Corps attached to the Egyptian Expedition. He wished especially to know whether it was true that the corps had been so deficient in strength and appliances that, had they not been largely supplemented by bearers and dandies from the Indian Contingent, there must have been great delay in removing the wounded from the field after the battle of Tel-el-Kebir. He was referred, in reply, by Lord Hartington to a statement on the subject made by Sir John Adye, the Chief of the Staff, before Lord Morley's Committee. Sir John was asked (Question 6079) whether he had obtained the assistance of a number of Indian dhoolie-bearers because the British bearer companies were not sufficient, and he replied: "No; but, knowing that they had a large establishment, and as the native regiments were very few up at the front, I thought it was common sense that the superfluity of that establishment should be devoted to the general use of the army on that occasion." This statement was corroborated by the evidence (Questions 636 and 637) of Sir Herbert Macpherson. Lord Hartington added: "There is no doubt, however, that the dhoolie-bearers of the Indian Contingent rendered most valuable service to the British troops, which I have no desire or intention of depreciating."

HOSPITAL SUNDAY COLLECTIONS.

Last Sunday was the day appointed this year for taking the collections from the metropolitan churches and chapels in aid of the London hospitals. It is at present almost too early to express any opinion as to the results obtained, although these should not at any rate fall short of the average, since no drawback has to be noted on the score of weather. At St. Paul's, where the Lord Mayor attended in state in the forenoon, the collections at the three services amounted to £240. At Westminster Abbey, where the Lord Mayor attended in the afternoon, and where Archdeacon Farrar preached in the evening, the total collections were £282, being nearly £50 more than was collected last year. At St. Margaret's, Westminster, Archdeacon Farrar preached in the morning, and the sum of £156 was collected. At the Chapel Royal, St. James's, the amount realised was £63; and at the Chapel Royal, Whitehall, £99. At the various synagogues the collections were made on the Saturday; the collection at the Great Synagogue, Duke's-place, exceeded £250, and it is expected that the aggregate sum collected from the Jewish community will not fall short of £1000. At the Metropolitan Tabernacle, where Mr. Spurgeon preached, the collections amounted to £218, and at the City Temple the sum realised was £70. The largest sum as yet ever sent in from one congregation for the Fund, viz., £917, with promises of additions, was sent in on Monday by Canon Fleming, Vicar of St. Michael's, Chester-square. Some other large collections have also been received at the Mansion House, as—St. George's, Hanover-square, £190; the Temple Church, £152; St. Stephen's, South Dulwich, £160; St. Peter's, Bayswater, £104; St. Paul's, Wilton-place, £217; St. James's, Piccadilly, £131; and the Greek Church, Moscow-road, £103. The total reported on the morning of the 14th inst. amounted to £11,000.

THE ROYAL COLLEGE OF SURGEONS.

The following Members of the Royal College of Surgeons of England having passed the necessary examinations for the Fellowship, at meetings of the Court of Examiners on the 24th, 25th, and 26th ult., were reported to have acquitted themselves to the satisfaction of the Court, and at a meeting of the Council of the College on the 21st inst. were admitted Fellows of the College, viz.:—Messrs. Charles Gross, L.R.C.P. Lond., Walworth, diploma of membership of the College dated July 31, 1876, of Guy's Hospital; William Henry Elam, Mirfield, Yorkshire, November 17, 1877, of the Charing Cross Hospital; William Archdeckne Duncan, L.R.C.P. Lond., Lambeth Palace-road, April 22, 1879, of St. Thomas's Hospital; David Collingwood, M.B. Lond., Bedford-street, Liverpool, July 29, 1880, of the Liverpool School; E. A. Haden Horsley, M.B. Lond., Gower-street, November 17, 1880, of University College Hospital; and Benjamin Wainewright, M.B. Edin., Belmont, Lee (not a Member), of the Edinburgh School. Two other Members of the College passed the Fellowship examinations, but, not having reached the legal age, could not yet be admitted.

THE APOTHECARIES' HALL OF IRELAND AND THE MEDICAL BILL.

On Tuesday, the 12th inst., a deputation from the Apothecaries' Hall of Ireland waited upon Mr. Mundella, the Vice-President of the Council, at the Privy Council Office. Their object was to have the Apothecaries' Hall of Ireland included in the Divisional Board for Ireland in the Medical Act Amendment Bill, as introduced into the House of Lords, but which had been struck out during the consideration of the Bill in Committee of the House. The Governor of the Hall (Dr. Collins) having stated the case of the apothecaries, and several members of the deputation having spoken, Mr. Mundella replied. Observing that the whole battle in connexion with the Medical Act Amendment Bill raged around the question of the representation of the different bodies on the respective Medical Boards, he further stated that the representations made to the Government, both by influential members of the Peers and by influential members of the Royal Commission, were to the effect that the Government had gone too far in recognising the claims of the Apothecaries' Societies amongst others. They said that the Government was not warranted, considering the report of the Commission, in placing either the English or the Irish Apothecaries upon that Board, and that to do so was to go in the teeth of the whole of the evidence. Finally, Lord Cairns on one side of the House, and Lord Carlingford on the other, agreed to the present form of representation in Ireland. The report of the Royal Commission was very strong against the Apothecaries' Hall, for it said that there was a notable concurrence of opinion amongst the witnesses that the examination of the Apothecaries' Societies had not been satisfactory, and opinions to the same effect had been expressed with regard to the Edinburgh College of Surgeons and the Glasgow Faculty of Physicians and Surgeons. The force of opposition was too strong in the House of Lords for the Government to retain the Apothecaries' Societies, and they were struck out. That arrangement having been accepted, they could not expect him to reverse what had been done by his chief (Lord Carlingford). All that he could promise was that he would put the arguments as forcibly as he could before the Lord President.

THE PARKES MUSEUM.

Mr. Edwin Chadwick, C.B., will take the chair on the occasion of the lecture to be given on Thursday next, June 21, at 8 p.m., in the Parkes Museum of Hygiene, Margaret-street, Regent-street, by Mr. Robert Rawlinson, C.B., on "The Hygiene of Armies in the Field." It may be within the recollection of some of our readers that Mr. Rawlinson earned his laurels in the Crimean War, and that the greatly improved health of our Army during the latter part of that war was due in no small degree to his labours.

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THE PARIS WEEKLY RETURN.

The number of deaths for the twenty-second week of 1883, terminating May 31, was 1158 (641 males and 517 females), and of these there were from typhoid fever 35, small-pox 10, measles 22, scarlatina 1, pertussis 23, diphtheria and croup 49, dysentery 2, erysipelas 4, and puerperal infections 2. There were also 72 deaths from acute and tubercular meningitis, 202 from phthisis, 43 from acute bronchitis, 93 from pneumonia, 93 from infantile athrepsia (34 of the infants having been wholly or partially suckled), and 46 violent deaths (44 males and 2 females). There is a notable amelioration this week, as the deaths of the preceding week amounted to 1247, but the mortality is still slightly above the annual mean, due chiefly to the mortality of children under five years of age. The deaths at this age were for this week at the rate of 139·6 per 1000 living, while the annual mean is but 107. Athrepsia has been more fatal (95) than in any preceding week of the year, and meningitis has caused 53 deaths below five years of age—the great heat which set in having doubtless been the cause of this excess. Measles, on the other hand, has declined from 45 to 22. Typhoid fever, as usual, exhibits the greatest decline as June approaches. The births for the week amount to 1214, viz., 641 males (469 legitimate and 172 illegitimate) and 573 females (414 legitimate and 159 illegitimate): 88 infants were either born dead or died within twenty-four hours, viz., 49 males (33 legitimate and 16 illegitimate) and 39 females (28 legitimate and 11 illegitimate).

THE OPHTHALMOLOGICAL SOCIETY.

There are not a few members of our societies who hold the belief that the frequently recurring debates on special subjects, which have become somewhat the fashion of late years, are not productive of any good results. That, as an opinion, we are not able to share. A discussion on a set subject always insures one really good paper, viz., that from the opener, and generally secures some facts and remarks of lasting value from other speakers. The discussion which took place last week at the meetings of the Ophthalmological Society may well be quoted as evidence of the truth of this statement. The paper with which Dr. Gowers introduced the subject of the relation of eye symptoms to diseases of the spinal cord, is one which does more than merely serve to draw attention to the subject. No one can have listened to it, or can read it now, without feeling that some of the problems of tabes have thereby been made somewhat simpler. We say the problems of tabes, for the question of diseases of the spinal cord was, at an early date, speedily reduced to that one, the association of eye symptoms with other diseases of the spinal cord being so uncommon—if we except cases of general paralysis of the insane—as not to need more than the most passing mention. Optic atrophy, the only condition of the disc under consideration, was shown by Dr. Gowers to be an early sign of tabes, and in this he was fully confirmed by more than one subsequent speaker; and it is noteworthy that no attempt was made to distinguish any particular kind of atrophy as characteristic of tabes, Dr. Gowers being especially careful to point out that we were not justified in assuming that in any particular case the atrophy was due to tabes unless some definite spinal symptom (*e.g.*, absence of knee-jerk) were present, and he added that he had never known optic atrophy precede the loss of knee-jerk in tabes. The optic nerve lesion in tabes is a degenerative one, just as is the lesion of the spinal cord itself, and Dr. Gowers fully accepts the results of Pierret's researches into the pathology of this disease, who has shown that peripheral lesions occur in other nerves besides the optic nerves, and that they coincide with, and may be independent of, the central lesion. As to the real cause of this degeneration and its relation to that in the spinal cord we know nothing. As regards the second part of the subject, viz., the state of the pupil in diseases of the spinal cord, again locomotor ataxy claims the lion's share of our attention, paralyses of the internal muscles of the eyeball being as frequent in locomotor ataxy as they are rare in other diseases of the spinal cord. The commonest of these pupil-states is the reflex iridoplegia, or Argyll-Robertson phenomenon, where the pupil acts to accommodation but not to light—this phenomenon being noted in about two-thirds of all the cases where Dr. Gowers had investigated the point. These ocular complications were in no case absent in the third stage of the disease, and in the vast majority were found to be present in the first stage. As to whether any of them may precede the loss of knee-jerk is a question still open; there seems some reason for thinking that they may. It is to be noted as a point of some importance that these pupil-states are mostly due to paralyses, whereas all the other early symptoms are due to affection of the sensory system. Some very interesting information regarding optic atrophy and the conditions of the pupil in general paralysis of the insane was contributed in remarks by Dr. Savage, Mr. J. B. Lawford, and Mr. Bevan Lewis, for a brief account of which we must refer our readers to the report of the meetings.

THE VALUE OF FISH AS FOOD FOR THE WORKING-CLASSES.

Dr. B. W. Richardson recently presided over a meeting, held at the New Temperance Hall, Paddington, convened by the Fish League, to popularise fish as an article of food. He observed that the sanitary condition of the people of this country, with which the food-supply was very intimately connected, had become one of the leading questions of the day; and that it was a somewhat startling fact that England, from her own resources, was never in possession of much more than one month's supply of food for her people. In corn alone 36,000,000 bushels would be required for feeding the population, and certainly less than half that quantity would be produced at home. Every effort should be made to provide cheap and healthy food for the people from our own resources, and every step in this direction should be encouraged. Fish was abundant, and ought to be cheap, but its value for food must be considered according to its constituents. Milk was a standard of food, and as to its powers for sustaining healthy life, its constituent parts were as follows:—4·5 per cent. of flesh-giving properties, 5·0 heat-producing, 0·31 minerals, and 90·19 of water. Mackerel, on the other hand, contained 13·5 flesh-producing properties, 12·5 of heat, 6·0 of minerals, and 68·0 of water. Sturgeon in steaks or chops was equal to flesh meat. In conclusion, he thought the whole question of the value of fish as food should be referred to a Parliamentary Committee.

DUBLIN SANITARY ASSOCIATION.

A special general meeting of this body was held on Monday last, for the purpose of amending the rules of the Association so as to enable it to place the benefits of "sanitary protection" within the reach of its members. The chair was occupied by Mr. Jonathan Pim, President of the Association. Dr. Grimshaw, the Registrar-General for Ireland, moved—"That the following (fifth) object be added to the four for which the Association was originally founded, viz.:—To provide its members, at moderate cost, with such advice and supervision as shall insure a proper sanitary condition of their own dwellings, and enable them to procure practical advice as to the best means of remedying defects in the houses of the poorer classes in which they are interested." The proposal would have the effect of making the

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Sanitary Association of Dublin a sanitary protection society, such as had been already established in many parts of the United Kingdom. Professor Barrett said he regarded it as of great importance that the inspection of houses should be carried out by an independent officer, not in any way connected with the trade. There was no doubt such a society was needed in Dublin, which had a higher death-rate than any other city in the kingdom. The resolution was adopted. It was also arranged that members of the Dublin Ladies' Sanitary Association, and of the Rathmines Sanitary Association, should be permitted to share, on special terms, in the advantages of the system of sanitary protection thus inaugurated.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

At the annual meeting for election of officers of the West London Medico-Chirurgical Society, the following officers were elected for the year 1883-84:—*President:* Dr. Thudichum. *Vice-Presidents:* Dr. Alderson, Mr. Laurence, Dr. Travers, Dr. Hart-Vinen. *Treasurer:* Mr. Alfred Cooper. *Secretaries:* Mr. Keetley, Mr. Hendley. *Council:* Mr. Alderton, Dr. Atkinson, Mr. Clippendale, Mr. F. S. Edwards, Mr. Hemming, Dr. Pope, Mr. Webber, Mr. Barnes, Mr. Lunn, Dr. Pickett, Mr. Potter, Mr. Walker. The report showed that an average of more than thirty-eight members had attended each meeting, that the total number of members was now 145, and that the prospects of this new Society were in every respect most satisfactory.

THE CONTAGIOUS DISEASES ACTS.

A discussion on the action recently taken by Government with regard to the Contagious Diseases Acts was brought on in the House of Lords, on the 12th inst., by a question from Lord Lifford, who inquired whether the attention of Government had been drawn to the moral condition of naval stations since the non-enforcement of the Act. In his opinion it was monstrous that the Act should have been practically repealed without the sanction of Parliament. Lord Cranbrook stated that when he was at the War Office he satisfied himself, after very careful and anxious investigation, of the physical and moral advantages of the compulsory provisions of the Acts. Those who opposed them were, for the most part, people who had had no practical experience of their working. Lord Hardinge, as a member of the Royal Commission, entirely concurred with what had been stated by Lord Cranbrook; and the Duke of Somerset, as having been familiar with the working of the Acts from the beginning, desired to express his opinion of their great value and efficiency. The Duke of Cambridge spoke strongly in support of the Acts, as he had done on previous occasions; and stated that in one town alone there were 250 fewer houses of ill-fame after the passing of the Acts than there had been before. Lord Northbrook said that, for his own part, he was strongly in favour of the Acts, and he regretted the vote of the House of Commons; but Her Majesty's Government had felt that it was undesirable, after the vote of the other House, to continue to employ the Metropolitan Police in carrying out the compulsory clauses of the Acts. The action of the members of that force had been most beneficial in keeping young girls off the streets, and in leading to their reclamation; but the Government hoped to be able to secure the object of the Acts under a voluntary system. Lord Salisbury, who sharply criticised the action of Government in the matter, pointed out that the question had two aspects. One was of a social, sanitary, and administrative character, in respect to which much had been said in which he entirely concurred; the evils that had been brought back to the towns affected were of the very gravest character. But he desired to know how far the Government had, on their own authority, and without the consent of Parliament, suspended the operation of an Act of Parliament. He asked if Lord Northbrook would lay on the table of the House all letters and orders given with reference to the subject since the vote of the House of Commons on the matter. Lord Northbrook said that the intention of Government had certainly been simply to withdraw the Metropolitan Police from taking part in the operation of the Acts. They had no power apart from that to prevent the Acts from being carried out. He thought there would be no objection to produce the papers asked for.

BEER IN THE PARIS HOSPITALS.

The *Progrès Médical* (June 9) criticises a rather arbitrary circular which M. Quentin, the Director of the Assistance Publique, has just issued to the directors of the Paris hospitals, with instructions to communicate it to the medical officers. In this he declares that the consumption of beer in the hospitals has for some time past so increased as to become a very serious charge upon the budget and deranging its equilibrium. This abuse, as he terms it, he can no longer permit, for beer he declares to be neither a food nor a medicinal agent, and therefore it must from this date cease to be furnished as one of the current articles of diet, and only become procurable by means of exceptional prescriptions of the *chefs de service* under the surveillance of the Central Administration. The *Progrès* disputes the assertion that beer is neither food nor medicine, and states that the medical officers find it of great value in the treatment of disease, and regards it as somewhat surprising that the Director should have issued this decree (which really means almost entirely stopping the use of beer) merely for economical reasons, without consulting the medical body as to its propriety. If economy is the object in view, there is said to be ample means of accomplishing it in the hospital administration, which is far too numerous.

VITAL STATISTICS OF IRELAND FOR FIRST QUARTER OF 1883.

The quarterly return of the Registrar-General for Ireland for the first three months of the present year is scarcely so satisfactory as usual. During the period referred to there were registered in the 800 registrars' districts in Ireland 32,065 births—a number equal to an annual birth-rate of 25·4 in every 1000 of the estimated population—and 29,558 deaths, representing an annual rate of 23·4 per 1000. For the sake of comparison, it may be stated that during the corresponding quarter the English birth-rate was 35·2, and the death-rate 22·3 per 1000. Moreover, the birth-rate in Ireland is slightly *under* the rate for the corresponding quarter of 1882, and the average for the first quarter of the five years 1878-82; and the deaths are *above* those registered in the corresponding quarter of 1882 to the extent of 4685; the death-rate is therefore 3·8 per 1000 above the rate for that quarter, and 1·1 over the average for the first quarter of the five years 1878-82. This increase, the return goes on to show, was principally owing to the severity of the weather experienced in Ireland during the earlier portion of the present year, and was chiefly confined to chest cases and excessive mortality amongst old people. The effects of a severe season on the health of persons advanced in life are strikingly exemplified by a comparison of the Irish returns of last quarter with those for the first three months of 1882, when the weather, it will be remembered, was comparatively mild. The total number of deaths registered during that quarter was 24,873, and of these 9721 were those of persons aged sixty and upwards; in the first

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quarter of the present year the deaths at all ages amounted to 29,558, being an increase of 4685; and the deaths of persons aged sixty and upwards numbered 13,273, being no less than 3552, or 36 per cent., in excess of the corresponding mortality in the March quarter of last year. Whooping-cough was the only prevailing epidemic in Ireland during the period under notice, and the Registrar-General is of opinion that the mortality from this disease—501 against 240 in the preceding quarter—was probably increased by excessive cold. In addition, measles and scarlet fever caused numerous deaths in the province of Ulster, the former disease having been specially prevalent in the county of Armagh, and the latter in the town of Belfast. In the aggregate the deaths from the principal zymotic diseases were somewhat in excess of the mortality from these causes in the preceding quarter, and slightly over the deaths in the first three months of last year, but they do not form so large a percentage of the total mortality. The annual rate represented by the deaths in this group during this March quarter was 1·7 per 1000 of the population. The deaths from small-pox registered during the period amounted to four—three reported from Belfast, and one from Lisburn—but, the return observes, according to the Registrar's notes there were a few fatal cases in the Glennamaddy district of Glennamaddy Union, and one in the Williamstown district of the same union. The prevalence of different diseases in the various parts of Ireland may readily be traced by a reference to the notes rendered quarterly by the different registrars. Referring to this source it will be found that in the first three months of the present year small-pox prevailed in 1 district, measles in 53 districts, scarlet fever in 38, diphtheria in 4, whooping-cough in 33, and fever in 63 (typhus in 22, enteric in 23, and fever in 18). The mean temperature of the air during the quarter was 40·6° against an average of 41·2° for the first quarter of the five years 1878-82. The maximum temperature was 58·6°, and the minimum 20·2°. Rain fell on 58 days, and the rainfall for the quarter was in excess of the average of the first quarter of the last five years.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

The annual meeting of this Society was held on Monday, the 4th inst., and was largely attended. Dr. J. W. Moore, one of the Honorary Secretaries, read the forty-first annual report of the Central Committee, which spoke of the continued prosperity of the Society, so that, notwithstanding the unprecedented state of social and political disquietude throughout the country during the past two years, it had yet been enabled to relieve an increased amount of distress with undiminished liberality. Several important changes have occurred in the working staff of the Society. Dr. Arthur H. Benson has succeeded Dr. Marks as Acting Secretary. Dr. J. Magee Finny was elected to the Honorary Secretaryship vacated by Dr. Benson; and Brigade Surgeon Henry King, of the Indian Medical Department, had been appointed as Honorary Secretary to the Royal Medical Benevolent Fund Society for India and the colonies. The financial condition of the Society remains fairly satisfactory. During the past year the fund in the Treasurer's hands amounted to £2053 0s. 7d.; of this, £469 19s. 3d. has been added to the funded property of the Society, in accordance with the wish of the donors. The sum of £1156 has been distributed, leaving a balance of £285 in the Treasurer's hands to meet the necessary working expenses. Of the sum distributed, £185 was to medical men, £856 to widows, and £125 to orphans. One hundred and twelve applications for relief have been received during the past year. Of these eight were from medical men, of whom five were new; ninety-one from the widows of medical men, of whom eleven were new; and thirteen from orphans, of whom four were new. Substantial additions to the funded property of the Society have been made during the past year by the several bequests and donations which have been paid since the issue of last year's report. The bequests include one of £1000 left by the late Dr. John Wilkinson, of Limerick. From the Treasurer's statement of accounts it appeared that the funded property of the Society now amounted to £18,800, exclusive of Dr. Wilkinson's bequest. The report concluded with extracts from some of the branch reports, showing the working of the Society at home and abroad. The adoption of the report and statement of accounts was moved by Dr. William Moore, President of the King and Queen's College of Physicians, seconded by Dr. Edward Halloran Bennett, Vice-President of the Royal College of Surgeons, and agreed to. The election of officers and the other routine business was then proceeded with.

THE UNION COMPANY'S SS. "TARTAR."

The growing importance of our South African colonies, and the increasing passenger traffic and commerce which go on between them and the mother country, have compelled the Union Company to add another to their already extensive fleet of vessels. Few of our colonies can now boast of easier access or of better ship accommodation than the Cape. This new ship (4339 gross tonnage) is one of the largest which has yet been built for this service, for, in the matter of size, the directors are somewhat limited by the capacities of the docks at the Cape; but, as regards internal arrangements and luxurious furnishing of the saloons and state cabins, they appear to have no such limitation, and we may fairly congratulate them on the finish and general excellence of all the interior arrangements of the passenger department. This is, however, a wise policy; for many invalids now seek health by a voyage to and from the Cape, as well as from a residence there, and they will naturally patronise those ships in which their comfort is most studied. We can only say, from a minute inspection of every detail, that on board the *Tartar* an invalid will find every comfort—roomy cabins, quiet airy retiring-rooms, and good sanitary arrangements, which will add much to the comfort and the value of a sea-voyage. The first-class cabins are all placed before the machinery department, so that they will be free from the noise of the screw as well as from the heat and smell from the engine-room.

At the opening ceremony of the Oxford Commemoration, on the 13th inst., the honorary degree of Doctor of Civil Law was conferred on Sir Frederick Augustus Abel, K.C.B., F.R.S., Director of the Chemical Establishment of the War Office.

At a congregation of the University of Cambridge, held on the 7th inst., the degree of Bachelor of Medicine was conferred on Frederick John Driver, of Christ's College.

On June 9 the Examiners for the Second Examination for the M.B. degree of the University of Cambridge issued the following list of examined and approved candidates:—Class 1. None. Class 2. Anderson, B.A., Caius; Coombe, B.A., Caius; Dudfield, B.A., Trinity; Evans, B.A., King's; H. A. Haviland, Pembroke; A. C. Ingle, non-collegiate; Jones, B.A., Downing; Lund, B.A., Trinity; Nicholls, B.A., St. John's; Nevin, B.A., Caius; Reeve, Caius; Smart, B.A., Caius; F. W. Smith, B.A., Caius; Thornton, Christ's; Trott, Caius; Watts, B.A., Corpus; E. H. R. Watts, St. John's; Windley, Trinity; C. Yeoman, Pembroke.

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On Monday, the 11th inst., Dr. Michael Foster, F.R.S., Fellow of Trinity College, Cambridge, was elected to the newly established Chair of Physiology in that University.

On the same day, Dr. Alexander Macalister, F.R.S., was elected to the Professorship of Anatomy, vacant by the resignation of Professor Humphry, F.R.S. Dr. Macalister is very well known to the profession and to science as Professor of Anatomy and Chirurgery, and of Comparative Anatomy, in the University of Dublin, by his works on Morphology, and his papers in the *Transactions* of various learned societies.

H.R.H. the Duke of Connaught, the President of St. Thomas's Hospital, will distribute the prizes to the students of the Medical School on Saturday, the 23rd inst., at three o'clock p.m. precisely; and we understand that H.R.H. the Duchess of Connaught will also be present.

Dr. Wickham Legg will deliver the Bradshawe Lecture of the Royal College of Physicians at the College, on August 18, 1883. His subject is "Cardiac Aneurisms."

An addition to the number of professional periodicals is announced in the shape of the *Bristol Medico-Chirurgical Journal*, the first number of which will appear at the beginning of July. It is at present intended to issue the journal half-yearly.

INTERNATIONAL EXHIBITION AT NICE, 1883-84.

At the International Exhibition to be held at Nice, to which reference is made in Dr. West's letter to ourselves, Section II. is to be devoted to Hygiene, Medicine, and Climatology. The objects are proposed to be classified as follows:—*Third Group: Hygiene.*—Class 5. Distribution and Purification of Water for Domestic Use.—Modes of water-supply, filtering, purification, distribution to dwellings, models and plans having special reference to questions of hygiene. Class 6. House Drainage and Sewerage.—(*a*) Models and plans of sewers. (*b*) Different systems of emptying cesspools, etc.; earth closets, water-closets, etc.; urinals, sinks, etc. (*c*) Apparatus for baths and hydro-therapeutics; public baths. (*d*) Various kinds of washing apparatus; public washhouses. Class 7. Hygiene of Public Establishments, of Houses, of Ships.—(*a*) Architecture of hospitals, of barracks, and of private houses. (*b*) Different appliances for hospital wards and for the sick-room. (*c*) Instruments and apparatus for detecting adulteration of articles of food and drink. (*d*) Demography; medical statistics. *Fourth Group: Medicine and Surgery.*—Class 8. Pharmaceutical Preparations.—Dietetic and pharmaceutical preparations; disinfectants. Class 9. Mineral Waters.—Mineral waters, and everything relating to watering-places, such as architecture, arrangements of baths, etc. Class 10. Medical and Surgical Instruments and Appliances.—(*a*) Instruments and appliances for anatomical and histological research. (*b*) Instruments and appliances used in investigation of disease. (*c*) Surgical instruments arranged according to their several purposes, as for amputation, resections, etc.; special instruments, as dental, eye, and ear instruments; obstetric instruments and those used in electro-therapeutics; pouches, and instrument and medicine cases, for military and naval surgeons. Class 11. Veterinary Medicine.—Special necessaries, instruments, and appliances needed in veterinary medicine and surgery; horse-shoes. Class 12. Hydro-therapeutics; Medical Gymnastics.—Hydro-therapeutics; orthopædic apparatus; gymnastics as applied to medicine and hygiene. Class 13. Life-saving Apparatus; Ambulances.—Instruments and appliances for accidents; naval and military surgery; civil and military ambulances. Class 14. Special Treatises.—Works bearing on the different above-mentioned groups. *Fifth Group: Climatology.*—Class 15. Meteorology applied to Climatology.—Meteorological instruments. Class 16. Meteorological Observations.—(*a*) Meteorological observations and stations. (*b*) Summary of observations; curves of temperature, and pressure from different stations. Class 17. Special Treatises; Plans; Charts.—Works published on meteorology generally.

MEDICAL MATTERS IN PARLIAMENT.

House of Commons—Thursday, June 7.

The Flour Supply for the Troops in Egypt.—Dr. Cameron having put a question relating to the unsoundness of the flour sent out to Egypt for the use of our troops, Mr. Brand replied that, in determining the class of flour to be sent out to our forces in Egypt till local supplies could be obtained, the advice of Messrs. Bovill and Co., the War Office brokers, was followed. They were specialists of the highest standing, and they considered that of the stocks in London then available for immediate shipment, American, which had been satisfactorily used in Natal and in the West Indies, was best calculated to meet climate and service requirements with a minimum of risk. The stowage on board ship was done under the professional supervision of the Admiralty. The Government brokers thoroughly tested the bulk supplies, and furnished certificates from the dock company as to the condition in which the bags were shipped. That was the custom of the London trade, and it afforded sufficient protection for the vast transactions of the mercantile public.

Infection by Vaccination.—Sir C. Dilke, in reply to a question by Sir Lyon Playfair, said it was true that one of the officers of the Local Government Board had, while investigating the conditions under which syphilis could be transmitted through vaccination, infected himself with syphilis. That officer believed that syphilis could be communicated by means of the operation for vaccination, though that had very rarely happened, and he determined to obtain more exact information than we yet possess as to the precautions necessary to avoid even a risk of such occurrence. Such a research required experiments on the human body, and the gentleman in question, voluntarily, and not acting as an officer of the Board, made the necessary experiments upon himself, and in the end did infect himself with syphilis. The case was the subject of skilled inquiry, and had not yet been reported on. But he believed that the transmission of the syphilitic virus was not obtained without departure in essential respects from the Board's instructions to public vaccinators, and from the recognised practice of all vaccinators. Sir C. Dilke concluded his answer with an expression of esteem for the official's self-devotion, and regret for the personal suffering he had incurred through his honourable sacrifice of himself in the interests of science and humanity.

The Medical Act Amendment Bill.—Replying to questions put by Lord Randolph Churchill, Mr. Gladstone spoke of this Bill as one that had been the product of very great labour, and had received, he believed, the very general—he might almost say, the universal—consent of the medical profession. In the circumstances the Government believed the Bill would have a favourable reception in the House, and he looked forward to seeing it passed during the session. The Government would study the means, without prejudice to other arrangements, for obtaining as good progress in the remaining as had been obtained in the early stages of the Bill. Pressed again to state if possible when the Bill would be taken, Mr. Gladstone said the best way would be for representatives of the Medical Council to put themselves in communication with the Vice-President of the Council. The Government would then endeavour to arrange when the Bill could be taken.

The Army Medical Department and the Egyptian Campaign.—Dr. Cameron asked whether it was true that in the original medical arrangements for the Egyptian campaign the establishment of a base hospital at Cyprus was proposed by the heads of the Army Medical Department, and agreed to by the military authorities; whether the military autho-

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rities afterwards decided that Cyprus should not be used for hospital purposes until the middle of the month of October; whose duty it was to inform the Director-General of the Army Medical Department, or Principal Medical Officer in Egypt, of that change in the medical arrangements; whether he could state the date at which the alteration was decided on, and the date at which the heads of the Army Medical Department, at home or in Egypt, were informed of it and instructed to make other arrangements for their base hospital.—Sir A. Hayter, in reply, said that as to the first question, such an arrangement as that mentioned was originally contemplated; the other four questions would, he thought, be best answered by an extract from the report of the Committee of Inquiry, which was to the effect that it was at first proposed to place the Cyprus hospital at Troados on Olympus, but, owing to the near approach of the cool season when the troops would have to move down into the plains, it was decided, instead, to establish a hospital in the neighbourhood of the camp at Polymelia. This change was approved on August 4, on the advice of the Chief of the Staff, Sir John Adye, with the concurrence of the Director-General, Dr. Crawford, and the Principal Medical Officer to the expedition, Dr. Hanbury, who was then in this country. When once the expedition had started, it was for the Commander of the forces, in consultation with his Chief of the Staff and Principal Medical Officer, to make any change in the hospital or other arrangements that the varying circumstances of the campaign might render desirable.—Lord E. Churchill asked whether Sir A. Hayter would state as a positive fact that Dr. Hanbury had any knowledge before August 27 that Cyprus would not be used as a base hospital.—Sir A. Hayter repeated what he had already said as to the determination come to on August 4; adding, the change was made by the General Commanding in Chief, in consultation with the two medical officers. On being pressed again for the date of that change, he protested against being required to answer questions of detail which would properly be raised when the vote was taken, and in the course of a full discussion.

Friday, June 8.

The Medical Arrangements in Egypt.—Dr. Cameron again put a long question regarding the medical arrangements in Egypt, and asked whether, when Ismailia was seized, and the plan of campaign developed in Egypt, the Principal Medical Officer and the Principal Commissariat Officer of the Army were informed of so much of the General's plan as was necessary to enable them to arrange for the efficiency of their respective departments under the altered conditions, and, if so, at what date was the seizure of Ismailia as a base sanctioned by the War Office, and at what date were these officers respectively informed of the intention to seize it.—The Marquis of Hartington, in reply, said he must ask the hon. member to bear in mind that the army in Egypt was commanded by the general officer on the spot, and not by the Secretary of State at home. Nearly all the points in the question related to local details in connexion with the conduct of the campaign in Egypt; and he had no information on those points beyond that contained in the evidence before Lord Morley's Committee. As to the last question, the determination of the base of operations in Egypt was wholly a matter for the determination of the General in command, and it was for that officer, acting through the Chief of the Staff, to convey to the heads of departments under him such instructions as he might think necessary and desirable.—Dr. Cameron gave notice that he should oppose the grant proposed for Lord Wolseley unless the matters to which he had drawn attention by his question were fully explained.

Monday, June 11.

Vaccination in St. Pancras Workhouse.—In reply to a question from Mr. Hopwood, Sir C. Dilke said: The Local Government Board have obtained copies of the depositions taken at the inquest respecting the death of Herbert Walsh, vaccinated in St. Pancras Workhouse by the Public Vaccinator. A medical practitioner stated at the inquest that in his opinion the vaccination of the mother caused the flow of her milk to cease; and the verdict of the jury was to the effect that the child died from wasting, caused by absence of the mother's breast-milk, and want of proper nourishment. But, on the other hand, three medical men, including Dr. Sharkey, Assistant-Physician of, and Demonstrator of Morbid Anatomy at, St. Thomas's Hospital, and Dr. Henderson, Pathologist of St. Mary's Hospital, who also were examined, could not see any connexion between the suppression of the mother's milk and the vaccination; and, in fact, there was no cessation of the milk for a month after the woman's vaccination. The woman was revaccinated on the day after her confinement, there having been no previous opportunity of revaccinating her. The medical officer stated that she knew that she was going to be vaccinated, and that she raised no objection; and that in cases where objection had been made he had not performed the operation. The Board had not advised the revaccination of mothers a few hours after confinement, and have no reason to suppose this is a general practice. They have been content to leave the matter to the discretion of the medical attendant, who can best estimate the risk of small-pox encountered by each woman during her stay in the lying-in ward. The Board have not had occasion to announce their approval or disapproval of the practice, but in ordinary circumstances would think it better that any required vaccination should not be associated with the accidents of the lying-in room. With respect to the case in question, the Board will communicate with the medical officer. The child was vaccinated when eight days old.

The Army Medical Service in Egypt.—Mr. Gibson asked the Secretary of State for War whether he would take care that the vote in the Army Estimates relating to the Medical Service should be taken at a time when those interested in vindicating the conduct of the medical officers would have ample opportunities of doing so.—The Marquis of Hartington was understood to say that when the Army Estimates were next before the Committee of Supply he hoped to be able to fix a day for the discussion of Vote 4, the medical vote.

The Hampstead Hospital Case.—Mr. Torrens having inquired whether the President of the Local Government Board would, by acquiescence, sanction the renewal of litigation in this case by the Metropolitan Asylums Board,—Sir Charles Dilke replied that the Lord Chancellor, in delivering judgment, had observed, "I think there ought to be a new trial in this case, because the verdict of the jury upon the main issue does appear to me to have been founded upon a state of evidence which is not to my mind satisfactory, having regard to the nature and importance of the question to be determined." Sir C. Dilke added that the Board had reason to believe that an attempt had been made to arrive at a compromise, but that the offer had not been entertained by the plaintiffs; that, in the event of the case proceeding, no sanction on the part of the Board was required to enable the Managers to defend the action brought against them; and the Board had not any authority to interfere in the matter.

Lord Wolseley and the Army Medical Service in Egypt.—In the course of the debate on Lord Wolseley's Grant Bill, Dr. Cameron spoke at some length on Lord Wolseley's charges against the Army Medical Department, and Mr. Gladstone replied to Dr. Cameron's strictures. Both of the speeches are referred to elsewhere in our pages.

House of Lords—Tuesday, June 12.

The Contagious Diseases Acts.—Viscount Lifford asked Her Majesty's Government whether their attention had been directed to the moral condition of naval stations, especially Portsmouth, since the practical repeal of these Acts. The question gave rise to a discussion, a notice of which will be found elsewhere in our columns.

Treatment of Otitis by the Dry Method.—At the meeting of the Missouri State Medical Society, Dr. Todd read a paper on his dry method of treating suppurative otitis. No syringing is permitted and no drops are instilled, but all the secretions are gently but thoroughly removed with absorbent cotton, and an antiseptic powder then applied. Dr. Todd first published his method in 1880, after he had thoroughly proved its value in his aural clinic at the Missouri Medical College. Dr. Burnett, of Philadelphia, states that the duration of treatment, as tested in his practice, gives an immense advantage to the dry mode. Dr. Todd uses the highly soluble borax as the antiseptic powder, other antiseptics, owing to their insolubility in the ear, causing inconvenience, or even danger.—*Phil. Med. News*, May 26.

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FROM ABROAD.

Surgical Expedients in Emergencies.

Under this title, Dr. Levis, of Philadelphia, read a paper at the annual meeting of the Pennsylvania Medical Society (*Phil. Med. News*, May 19), which contains some ingenious suggestions.

In a case of *over-distended bladder*, when prompt relief is necessary, and no catheter is at hand, he has taken a piece of bell-wire doubled upon itself so as to form a loop, which is readily passed into the bladder. In the female a rye-straw might be used, its end being rounded with a little sealing-wax, or the stem of a clay-pipe. In *venesection*, when a lancet is not at hand, an ordinary pocket-knife will answer, provided that the vein be held in position by transfixing it with a needle after applying the ordinary bandage. For obstinate *epistaxis* requiring plugging, a piece of sponge, to which a string is attached, is forced through the meatus to the posterior nares, and small pieces of sponge are then threaded on to this, and successively pushed into the passage until it is filled. When the danger is over they can be removed by reversing the process. Another good method is to take a portion of the intestine of a chicken, or other small animal, close one end, and pass it through the meatus, when air or water may be forced in so as to make equable compression. If it is necessary to plug the posterior nares, a slender gum bougie or a piece of thick catgut ligature may be passed along the floor of the nostril, and brought out under the soft palate. A string can then be attached, and brought out of the nose in front by withdrawing the bougie; the sponge can then be employed in the usual manner. In *bleeding from an intercostal artery*, from a wound, he had succeeded in arresting it by introducing the upper part of an ordinary key into the pleural cavity; then *turning* it at a right angle and making pressure upon the vessel for some hours, when the bleeding ceased. A very efficient substitute for the *Esmarch elastic bandage* is a flannel roller cut bias. For dislodging and forcing downwards a *foreign body in the œsophagus*, an ordinary carriage or riding-whip, knotted sufficiently far from the end to insure flexibility, may be used. Good temporary dressings for *fractures* may be extemporised by tearing palm-leaf fans into strips. A more permanent dressing can be made by dipping ordinary sand-paper into hot water, and applying it while soft. It adapts itself to the shape of the limb, but becomes sufficiently strong and rigid afterwards. Hard dressings also can be made with starch, or eggs and flour. In moving a patient with *fractured thigh*, the sound limb may be made into a splint by fastening the legs together. In treating these fractures complicated apparatus is not necessary; simple extension by weights is all-sufficient, the limb being kept in position by lateral supports or sand-bags. The postural method without splints is to be preferred in all fractures near joints. Fracture of the clavicle is best treated by the supine position, with the head slightly elevated. An ordinary gimlet is an efficient instrument with which to *open the mastoid cells* in cases of abscess with threatening cerebral complication. The carpenter's rasp may sometimes replace the trephine in replacing fragments of bone after fracture of the skull. A rubber tube may be used instead of a syringe in cases of *obstruction of the bowels*, the fluid being injected by hydrostatic pressure.

The substitution for belladonna of stramonium, where a mydriatic is needed, and replacing carbolic acid by sulphurous acid as a disinfectant, and the employment of hot water in place of all other styptics, were also mentioned. Dr. Levis prefers the straight glover's needle to the ordinary curved surgical needle for sutures.

The Internal Employment of Glycerine.

In a recent *thèse de Paris*, M. Tisne (*Journal de Thérapeutique*, April 25) gives an account of the results of the employment of glycerine by Drs. Jaccoud and Ferrand. The former prescribes it as a stimulant to the digestive organs in the non-febrile stage of phthisis, when for any reason cod-liver oil ceases to be tolerated. The following mixture is given daily in two or three doses:—Glycerine forty, and rum or cognac ten grammes, with one drop of essence of mint. This aromatised alcoholised compound, of agreeable flavour, is well tolerated by the stomach, and even after long uninterrupted employment it causes neither satiety nor disgust. The addition of the rum or brandy has simply in view the modification of the insipid taste of the glycerine, and to assist its digestion. The amount of the glycerine may be raised to fifty or sixty grammes, but only in persons who do not exhibit any sign of abnormal excitability of the heart or nervous system; and restlessness, unusual loquacity, obstinate insomnia, or an increase of temperature announce that the proper dose has been exceeded. Dr. Ferrand makes daily use of glycerine in his wards at the Laennec, and it is found to be readily absorbed, without producing any toxical effects. It diminishes constipation in almost all cases, and yet moderates diarrhœa when this is present; and under its use sleep becomes calmer. It has an evident effect on nutrition, its employment in most cases leading to an increase in weight after the first fortnight. In tuberculous cases it induces a considerable amendment in the functional manifestations of the disease, such as dyspnœa, cough, and sweating. The expectoration is the symptom which is least influenced. The local condition of the lung also remains stationary, and the physical signs undergo no change. The action of glycerine on the liver is exhibited by the increase of its size and by the more abundant flow of bile. With respect to its action on the kidneys, there are observed a more abundant diuresis and an absolute and relative increase of urea, the chlorides and phosphates eliminated by the urine. In affections of the genito-urinary organs, M. Tisne has found that under the use of glycerine the alkalescence of the urine seems to diminish, while purulence, when present, becomes considerably lessened.

REVIEWS.

A Manual of Hygiene. By Edmund A. Parkes, M.D., F.R.S. Edited by F. S. B. François de Chaumont, M.D., F.R.S. Sixth Edition. London: J. and A. Churchill. 1883. 8vo, pp. 730.

The subject of hygiene, or health, is one to which more interest and more importance attaches every year. It is an old saying that prevention is better than cure, but it is only since the master mind of Parkes made the study of hygiene not merely possible, but easy, that the means of following up that excellent adage have been brought prominently home to us. The University of Cambridge some few years ago instituted an examination in sanitary science, and now the Royal College of Physicians of London have announced their intention of following suit: this shows that those in authority recognise the necessity of a more exact knowledge of this subject. It was also with a view of disseminating that knowledge far and wide that the Parkes Museum was founded, and of the success of that undertaking we have had ample proof in its re-opening the other day in larger and more fully equipped premises in Margaret-street. Parkes's "Manual of Hygiene" has always been, and will continue to be for a long time to come, the standard work upon the subject in the English language.

The present edition does not differ much from its immediate predecessors, the general arrangement adopted by the late Dr. Parkes in the fourth edition (the last that he revised) having been adhered to almost throughout, and most of the chapters seem not to have needed any alteration. Professor de Chaumont, however, has spared no pains to keep the book thoroughly abreast of the times, as is evident from a perusal of the article on food, where even the question of the propagation of tuberculosis by the milk or by eating the flesh of tubercular cows is alluded to. It seems difficult, however, to see why, if the flesh of animals dying of tuberculosis is dangerous to health, it should be possible to eat with impunity the flesh of animals that have died from the rinderpest, from rabies, or from glanders; and although this has no doubt been done on various occasions, we must suppose that the meat has at such times been deprived of its noxious properties by cooking. Whether that would suffice to destroy bacilli (and there is reason for suspecting that glanders and rinderpest may be due to such an agency) may indeed be doubted. Professor de Chaumont was apparently not aware of Mr. A. P. Thomas's successful labours on the life-history of the liver fluke, the parasite which produces in sheep the disease known as the rot.

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The only section that has undergone much alteration is the last in the first book, which now treats of disinfection and deodorisation, the latter subject having been previously dealt with in the chapter on the removal of excreta. The term *disinfectant* is rather a vague one, and different people attach a different meaning to it, some indeed using it as synonymous with deodorant. In the present instance its use is restricted to those substances which can prevent infectious diseases from spreading by destroying their specific poisons. The exact manner in which this takes place, whether by oxidation, deoxidation, or arrest of growth matters not, provided only that it be accomplished. The term "air-purifiers" is used in respect of those substances which cleanse the air. Disinfectants would come under this head, and sewage deodorants is the name given to those substances which are used to prevent putrefaction in excreta, or in waste animal or vegetable matters, or to remove the products of putrefaction. Disinfection to be rightly and thoroughly carried out requires the knowledge on our part of three things:—1. The nature of the contagia (*i.e.*, the agencies by which the so-called infectious diseases are supposed to spread); 2. The media through which they spread; and 3. The effect produced upon them by the chemical methods which are supposed to destroy or modify them. The first of these is one of the problems to which more attention is being paid just at present than to any other subject in the whole range of medicine or surgery. Probably in all diseases the contagia exist as solid particles, but this has yet to be proved. In some diseases, at any rate, it is certain that these particles contain minute organisms—*e.g.*, bacteria, bacilli, vibrios, spirilla, etc. As regards the second point we read—"Those parts of the body, which are the breeding places of the contagious particles, give off the poison in greatest amount. The portions of the body thus thrown off, and containing the contagia, may then pass into air, or find their way into water or food, and in this way be introduced by breathing, drinking, or eating, or through broken surfaces of the body." With reference to the third point, heat is the most reliable means of destroying the contagia; a dry heat is more efficacious than boiling. As regards the disinfection of clothes, linen, etc., when sufficient heat could not be obtained, the late Dr. Parkes used to recommend that the articles be soaked for twenty-four hours in a solution of chloride of lime, and then boiled with some more chloride added; they should then be washed, dried, and baked as far as possible. Fumigation of the clothes with sulphur has also been successfully tried. Next to heat, chemical agents have the greatest efficacy. They may act in one of three ways—either they actually destroy disease poison and minute organisms, or they suspend vitality and propagation, or they merely act as deodorants—*i.e.*, they destroy or mask smell. We need only enumerate some of the chief of these agents—viz., charcoal, quicklime, permanganate of potash, chloride of zinc, ozone, chlorine, iodine, bromine, nitrous and sulphurous acids, carbolic acid, etc. Some admirable directions are given for the purification of rooms after infectious diseases, and for disinfection of the patient and his surroundings in various diseases. The section concludes with a list of the more common chemical agents in use for the deodorisation of sewage, and a brief account of their mode of action.

Practical Lessons in Elementary Physiology and Physiological Anatomy for Schools and Science Classes. By D. M'Alpine, F.C.S., Lecturer on Biology, Edinburgh; Honourman of the Science and Art Department; Author of Biological, Botanical, and Zoological Atlases. Twelve plates, with practical directions and explanatory text. London: Baillière, Tindall, and Cox. 1883. Pp. 23.

The aim of this book is, according to the preface, "to encourage the practical teaching and study of elementary physiology and physiological anatomy in our schools and science classes." It treats, however, of anatomy more than physiology, and the physiological part is almost altogether limited to an account of the chemistry of digestion. The rabbit has been selected by the author as a type, and in the plates are numerous figures of the bones, muscles, alimentary canal, respiratory, circulatory, and nervous systems of that animal. For comparison there is a life-size drawing of a vertical section of the body of a newly born child. In the text the names and brief descriptions of the parts figured are given, and there are directions for dissection. We cannot commend the work as well adapted for the purpose for which it is intended. The enumeration of the parts of the animal is, in our opinion, needlessly minute, and the descriptions are very superficial, and sometimes inaccurate. Surely Jacobson's organ and the Harderian gland do not come within the range of elementary physiology, and the Harderian gland does not "lie in the front corner of the *eye*, and open there." The Latin *chorda*, corresponding to the Greek χορδή, ought not to be deprived of the "h"; and if the anatomist Varolio is to be mentioned in a work such as this, his "pons" ought not to be translated as "the bridge of Varo*lus*." To tell a student that the *dura mater* and the *pia mater* are respectively the hard mother and the tender mother, without any explanation of the origin and the meaning of these terms, is more likely to suggest erroneous ideas than to convey useful information. We admit the great difficulty of preparing a work on this subject for general students, and brevity is an excellent quality in an elementary book; but the author should remember the maxim—"*Brevis esse laboro obscurus fio.*"

Lehrbuch der Geschichte der Medicin und der epidemischen Krankheiten. Von H. Haeser, Professor in Breslau. Dritte völlig umgearbeitete Auflage. Verlag von Gustav Fisher, in Jena. 1875-82. Erster Band, 875 Seiten; zweiter Band, 1120 Seiten; dritter Band, 995 Seiten.

In the first and second volumes of this work we have a history of medicine from the earliest records to the present time. The third volume is a history of epidemics.

The most ancient work on medicine which remains for us dates back nearly three thousand years, and for all before that we have nothing but conjecture. Professor Haeser assumes that in all communities the rudiments of obstetrics would first engage attention, and that the ordinary accidents of life would lead to the practice of surgery. Ailments of obscure origin, and especially epidemics, would be regarded as punishments from the gods, or as due to the malignity of evil spirits, and would be treated by the intervention of priest-craft, expiatory or propitiatory offerings, and prayers. As experience of individual cases increased, so rules were formed and the practice of medicine became an art; and when to the observation of results was added an inquiry into causes and the laws of natural phenomena, it was elevated to the rank of a science.

From the Sanscrit literature of the Vedic period we learn that medicine was a distinct art 1500 years before Christ, and that those who practised it did so for payment. In the Brahminic period, which immediately succeeded this, there was an abundant medical literature, some of which still remains. From this we learn much about the medical education and practice of nearly 3000 years ago. Medical education lasted for six years. Each teacher had from four to six pupils, and the teacher was advised in the choice of pupils to pay regard to the nobility of birth, comeliness of appearance, moral character, and manual and mental capacity of the candidates. The students were advised to choose a good textbook and a good teacher. Their initiation took place in winter, with religious ceremonies and the presentation of gifts to the teacher, who delivered an introductory lecture, in which he admonished the students, as they hoped for success in practice, a good name on earth, and a place in heaven hereafter, to begin and end each day with prayer for the good of all living creatures, and especially for the Brahmins and the Sacred Cow.

They were advised to be modest in dress, low in voice, concise and to the point in speech, to covet no man's wife or goods, to abstain from bad company, to be guarded in their behaviour to female patients, not to obtrude their services, not to gossip about what they might see in houses to which they might be admitted, to make their patients' welfare their chief aim, to in all ways seek to improve their professional knowledge, and to remember that the acquisition of the art of medicine was a difficult task.

Their knowledge of anatomy corresponded with their mode of studying it. The subject was immersed in a running stream for seven days, and was then scrubbed with a coarse brush to remove the soft parts. They aimed at enumeration rather than description. Their ideas about physiology were childish, but in some respects they seem to have in part anticipated modern discoveries. Thus they taught that

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blood was formed from chyle, which was a watery fluid, and acquired its red colour in the spleen and liver.

Their surgical practice was certainly not deficient in courage. Enlarged lymphatic glands were extirpated, malignant growths were removed, and recurrence avoided by the application of arsenical ointments. Intestinal obstruction was treated in extreme cases by abdominal section and excision of the obstruction. Lithotomy was common, and minute directions for the operation were given.

By the examination of urine they discovered albuminuria and diabetes. Their knowledge of drugs was extensive, and mercury was highly esteemed as a remedy. Indeed, the physician who thoroughly understood the healing powers of this medicine was regarded as a god. Specialism was not esteemed at that time, and the practitioner was both physician and surgeon. If he were ignorant of one or the other branch of knowledge he was compared to a bird with only one wing.

Licence to practise had to be obtained from the rajah, who sometimes granted it to unworthy people. For there were charlatans in those days who flattered the patients' friends and took small fees. The fees were proportioned to the patients' means, and it was dishonourable to demand a fee from a Brahmin, a relative, or a friend.

This part of the work is interesting from the antiquity of the period with which it deals. But English readers have already an excellent account of this period in Wise's "History of Medicine among Asiatic Nations."

Professor Haeser next traces the history of medical practice in ancient Persia, China, Egypt, ancient Greece and Rome, in the middle ages and in modern times. Throughout the book we have short biographies and notices of the principal works of all who have been eminent in medicine. These biographies illustrate the vanity of fame; for the names of many distinguished men, if remembered at all, are known to the bulk of our profession only in connexion with some small anatomical detail. But readers of this history will find that the mistranslated torcular of Herophilus, the fissure of Sylvius, the foramen of Vesalius, or, to turn to a later period and the history of our own country, Glisson's capsule, Highmore's antrum, Wharton's duct, Willis's circle, and Cowper's glands, are very inadequate memorials of men who did good work in their day, and bequeathed to us the enjoyment of the fruits of their labours.

Atlas der Gelenkkrankheiten nebst diagnostischen Bemerkungen und einem Abriss der Anatomie der Gelenke. Von Dr. August Schreiber. Mit XXIII. theilweise in Farbendruck ausgeführten lithographischen Tafeln und 56 Holzschnitten. Tübingen, 1883. Verlag der H. Laupp'schen Buchhandlung.

Atlas of Diseases of Joints, etc. Pp. 100.

In this Atlas, published by the advice of the late Professor Hüter, we have illustrations of cases which came under the observation of the author when acting as first Assistant-Physician in the Surgical Klinik at Tübingen and as Resident Medical Officer at the German Hospital at Dalston. To these a few drawings from specimens in the collection of Hunter and Dupuytren have been added. The illustrations comprise acute and chronic synovitis, caries and suppuration of joints, bursitis, arthritis deformans, joint affections in tabes dorsalis, angular and lateral curvature of the spine, rickets, deformities resulting from diseased joints, different forms of talipes, gouty concretions, etc. They are all well drawn, and those representing arthritis deformans and the joint affections in tabes dorsalis are especially good. Prefixed to the Atlas is a brief account of the normal anatomy of the articulations of the human body, with numerous woodcuts, mostly copied from Luschka. The author states in his preface that the work has been published with the desire of increasing the interest in the study of diseases of joints, and so leading to improvements in practice. How far this desire will be realised must be left to the decision of time, but the intention and execution of the work are good, and the price at which it has been issued (twelve shillings) is, for the number and quality of the illustrations, very moderate.

It is stated that efforts are being made to see if it is not possible to have some Parliamentary inquiry into the proceedings of the Metropolitan Asylums Board.

GENERAL CORRESPONDENCE.

THE INTERNATIONAL EXHIBITION AT NICE.

Letter from Dr. C. West.

[To the Editor of the Medical Times and Gazette.]

Sir,—Following the example of so many other cities, the Mayor and Municipality of Nice have resolved on opening an International Exhibition there in December next.

The Society of Medicine at once seized the opportunity to point out the importance of devoting a portion of the building to a Medical and Sanitary Exhibition, and you will see by the enclosed catalogue how earnestly they seek that it shall be as complete and as practically useful as possible.

All of us who have lived on the Continent know how far from perfect are all the hygienic arrangements of our neighbours on the other side of the Channel, and the Riviera has had in these respects more even than its fair share of blame.

If you, Sir, and other members of the profession will lend your influence and help to promote its success, the Medical and Sanitary Exhibition at Nice may be the starting point of far better things than exist at present; and we may then send our patients south in search of health with none of those misgivings as to imperfect drainage, untrapped closets, and ill-ventilated houses which make us sometimes hesitate as to whether an English winter, with its damp, and cold, and darkness, may not after all be safer than the cloudless sky and brilliant sunshine of the Mediterranean. The English agents are Messrs. Johnson, Castle-street, Holborn, E.C., to whom all applications for space must be addressed, and from whom all information can be obtained. I shall also be most happy to answer any inquiries on the subject.

I am, &c.,

2, Bolton-row, Mayfair, June 12. Charles West.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

June.

Infectious Diseases—The New Royal Infirmary.

The management of cases of infectious disease is still exercising the minds of the authorities who have to deal with them. The question of notification is now in abeyance, and the epidemic of typhus fever in the parish of Liverpool is gradually subsiding. In the adjacent township of Toxteth Park the number of cases of typhus has been increasing, and the Guardians of that district have made an inquiry into the causes of this increase. The result has been a letter to the City Council, in which attention was called not only to the inefficient nature of the disinfection, by the Health Officers, of the dwellings of the poor, but to the apparently unwarrantable delay that took place in some cases in the carrying out of even this inefficient disinfection. In one case several weeks elapsed between the removal of the infected patient and the disinfection of the house. The Medical Officer of Health for Liverpool, in his reply, charges the Guardians with putting obstructions in the way of his removing infectious cases to their hospital at the Toxteth Workhouse. As regards disinfection, he alleges that it is impossible to carry it out efficiently in the dwellings of the poor. To this the Guardians have rejoined that there are only two ways by which infectious cases can be removed to their hospital. First, through a relieving officer when removal is voluntary on the part of th patient or his friends. The relieving officers assert that under such circumstances they have never refused admission to hospital, nor has any delay occurred in removal. Secondly, through a magistrate's warrant under Section 124 of the Public Health Act, 1875, when the patients or their friends are unwilling that removal to hospital should take place. In such cases the certificates have been returned to the Medical Officer of Health, that he might be able to set this law in motion; but this he has not yet thought it necessary to do. Thus the matter at present stands, but the friction between the opposing authorities has caused the City Council to consider the question of providing hospital accommodation that shall be directly under the control of the Medical Officer of Health. This question is one that councillors seem to be

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afraid of, partly on account of the "bigness of the business," as several have termed it, and partly because the Netherfield-road Infectious Hospital has remained more than half empty throughout the epidemic, although the Medical Officer of Health can command a certain number of beds there. The advocates of the additional hospital ascribe its emptiness to its position and relations, and assert that smaller and more numerous hospitals would be better filled.

The Liverpool Royal Infirmary site is the subject of occasional letters in the daily newspapers. The medical staff of the Hospital and the teachers of the Medical School are quite satisfied with the decision of the City Council, by which the site of the new Infirmary will be obtained through the enlargement of the present site by the demolition of some objectionable property in the neighbourhood. By this the new Infirmary, the Medical School, and the University College buildings will occupy the same grounds, and be isolated from dwelling-houses by four streets enclosing a quadrangle that will contain the three institutions. The demolition of the houses will be a very expensive affair, and accordingly it has been suggested as much cheaper to either build the new Infirmary at Mount Vernon, seven hundred yards away, or to remove University College to that place. The divorce of the Hospital from the Medical School is strongly opposed by all the staff, and University College, having just settled down to work contentedly on its present site, is not willing to be removed so soon. The three are likely, therefore, to be allowed to remain side by side, so that the student will, as at present, be able to acquire in one building all the knowledge necessary for a medical man.

REPORTS OF SOCIETIES.

THE CLINICAL SOCIETY OF LONDON.

EXTRA MEETING, FRIDAY, JUNE 1.

ANDREW CLARK, M.D., President, in the Chair.

DR. COUPLAND read the report of the Committee on Dr. Tyson's Case of Leprosy. A small portion of the diseased skin was snipped off and immediately plunged in alcohol. The sections were cut by Dr. Thin, and stained with methyl-violet and fuchsin. Precautions were taken against the appearance of putrefactive changes; bacilli of characteristic appearance were discovered in all the sections. The thanks of the Society were voted to the Committee for their report.

A CASE OF LARGE SEBACEOUS OR DERMOID CYST IN THE TONGUE, REMOVED BY OPERATION, WITH CURE.

MR. BARKER said that the case was one of a woman, aged twenty-eight, who had first noticed pain and difficulty in swallowing seven years before. Soon after, a swelling was noticed exactly under the tongue in the middle line, and directly behind the symphysis menti. This had been increasing ever since. On admission into University College Hospital, it pushed the mucous membrane forwards and upwards, so as to make an interval between the jaw and the root of the tongue of quite an inch broad. It also projected beneath the chin for about an inch and a quarter. The skin over it here was perfectly normal, and in no way attached to the tumour. The whole tongue was thrust much upwards, and its dorsum rested against the hard palate. The tumour was painless, and fluctuated over its whole surface; there was no trace of inflammation anywhere about it. On puncture with a grooved needle, typical sebaceous matter was obtained. On August 12, 1882, Mr. Barker removed the tumour by a straight incision in the middle line under the chin. The tough cyst was reached above the mylo-hyoid muscle, and lay here, partially separating the genio-hyoidei. It was easily separated from its bed, which lay almost entirely between the genio-hyo-glossi muscles, and reached quite up to the dorsum of the tongue, only covered by the tough mucous membrane of the latter. Blunt instruments and scissors were used, and hardly a trace of blood was lost, no vessels requiring to be secured, except one tiny twig, which was pinched. The wound having been well cleansed with carbolic solution, the skin was brought together with four silver sutures, and the large cavity drained with a tube. The whole thing healed in a few days without any suppuration or reaction, and the patient left hospital on the sixth day after operation. The cyst (shown), being removed entire, was found very tough and firm-walled. It measured three inches by one inch and a half, and was somewhat uniform. Its contents were like porridge, with a faint sour smell, and under the microscope were seen to be typical sebaceous material. Its wall was fibrous, lined by a thin, glistening membrane, leaving no doubt as to its nature. Mr. Barker then alluded to the rarity of these tumours of the tongue, and in illustrating this fact, stated that after careful search he had only been able to collect sixteen recorded cases, exclusive of his own two. From an examination of these, it appeared that these cysts may occupy three distinct situations in relation to the tongue:—1. Between the genio-hyoglossi muscles in the middle line; 2. They may be unilateral—that is, lie between the mylo-hyoid muscle and genio-hyo-glossus of one side; and 3. They may be bilateral, lying above the mylo-hyoid and below the genio-hyo-glossi of both sides. Their contents vary very much, as well as the age of the patients among whom they are met, although they appeared to be, in a sense, congenital. The various modes of treatment were then alluded to, but of all Mr. Barker gave the preference to complete enucleation, without opening the sac, as the easiest and safest operation. This may either be done from the mouth, or by a median incision, as in the last of the author's two cases. The scar left by the last method was very trifling, as seen in the patient exhibited, and the ease and safety of the operation was greatly increased where larger cysts have to be removed.

The PRESIDENT asked whether any deformity were left, and whether any disturbance in the articulation of speech could be noted after the operation. To both questions a negative reply was given.

STRETCHING THE FACIAL NERVE FOR TIC CONVULSIF.

MR. R. J. GODLEE read the following notes:—The first case was the conclusion of one reported in vol. xiv. of the *Transactions of the Clinical Society*, page 44, by Dr. W. Allen Sturge and Mr. Godlee—that of a lady, aged seventy-two, in whom the operation had been performed for right-sided tic. The result had been almost complete relief for nine months, when the spasm recommenced as the result of a sudden and severe nervous shock, and gradually regained all its former intensity. The patient remains in tolerably good health, but still suffers from some neuralgic pain in the face, principally in the right supra-orbital nerve, and at the top of the head, on the left side, at the seat of an old injury. She is unwilling to undergo any further operation. The next case was that of a man, aged thirty-six, who had suffered from bilateral tic for some years without assignable cause. There was no syphilis, and no source of reflex irritation, except some old carious stumps of teeth. It was made worse by exposure to cold and bright light and excitement. He had slight supra-orbital neuralgia on the left side. He was kept under observation for some months, and improved while perfect rest was maintained, but relapsed when allowed to go about. The left supra-orbital nerve was first divided subcutaneously without good effect, and subsequently the left, and afterwards the right facials were stretched by the same method as in the former case. In both instances the twitching recommenced after three months, as the paralysis disappeared, and returned as severely as before the operations. Arguments were adduced in favour of the mischief being situated in the region of the medulla oblongata, and references were made to as many reported cases as the author could discover. It was shown that, though all of these had been reported at first as examples of success, in all (except in one reported by Mr. Southam, of Manchester, which remained quite well after two years) more or less return of the twitching had occurred. Some, however, according to reports carried up to the present time, remain to some extent improved. The total number of cases in the table amounted to thirteen. It was then urged, that if Mr. Southam's case did not exist, we should have to consider this chapter of surgical therapeutics closed, but that while it remains well there was still a certain amount of hope that the operation may be sometimes successful. It was lastly pointed out that the stretching of a small nerve on a hook acted differently from the stretching of a large nerve with the finger. In the latter class of cases the effect was probably either a loosening of the nerve from its sheath, or some influence on the nervous centre; in the former it caused a solution of continuity of the nerve, but with a certainty of union. The *modus*

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operandi was, therefore, probably not a profound effect upon the centre, as has been supposed, but merely the breaking of a bad habit, which must be taken for what it is worth.

Mr. HERBERT PAGE fancied the operation must have been done more often than Mr. Godlee's tables showed. He referred to a case operated on by Mr. Walter Pye which had complete relief for six months, when a fright seemed to bring on a relapse quite suddenly. He narrated a case of his own in which the facial nerve was stretched, with sequent palsy of the face. Eighteen months after the operation there was still some improvement. The influence of stretching of nerves on distant parts of the body was clearly brought out by some observations made by Braun in Germany.

The PRESIDENT congratulated Mr. Godlee upon the valuable paper which he had presented to the Society. He knew of at least two cases in which the facial nerve was stretched, once by Mr. Hutchinson, with complete success.

SPONDYLITIS DEFORMANS.

Mr. H. H. CLUTTON said the patient, who had been exhibited at a previous meeting, was thirty years of age, and the subject of a very severe form of anchylosis of the spinal column. In the family history there was nothing to indicate hereditary taint. In his previous history there was strong evidence of rheumatism affecting the joints. When nine years old he was confined to bed for rheumatism, which, with several intermissions, lasted for six months. It began in the metatarso-phalangeal joint of the right big toe. It then attacked the right knee, and finally the right hip. The latter joint had, he said, remained stiff ever since. Six years ago he had a painful foot, which the doctor called rheumatic gout. He had never had any venereal disease of any kind, and, beyond the attacks above described, had always had good health. Three years ago he first felt pain and stiffness in his neck, but it had caused him little inconvenience till the last six months. He can give no account of his back or chest, and is not aware that they are fixed and immovable. For the last three months his left shoulder has been stiff and painful, and he still occasionally suffers from rheumatic pains in the right hip. His present condition is one of almost complete anchylosis of the spinal column. He stands with the left leg advanced in front of the right with the knees bent, and in a stooping posture. His spine presents one large dorsal curve, with the convexity backwards. The head is craned forwards, and the chest sunken and depressed. The movements of the head are very much impaired, although not as yet completely destroyed. He cannot turn his head at all to the right, and only slightly to the left, the nose moving about one inch and a half from the median line. The lateral movements ordinarily obtainable in the cervical region are entirely absent. In raising and depressing the head, the chin only moves three inches. There is no movement whatever in the lower cervical vertebræ. This is very apparent on trying to make the patient bring his chin towards the sternum. On bending the whole body forwards, it is seen that the spinal column is quite rigid; there is no separation between the spinous process, or increase of curve. With the knees extended, the tips of the index fingers just touch the patella, and this movement appears to be effected by the hip-joints. The respiratory movements are entirely abdominal. On the deepest inspiration there may be some slight expansion, but there is no elevation of the ribs. His height is now 5 ft. 2 in. in his boots, and he is quite sure that some years ago he was 5 ft. 5½ in. when measured in his boots against the wall. As to other osteo-arthritic changes, the patient has several creaking joints and distinct "lip-growths" in both shoulders and big toe joints. He has also distinct limitation of movement in the left shoulder. The right great trochanter is larger than the left, and tender on pressure. All the other joints except those named seem perfectly healthy. Such an extensive and severe form of anchylosis of the spine, with or without osteo-arthritic changes elsewhere in the body, is a rare condition in a man thirty years of age, and it was on this account Mr. Clutton brought him before the Society. A similar case was shown at this Society by Dr. Allen Sturge, and is recorded in the *Clinical Society's Transactions*, vol. xii.

SPONDYLITIS DEFORMANS AND OSTEITIS DEFORMANS.

Dr. COUPLAND read an abstract of this case for Dr. LEDIARD. The patient was a miner, aged fifty-eight, from Cumberland, who had suffered from repeated attacks of pain in the spine, and rheumatic affection of the joints, and of late years stiffness of the spine and head, so that the body was bent forwards in a stooping posture. The spine was absolutely anchylosed except for slight movement in the neck, and the head was firmly fixed to the spine. Several joints presented chronic rheumatoid arthritic changes; there was no movement of the chest walls, respiration being entirely diaphragmatic. The femora were curved forwards and outwards, and the shafts, somewhat massive, suggesting the disease known as osteitis deformans in possibly an early stage. The skull and clavicle were, however, unaltered.

Dr. DYCE DUCKWORTH thought it remarkable that osteo-arthritis occurred so rarely in the spinal column. Mr. Hutchinson said that gonorrhœa, when it produced arthritic changes, was probably causally related to the disease. It was also remarkable that the malady affected young people; this was the case in Mr. Clutton's example.

In reply, Mr. CLUTTON said that he had ascertained the almost certain absence of gonorrhœa in his instance.

TWO CASES OF EPITHELIOMA WHICH HAD OCCURRED ON OLD CICATRICES.

Mr. GEORGE LAWSON related the history of these two cases. In the first, the patient, a pale, anæmic woman, aged thirty-eight, had lost, in childhood, the sight of both eyes, except the bare perception of light, from an ulcerative inflammation, probably diphtheritic, and which had caused complete adhesion of the upper and lower eyelids of each eye to the globe. The patient was admitted into the Middlesex Hospital in May, 1881, and the growth first commenced in the previous September. It sprang from the cicatricial tissue which united the left lower eyelid to the globe, and steadily increased until it obtained the dimensions shown in the drawing, the whole front of the eye being occupied by it. Mr. Lawson removed the growth and the eye. Two years have now elapsed since the operation was performed, and there has been no recurrence. In the second case, the patient, a strongly-built man, aged thirty, was admitted into the Middlesex Hospital in March, 1881, with an epithelioma of the left thigh, which occupied the greater part of a large cicatrix. Twenty years previously his left thigh was crushed by a heavy cart passing over it, which caused great laceration of the skin and muscles. He was seven months in the Aylesbury Hospital, and when he was discharged there was still an unhealed superficial wound of about the size of a small saucer. He then went to work as a farm labourer, but the wound never healed. Two years and a half before his admission into the Middlesex the wound took on a new action. It began to spread rapidly, the granulations became large and fungoid, and it occasionally bled. On admission, there was found an epitheliomatous ulcer measuring seven inches and a half by eight inches. Mr. Lawson amputated the thigh just below the trochanters, and although two years have elapsed, there has been no recurrence of the disease. Mr. Lawson remarked that the cicatrices which seemed specially prone to epithelioma were the tight cicatrices such as are caused by a great destruction of skin, and those cicatrices upon which there was a constant tension. Both the cases, he said, tended to show that if epithelioma can be completely excised before it has affected lymphatic glands, it is the form of cancer which is the most amenable to treatment; whilst experience has taught us that after the lymphatic glands are invaded, epithelioma is the most formidable and irremediable of all the cancers.

Mr. GODLEE asked whether the epithelioma grew from the edge or from the centre of the scar. He had had a case in which the epithelioma commenced in the middle of the scar.

Mr. WARRINGTON HAWARD said that it seemed certain from Mr. Lawson's case that the local origin of epithelioma was an ascertained fact. He narrated a case of a young lady who was extensively burnt, and in whom two-thirds of the circumference of the leg did not heal satisfactorily, and after a time a part of this began to fungate and became epitheliomatous. Although skin-grafts were tried, no healing could be brought about, and finally amputation of the leg was resorted to. No history of cancer could be made out in a considerable number of generations of this family. The patient has remained perfectly well—that is now eight years. Other examples were mentioned in which an epithelioma appeared on the top of long unhealed sores.

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Mr. Barker spoke of the influence of the local irritation in the production of epithelioma. This was most evident in the cancer of the tongue. These two cases were an important lesson in this direction. In Mr. Lawson's case the epithelioma began at the seat of greatest irritation, namely, at the border of the wound.

Mr. Pearce Gould remembered two similar instances. One was a woman, aged thirty-five, who had a burn, the ulcer from which refused to heal. At the edge of this an epithelioma developed. The other was a man of middle age, who received a charge of shot in the leg several years before, and small sinuses leading down to the tibia became the seat of epithelioma. He thought these cases called to mind the facts brought out by Mr. Moore in rodent ulcer. It was another evidence of the strong resemblance between these forms of disease.

The President inquired whether syphilitic fissures predisposed to the appearance of epithelioma, and also whether Mr. Lawson could suggest the mode in which irritation produced the carcinoma.

Mr. Lawson regarded the syphilitic tongue as more prone to carcinoma than a tongue not so diseased. A marked feature was that the disease appeared to be so manageable in the early stage, and so uncontrollable when the glands were involved.

Nodes from Congenital Syphilis.

Dr. Radcliffe Crocker read the case of a girl, aged twelve. The patient had been shown at a previous meeting. She had enteric fever five months before she came under notice, and during convalescence two nodes appeared on the forehead, one on each side of the median line; there was another tumour in the right orbit, softer than the nodes, and movable. There was no corroborative evidence about the girl except the two upper central incisors, both of which were notched, and one was slightly pegged. No history of infantile syphilis could be obtained, and the mother and the other children were apparently quite healthy; but eventually it was ascertained that the patient was a child by a previous husband, who died soon after their marriage, had lived a dissipated life, and was never well, but resented inquiries into the cause of his ill-health. The patient was put under iodide of potassium. When last seen the softer tumour had quite gone, both the nodes were softer and much smaller, and the improvement in the general health of the patient was very striking. Dr. Crocker remarked that the case corroborated Sir James Paget's observation that typhoid fever often aided as the discoverer of constitutional taint, and also Mr. Hutchinson's observations on the value of the notched and pegged incisor teeth as evidence of congenital syphilis.

Infantile Hemiplegia with Unusual Reflex Phenomena.

Dr. Frederick Taylor narrated this case. The patient was a child, aged five, who was taken with convulsions at twelve months old. This lasted two hours, and was followed by weakness of all the extremities. In a few days the right arm began to move, and the right leg, but the left limbs remained paralysed. Gradually rigidity developed, and with it the curious reflex irritability to be described. The child was fat and well, commonly semi-recumbent, with both legs semi-flexed and rigid, the left arm flexed at all joints and rigid. This arm is scarcely used, but the right freely and well. Both legs can be moved, but not completely flexed or extended. The right is less rigid than the left. The child cannot sit up in bed, nor stand upright, nor walk. The left arm and leg are nearly two inches shorter than the right arm and leg respectively. On making a sudden noise near the patient the left arm is quickly thrown out at right angles to the body, the elbow, wrist, and fingers are extended, the face assumes a puzzled expression, and the legs undergo moderate extension. The condition of spasm remains for about thirty seconds, then slowly relaxes. The same reflex contractions are brought about by shocks affecting the surface of the body, a blow on his crib, a tap on the head. Vision appears to be good, but he has disseminated choroiditis in very small patches in both eyes. He is lively, fairly intelligent, and can talk. He passes fæces and urine involuntarily. But for the choroiditis there is no conclusive evidence of congenital syphilis. He has been four months treated with iodide of potassium and mercury, but shows no material improvement. Dr. Taylor thought the case was allied to those of infantile hemiplegia with spastic or choreic phenomena occurring afterwards. Though not strictly unilateral, the disease on the left side was obviously of cerebral origin, and that on the right side must be explained by a second lesion, or more likely by a single lesion crossing the middle line. The mode of origin suggested obstruction of a vessel with syphilis as a possible antecedent. Its early occurrence and the deficient growth of the left limbs rendered it probable that asymmetry of the brain also co-existed.

The meeting (and the session) terminated after a few remarks from the President.

THE OPHTHALMOLOGICAL SOCIETY.

Thursday, June 7.

W. Bowman, F.R.S., President, in the Chair.

The Relation of Eye Symptoms to Diseases of the Spinal Cord.

Dr. Gowers having read his paper on the above subject (which we give in full elsewhere in our pages).

The President expressed in a few words his sense of the great value of the paper that had just been read.

Dr. Hughlings-Jackson commenced by speaking of the great value of Dr. Gowers' complete and splendid contribution to ophthalmology and neurology. What struck him most in this matter was the exceeding complexity of locomotor ataxy. There seemed to be all varieties of it, and of the complications, *e.g.*, joint affections, gastric crises, and in rare instances paralysis of one or both vocal cords. Occasionally there might be absence of one of the three typical symptoms, *i.e.*, ataxy, or the knee phenomenon, or the Argyll-Robertson pupil might be absent. Again, some of the so-called typical symptoms might occur in other diseases; for instance, as Dr. Gowers had just shown, the Argyll-Robertson pupil was found amongst the insane, and again, the knee-jerk was absent in diphtheritic paralysis. Then, too, the symptoms varied in degree: there might be much, little, or no ataxy at all; or there might be what he would call a stage beyond ataxy. Also there were great variations in the pupils. As regarded ocular symptoms in connexion with what he might call artificial disease of the cord he knew nothing, save that in one case of a stab through one-half of the cord in the cervical region there was contraction of the pupil on the same side as the lesion. Dr. Brown-Séquard had recorded several instances of this coincidence. In cases of optic atrophy with tabes, no matter whether the sight was good, impaired, or totally lost, the pupil might act during accommodation—*i.e.*, if the patient were told to imagine he was looking at the clouds the pupil would dilate, and would contract when the patient tried to look at his hand. This was what he called ideal accommodation; inability of the pupil to contract to light under these circumstances was not of so much importance. He had seen a case in which there was optic atrophy and the Argyll-Robertson pupil, and no other symptom of tabes. In another case, with these two symptoms there were pains, but no other symptom of tabes. In another case, where the optic atrophy had existed for eight years, there were also present the Argyll-Robertson pupil and pains; there were no knee-jerks, but the gait was good. In another case, similar in all other respects, the patient had reached the stage beyond ataxy. Then he had seen cases of optic neuritis of cerebral origin, and he mentioned the case of a little girl (whom he had seen with Mr. Bowman) with cerebral symptoms, optic atrophy, absence of knee-jerk, and pains. Later, hemiplegia occurred, followed by death; but there was no autopsy. He had seen five such cases. In only one was an autopsy performed, and there was found a tumour of one hemisphere; the spinal cord was healthy. Diphtheritic paralysis *superficially* imitated ataxy. At a recent meeting of the Society the author of a paper on diphtheritic paralysis had attributed to him a statement that the symptoms in this disorder were due to disease of the sympathetic system. He could not deny that he might have made such a statement, but it did not correctly represent his views. He believed that in diphtheritic paralysis the symptoms were due to an affection of parts supplied by the cranial nerves, but only through the sympathetic system. Sometimes the symptoms were exceedingly persistent in this

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disorder. Thus in one case the absence of knee-jerk persisted for a year. Coming next to conditions of the pupil, Dr. Jackson remarked that these were exceedingly various. Sometimes the pupils were dilated, and did not act to light or on accommodation. This condition might come on suddenly in one eye only, and persist. He had seen this in a case where there had been pains for five years; the knee-jerk was absent. In another case he had seen the pupil dilated and fixed to light and accommodation on one side, and an Argyll-Robertson pupil on the other, with no other symptom of tabes. He believed that in this case both pupils had been alike originally, and that the dilatation in one had supervened suddenly. Another patient had an Argyll-Robertson pupil in one eye only; there were in addition pains, absence of knee-jerk, and marked ataxy. In a previous communication he had brought under the notice of the Society the case of a lady in whom in one eye there was loss of action to light and accommodation, but with perfect accommodation on her part; there was loss of knee-jerk, and absolutely no other symptom. In another case there was loss of action to light or accommodation, but the patient's accommodation was natural; this man had lightning pains, loss of knee-jerk, and ataxy. In another case the pupils did not act to light or accommodation, and the patient's accommodation was slightly weak; he had gastric crises, lightning pains, and absence of knee-jerk. In a man who had ophthalmoplegia externa, the ciliary muscle was perfect, and the knee-jerk present on one side only. The problem offered by the symptoms of locomotor ataxy was of exceeding complexity; he could almost say that it might begin in any way and take any course.

The SECRETARY read a paper by Mr. W. BEVAN LEWIS. By the systematic examination of a large number of insane patients, the author has been led to the following conclusions. (1) That a loss of reflex dilatation of the pupil to sensory stimulation occurred in the greater number of cases of general paralysis of the insane. (2) That, next to this condition, the most frequent accompaniment of the disease was loss of pupillary reaction to light (reflex iridoplegia). (3) That, in 23 per cent. of the cases, the movements on accommodation were completely lost; and (4) that, in a few cases, cycloplegia was associated with this. (5) That ophthalmoplegia interna was found only in advanced stages of the disease; in one case it appeared to commence as reflex iridoplegia. (6) That, with the exception of one case, reflex iridoplegia was always present when the movements on accommodation were impaired or lost. (7) That spinal symptoms (such as absence of patellar reflex) were by no means especially associated with the more grave ocular troubles. Finally, Mr. Bevan Lewis concluded, judging from the nature and progress of the disease, its duration, the history of cases in the earlier stages, and the condition of the paralytic in the more advanced stage, that the sequence of morbid phenomena occurring in the iris in this disease was this: that there was, first of all, loss of reflex dilatation to cutaneous stimulation; that, next, the action to light was lost (reflex iridoplegia); and that, in the final stage, ophthalmoplegia interna was developed, and became in the end complete.

DR. SAVAGE said that he could only speak on this subject in a very general way. He had commenced the study of the optic disc in general paralysis of the insane some years ago at Hanwell with Mr. Henry Power, where they had examined the eyes and taken sphygmographic tracings of dozens of patients; he regretted that he had no notes of these investigations, but the general result was that they found no definite changes in the discs themselves. Since then, however, his experience at Bethlem had taught him that a certain number of cases of general paralysis did present optic disc changes. Were they the patients with tabetic symptoms? Patients came under his care who were said to have suffered from locomotor ataxy first, and general paralysis afterwards; thus, one patient had had ataxy for ten years before the mental symptoms commenced, another patient became blind, deaf, and ultimately had labio-glosso-laryngeal paralysis. Quite recently, however, he had found optic disc changes in another form—that where there were special symptoms of lateral sclerosis,—and the question arose whether these were due to degenerative processes descending from the motor areas of the brain. The class of cases he was referring to were those of young, healthy, single, steady men with lateral sclerosis, exaggerated patellar reflex, and with optic disc changes. He believed that cases of general paralysis of the insane would ultimately have to be subdivided under several heads, possibly according to whether there were optic nerve changes or not, but more probably according to the state of the reflexes.

Meeting then adjourned till next evening.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—Monthly examinations for the Licences of the College were held on Monday, Tuesday, Wednesday, and Thursday, June 4, 5, 6, and 7, when the following candidates were successful:—

For the Licence to practise Medicine—

Bosanquet, Adela, London.
Donavan, Daniel Wycherley, Dublin.
Fitzgibbon, James Edward, Castlerea, co. Roscommon.
Graham, George Robert Moore, Melbourne, Australia.
Hawes, Francis Brunel, Kingstown, co. Dublin.
Lougheed, Elizabeth, London.
Lyons, John Joseph, Dublin.
McMath, Arthur William, Dublin.
Murray, Patrick Harward, Strokestown, co. Roscommon.
O'Hagan, John Joseph, Mullingar, co. Westmeath.
Ramsbottom, Alfred Ernest William, Aliwal North, Cape Colony.
Ridley, George Peirce, Dublin.

For the Licence to practise Midwifery—

Bosanquet, Adela.
Donavan, Daniel Wycherley.
Fitzgibbon, James Edward.
Graham, George Robert Moore.
Hawes, Francis Brunel.
Kelly, Christopher Peter, Navan, co. Meath.
Lougheed, Elizabeth.
McMath, Arthur William.
Murray, Patrick Harward.
O'Hagan, John Joseph.
Ramsbottom, Alfred Ernest William.
Ridley, George Peirce.
Trimble, John Maxwell, M.D., M.Ch. Roy. Univ. Ire., West Bromwich.

The following candidate obtained the Licence as a Midwife and Nursetender:—

Hubbert, Marianne, St. Martin's-lane, London.

The following Licentiates in Medicine of the College, having complied with the by-laws relating to Membership, pursuant to the provisions of the Supplemental Charter of December 12, 1878, were duly enrolled as Members of the College:—

Clark, Ann Elizabeth, M.D. Berne, L.M. 1878, Birmingham.
Lynch, Gilbert, M.D. Univ. Dub., L.M. 1876, Lond.
St. George, George Lombe, L.R.C.S. Edin., L.M. 1871, Lisburn, co. Antrim.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 7:—

Holloway, Robert, Higham Ferrers.
Huxtable, Arthur Edwin, Queen's-road, Kingston Hill.
Jago, Charles Sprague, Devonshire-terrace, Forest Hill.
London, John Edward, Berbice, British Guiana.
Mathew, Charles Pynsent, Millman-street, W.C.
Tenison, Edward Heron, St. Paul's-crescent, N.W.
Ward, Charles Walton, Buckhurst Hill, Essex.

BIRTHS.

BRANFOOT.—On June 4, at Madras, the wife of A. M. Branfoot, M.B. Surgeon Indian Medical Department, of a daughter.

BROCK.—On June 10, at 129, Clapham-road, the wife of J. Brock, M.R.C.S., L.R.C.P., of a daughter.

BUSHELL.—On April 13, at H.B.M.'s Legation, Pekin, the wife of Dr. S. W. Bushell, of a son.

CARTER.—On June 12, at Aldershot, the wife of Brigade-Surgeon R. W. Carter, A.M.D., of a son.

CASSIDY.—On June 11, at 82, Guilford-street, Russell-square, the wife of Joseph Lamont Cassidy, M.D., of a daughter.

CLARK.—On June 7, at 19, Cavendish-place, W., the wife of Andrew Clark, F.R.C.S., of a daughter.

COHEN.—On June 4, at Chaunt House, Burwash, Sussex, the wife of Algernon A. Cohen, M.B., of a son.

GRAY.—On May 3, at Seleng, Assam, the wife of E. Gray, M.B., C.M., of Cumamara, prematurely, of a daughter.

KING.—On June 7, at Ambleside, Westmoreland, the wife of William Moore King, M.R.C.S., of a daughter.

MOORE.—On June 4, at Penlea, Shirehampton, Gloucestershire, the wife of Dr. George Moore, Deputy Inspector-General of Hospitals and Fleets (retired), of a son.

PEARCE.—On June 8, at Lennox Villa, Hurstpierpoint, the wife of H. Pearce, M.R.C.S., of a daughter.

TRAVERS.—On June 3, at San Nicholas, St. Leonards-on-Sea, the wife of Otho B. Travers, M.B.C.S., of a daughter.

MARRIAGES.

BARRY—WORWELL.—On May 31, at Paris, M. Barry, M.D., of Brighton, to Mary Elizabeth, eldest daughter of William Pearse Worwell, Esq., of Penzance.

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BROWN—JEFFREY.—On June 5, at Edgbaston, Surgeon-General Sir Campbell Brown, K.C.B., late Bengal Army, to Frances Caroline, widow of the late Russell Jeffrey, and younger daughter of Charles Baker, of Adelaide, South Australia.

BURN—WARNER.—On June 6, at Botley, Hampshire, Stacey Southerden Burn, M.A., M.B. Oxon., M.R.C.S., of Tudor Lodge, Richmond, Surrey, to Agnes Ellen, younger daughter of Thomas Warner, Esq., of Holmesland, Botley.

DONALD—M'LAREN.—On June 5, at Govan, James Donald, M.B., C.M. Glasg., to Annie Summers, younger daughter of J. F. M'Laren, Esq., late of Manchester.

DUDLEY—WHITTINGTON.—On June 7, at St. Peter-upon-Cornhill, John Dudley, M.B., Surgeon R.N., to Edith Bella, eldest daughter of the Rev. Prebendary Whittington, M.A., Rector of St. Peter-upon-Cornhill.

GRANGE—BURNESS.—On June 7, at Kensington, William D'Oyly Grange, M.D., of Moffat, N.B., to Lucy, youngest daughter of the late James Burness, Esq., of 5, Addison-road, Kensington.

GRIFFITH—HARE.—On June 7, at Great Yarmouth, Charles Edward Osborne Griffith, of Yateshead, Yorkshire, to Mary Emma, only daughter of the late Henry Hare, M.D., of Great Baddow, Essex.

HOLDSWORTH—KELLY.—On June 6, at Hamilton-terrace, William Holdsworth, L.R.C.P., L.R.C.S., L.S.A., of Thames Ditton, to Julia Mary Burgess, eldest daughter of George Kelly, Esq., of Sutherland-gardens, Maida Vale, W.

KELLARD—ANNISS.—On June 2, at Plymouth, James T. Kellard, Surgeon R.N., H.M.S. *Ganges*, to Beatrice Catherine, daughter of the late William James Anniss, Surgeon, Devonport.

LONG—CLARK.—On June 9, at Folkestone, the Rev. George Edward Long, eldest son of George Long, banker, of Portsmouth, to Martha Maria, third daughter of Samuel Clark, M.D., of Folkestone.

PRIESTLAW—CAMPBELL.—On June 6, at Edinburgh, James Darling Priestlaw, to Maggie Fulton, second daughter of Dr. J. Campbell, R.N.

YOUNG—PURVIS.—On June 12, at Lee, Kent, Arthur William Young, of 83, Granville-park, Lewisham, to Edith Prior, fifth daughter of Prior Purvis, M.D. Lond., of Lansdowne Place, Blackheath.

DEATHS.

JULER, HENRY CUNDELL, son of Henry E. Juler, F.R.C.S., at 77, Wimpole-street, on June 11.

OWEN, ROBERT BRISCO, M.D., F.R.S., J.P. and D.L. for the county of Anglesey, etc., at Bulkeley Place, Beaumaris, on June 6.

SANDES, WALTER HUSSEY FITTON, M.R.C.S., at Bombay Settlement, Auckland, on April 29, aged 32.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

DEVON COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary £120 per annum, with board and residence. Candidates must be unmarried. Further particulars may be obtained from Dr. Saunders, the Medical Superintendent, or from Mr. T. E. Drake, solicitor, Exeter, the Clerk to the Committee, to whom applications, stating age, with testimonials, are to be sent before June 18.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. (*For particulars see Advertisement.*)

QUEEN'S HOSPITAL, BIRMINGHAM.—Resident Physician. Salary £50 per annum, with board, lodging, etc. Candidates must hold a registered medical qualification. Applications, testimonials, and certificates of registration, to be sent, under cover to the Secretary, from whom all further information may be obtained, on or before June 20.

ROYAL HANTS COUNTY HOSPITAL, WINCHESTER.—House-Surgeon. Salary £100 per annum, with board and lodging. Candidates must possess a diploma from the Royal College of Surgeons in England, or the surgical diploma of a Royal College or a University in England, Scotland, or Ireland, and also a degree in medicine from one of the said universities, or a licence from the Society of Apothecaries; they will not be eligible without unexceptionable testimonials as to moral character. Applications, with testimonials, to be sent to the Secretary, at the Hospital, on or before July 4.

ST. MARY'S HOSPITAL MEDICAL SCHOOL, PADDINGTON, W.—Demonstrator of Physiology and Histology. (*For particulars see Advertisement.*)

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon (non-resident). Salary £200 per annum. Candidates must be doubly qualified. Applications, in writing, stating age, with recent testimonials (or copies), to be sent to the Secretary, not later than July 14.

WESTERN DISPENSARY, ROCHESTER-ROW, WESTMINSTER, S.W.—Consulting Accoucheur. Candidates must be either Doctors of Medicine of a British University, or Members of the Royal College of Physicians. Applications, addressed to the Secretary, from whom all information can be obtained, will be received up to June 30.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Alderbury Union.—Dr. Hannan has resigned the Second District: area 12,892; population 3622; salary £100 per annum.

Lichfield Union.—The office of Medical Officer for the St. Chad District is vacant: area 12,760; population 8095; salary £50 per annum.

Mutford and Lothingland Incorporation.—The office of Medical Officer for the Gorleston District is vacant by the death of Dr. Arnott: area 10,452; population 8563; salary £50 per annum.

Newark Union.—The offices of Medical Officer for the Workhouse at Claypole and for the Infirmary at Newark are vacant by the death of Mr. Henry R. Smith: salary for Workhouse £40 per annum, for Infirmary £20 per annum.

North Surrey District School.—The office of Medical Officer is vacant: salary £200 per annum.

Stourbridge Union.—Mr. George Chapman has resigned the Fourth District: salary £50 per annum.

APPOINTMENTS.

Basford Union.—Francis Dixon, L.R.C.P. and L.R.C.S. Edin., L.S.A., to the Kirkby District.

Cardiff Union.—Alfred Rees, L.R.C.P. Lond., M.R.C.S. Eng., to the Cardiff South District.

Chertsey Union.—Richard Reece, M.R.C.S. Eng., L.S.A., to the Walton District.

Haltwhistle Union.—Wm. R. Speirs, M.B., C.M. Glasg., to the Western District.

Shardlow Union.—John W. G. Sellon, M.R.C.S. Eng., L.R.C.P. Lond., L.S.A., to the Castle Donington District.

SANITARY ASSURANCE ASSOCIATION.—At a meeting of the Council of this Association on Monday last, Sir Joseph Fayrer, F.R.S., in the chair, the following resolution recently passed by a meeting of the Association was considered, viz.:—"That the Council of the Association be requested to consider whether they cannot recommend legislation compelling the builders of all new dwellings to obtain a certificate from some authority or qualified person as to their sanitary condition before it shall be lawful for such buildings to be inhabited." On the motion of Professor Hayter Lewis, F.S.A., seconded by Professor Corfield, M.D., a sub-committee was appointed to consider how best the object of the resolution may be attained, and, if desirable, to draft a Bill and report to the Council.

RIDING AS A PREVENTATIVE of HÆMORRHOIDS.—In the *New York Med. Record*, Dr. Bodenhamer writes favourably of horseback exercise as a potent preventative and curative agent for hæmorrhoids, especially internal. He also refers to a gymnastic exercise practised in Bethune Hospital with success. "It consists simply in trying to touch the toes with the fingers without bending the knees. This movement, though difficult at first, soon becomes easy. It not only strengthens and developes the muscles of the abdomen, but also those of the legs and thighs."—*Phil. Med. Times*, April 7.

APPOINTMENTS FOR THE WEEK.

June 16. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

18. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. Jonathan Hutchinson, "On certain Diseases of the Tongue."

19. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

20. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. Jonathan Hutchinson, "On certain Diseases of the Tongue."

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON, 4 p.m. Dr. J. Kingston Fowler, "On some Points in the Diagnosis, Prognosis, and Treatment of Thoracic Aneurism; with Cases."

21. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

PARKES MUSEUM OF HYGIENE, 8 p.m. Mr. Robert Rawlinson, C.B., "On the Hygiene of Armies in the Field."

22. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. Jonathan Hutchinson, "On certain Diseases of the Tongue."

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VITAL STATISTICS OF LONDON.

Week ending Saturday, June 9, 1883.

BIRTHS.

Births of Boys, 1352; Girls, 1256; Total, 2608.
Corrected weekly average in the 10 years 1873-82, 2522·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	725	675	1400
Weekly average of the ten years 1873-82, corrected to increased population ...	758·6	693·7	1452·3
Deaths of people aged 80 and upwards ...	...	...	38

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	6	2	2	4	...	1	...	6
North ...	905947	2	15	10	5	6	...	3	...	3
Central ...	282238	...	8	1	4	2	...	...	1	3
East	692738	...	20	10	3	6	...	1	...	6
South	1265927	1	27	8	8	5	...	5	1	9
Total	3816483	3	76	31	22	23	...	10	2	27

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·716 in.
Mean temperature	56·0°
Highest point of thermometer	75·0°
Lowest point of thermometer	44·8°
Mean dew-point temperature	48·7°
General direction of wind	N.E. & E.
Whole amount of rain in the week	0·01 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 9, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending June 9.	Deaths Registered during the week ending June 9.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2608	1400	18·5	75·0	44·8	58·0	14·44	0·01	0·03
Brighton	111262	73	38	17·8	79·0	49·0	58·3	14·61	0·02	0·05
Portsmouth ...	131478	85	39	15·5	...	...	...	...	...	...
Norwich	89612	54	33	19·2	...	...	...	...	...	...
Plymouth	74977	46	28	19·5	74·5	49·5	58·0	14·44	0·13	0·33
Bristol	212779	112	60	14·7	73·0	42·0	55·5	13·06	0·14	0·36
Wolverhampton ...	77557	52	31	20·9	71·6	40·1	53·4	11·89	0·16	0·41
Birmingham ...	414846	270	146	18·4	...	...	...	...	...	...
Leicester	129483	119	46	18·5	...	...	...	...	...	...
Nottingham ...	199349	190	67	17·5	77·2	43·5	55·6	13·12	0·54	1·37
Derby	85574	59	38	23·2	...	...	...	...	...	...
Birkenhead ...	88700	66	31	18·2	...	...	...	...	...	...
Liverpool	566753	375	277	25·5	70·2	40·6	54·1	12·28	0·00	0·00
Bolton	107862	66	43	20·8	68·5	38·8	53·1	11·73	0·01	0·03
Manchester ...	339252	252	143	22·0	...	...	...	...	...	...
Salford	190465	120	67	18·4	...	...	...	...	...	...
Oldham	119071	73	39	17·1	...	...	...	...	...	...
Blackburn	108460	77	59	28·4	...	...	...	...	...	...
Preston	98564	82	42	22·2	...	...	...	...	...	...
Huddersfield ...	84701	78	29	17·9	...	...	...	...	...	...
Halifax	75591	46	30	20·7	...	...	...	...	...	...
Bradford	204807	121	70	17·8	70·6	44·0	54·5	12·50	0·19	0·48
Leeds	321611	212	108	17·5	72·0	46·0	55·8	13·23	0·00	0·00
Sheffield	295497	219	146	25·8	72·0	43·0	53·4	11·89	0·04	0·10
Hull	176296	136	62	18·3	...	...	...	...	...	...
Sunderland	121117	109	53	22·8	67·0	44·0	50·3	10·17	0·18	0·46
Newcastle	149464	95	69	24·1	...	...	...	...	...	...
Cardiff	90033	91	29	16·8	...	...	...	...	...	...
For 28 towns ...	8620975	5886	3223	19·5	79·0	38·8	55·0	12·78	0·12	0·30
Edinburgh	235946	122	81	17·9	66·3	38·5	51·8	11·01	0·00	0·00
Glasgow	515589	439	335	33·9	67·5	37·0	52·9	11·61	0·00	0·00
Dublin	349385	206	190	28·3	67·4	38·0	54·0	12·22	0·49	1·24

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·72 in. The highest reading was 29·99 in. at the beginning of the week, and the lowest 29·59 in. on Thursday afternoon.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The Middlesex Hospital.—During the last ten years the capital account has been reduced by sales of stock, by £30,000, of which sum £10,000 has been expended on new buildings, leaving a deficiency of £20,000. Something like £300 a year was spent in advertising, but a part of that was returned in the shape of legacies. It has been decided that the financial state of the Hospital should be laid before the next quarterly meeting by a statement to be prepared by the Treasurer, and then a public meeting might be called, or other means be taken, to raise additional funds to cover the deficiency.

Scarlet Fever, Dover.—The Mayor of Dover writes:—"As to the prevalence of scarlet fever in the garrison here, there is no cause for any alarm, nor does any exist, for the epidemic has not spread. There are about ten cases only, all the patients, with the exception of one man, being children. Prompt measures have been taken by Major-General Newdigate to prevent contagion."

Watered Milk.—At the instance of the Vestry of the Parish of Bethnal Green, four summonses were heard on the 5th inst. at the Worship-street Police-court against milk-sellers for selling milk adulterated with water, and fines were imposed varying from 20s. to 40s. each.

Hanging.—Judging from the published accounts of the many recent executions for murder, Marwood appears to have reduced his calling to a *science*, as in all the cases, with one exception, in the evidence of the medical officer at the inquest on the body of the executed criminal, it is stated that death was instantaneous, the neck always being dislocated. This was seldom or never the case in the "good old days when George the Third was King," judging from the reports of Sir William Blizard, twice President of the Royal College of Surgeons, and Mr. William Clift, the Conservator of the Hunterian Museum, both of whom, with other officials of the College and some visitors, were always present when the body was "*anatomised*," in the quaint expression of the period. Looking over his curious and interesting collection of autographs, our oldest correspondent, who has been connected with the *Medical Times* since the first number was "floated," sends us the following account of the post-mortem examination of that unfortunate gentleman, John Bellingham, who was executed for the murder of the Hon. Spencer Percival, although at the time it was generally considered he was insane—an opinion shared since by writers on psychology. The paper, which is in the handwriting of Sir William, with corrections by Mr. Clift, states that "John Bellingham was executed on Monday Morning, May 18, 1812, precisely at Eight in the morning at the Old Bailey. The body was received by the College of Surgeons (at 32, Duke Street, West Smithfield) at a quarter-past Nine; it expressed a person of about 42 years of age, of dark hair, and in stature about five feet eleven inches. The cavities, so termed, of the Thorax, Abdomen, Pericardium, and right Tunica Vaginalis were immediately opened, one of the objects of Enquiry previously determined upon, being, to ascertain the existence, or not, of a Fluid in the Parts. There was not any Fluid in the cavity of the Thorax or of the Abdomen; but the Pericardium contained about a Tea-Spoonful of a reddish Fluid, and the right Tunica Vaginalis, nearly the like quantity of Fluid of a yellowish Colour. The Gall Bladder was large and distended with Bile. The Stomach was strongly corrugated, and contained a small quantity of Fluid, which seemed to be Wine. (Before ascending the scaffold the condemned were offered a glass of wine, which was generally accepted.) The urinary Bladder was Empty and contracted. Not any of the Viscera of the Thorax or of the Abdomen presented the least Appearance of a morbid change. The left Testis appeared to be reduced in size and loose in Texture. The Veins of its Spermatick cord were varicous. The Penis seemed to be in a State of Semi Erection. *There was no Dislocation of any Cervical Vertebra; nor did the Trachea show any sign of Compression or Hurt.* The Stomach and the left Testis were sent to the College Museum. *The right Auricle of the Heart moved at irregular Intervals, without the Application of any Stimulus, during the Period of nearly four Hours from the Time of Execution*, and for about an Hour longer upon being Touched with a Scalpel. This Motion was not strictly a contractile Action, diminishing in any sensible Degree the Cavity of the Auricle, it was undulary and weak, sometimes beginning at the right extremity of the Auricle and moving to the left; at other times commencing and proceeding in the contrary Direction. Not the least Motion was observable in the left Auricle, or in either of the Ventricles. On the next Day the Brain was examined. It was firm and sound throughout. The Vessels of the Pia Mater were distended with Air. Not a Drop of Fluid was found in the Ventricles. There was a small Hydatid on the left side of the Choroid Plexus." The original style of writing with many capital letters is preserved; the italics are ours, and refer also to the cases by Mr. Clift, in none of which was there any dislocation of the neck. In the case of John Bruce, executed at Execution Dock at eight o'clock, and received so late as half-past-twelve, there were the same weak waving motions for a period of *five hours after execution*

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Vaccination Fees.—The Guardians of St. George's, Hanover-square, have decided, subject to the approval of the Local Government Board, that the vaccination officer be paid a fee of one shilling for each certificate of successful vaccination registered. Whitechapel, Kensington, and Paddington paid this sum, the City of London Union one shilling and sixpence, while Marylebone gave a lump sum of £180 per annum.

The Hygienic Exhibition, Berlin.—The Imperial Sanitary Department takes a prominent position, and its collected information forms an important basis for further efforts in the cause of sanitation. The Hygienic Institute of Munich is known to be the realisation of a wish of its present director, Pettenkofer, that his particular study should be placed in a technical position worthy of the great element it forms in modern civilisation. Bavaria had been even already in advance of other countries in this matter, having at each of her universities a professor of hygienic science.

Great Hospital at Rome.—It is proposed to erect in Rome a large hospital or polyclinic, which is to consist of ten separate buildings, and is estimated to cost eight million lire, or £320,000 sterling. The Italian Ministry of Public Education has issued a notice that a public competition has been opened for the best designs. The jury will consist of a number of medical men and architects, selected by the Ministry of Education.

Negro Physicians.—The *New York Herald*, in deprecating the growing taste of the negroes for politics, says that they have "succeeded much better in every other profession and occupation than in politics." Speaking of the solid progress of the once servile race, it adds, "There are very successful negro physicians in almost every city from New Haven to Galveston."

Small-pox, Cheshire.—Dr. Fox, Medical Officer of Health to the Nantwich Rural Sanitary Authority, reports the occurrence of a case of virulent small-pox at Church Coppenhall, near Crewe, and he adds that other cases near Crewe are traceable to it. This is the first case reported to the Authority for six years. Instructions have been given for strict isolation, and that the defective sanitary arrangements of the district are to be attended to.

An Example made of a Careless Driver.—It has long been demonstrated by the constantly recurring verdicts of coroners' juries of "accidental death" in fatal cases of careless driving in the metropolis that the result of these inquisitions is little likely to check the dangers to be encountered from such recklessness. Sir Robert Carden (who has himself several times been a sufferer from these perils) has made an example of a "town traveller," who was charged at the Mansion House with being drunk while driving a light cart in Gracechurch-street, and running over a woman, who subsequently died from the injuries she received. The coroner's jury, as is usual in such cases, had previously returned a verdict of "accidental death." The Alderman, though believing the defendant was drunk, was not disposed to inflict a mere amercement; he sentenced him to twenty-one days' hard labour. A few such sentences in similar cases would probably prove a wholesome warning to careless drivers in the thronged streets of London.

American Lard.—In the course of a dispute between the Chicago dealers in lard, it has been incidentally disclosed that most American lard is adulterated from 10 to 100 per cent. with oleomargarine, stearine, cotton-seed oil, tallow, and terra alba. A revelation this for the British consumer!

Mortality, Brighton.—Dr. Taaffe, the Medical Officer of Health for Brighton, in his last quarterly report, shows that the death-rate in that town had been equal to an annual rate of 19·8 per 1000 of the estimated population. Seventeen deaths were attributed to zymotic diseases, the rate of which was 0·6 per 1000.

Peter D. N.—The Fulham District Board of Works has fitted up a building as a temporary mortuary, but it contains no accommodation for post-mortem examinations. It seems this Board and the Board of Guardians are at issue on the matter.

Vaccination in the St. Pancras Workhouse.—The Visiting Committee submitted a report to the last meeting of the Guardians in respect to the recent cases of vaccination in the workhouse, and they came to the conclusion that it would be better to leave these matters to the discretion of the medical officer of the workhouse. A guardian remarked that he agreed with vaccination, but the system pursued in the workhouse of St. Pancras would have the effect of bringing the whole subject into disrepute. He could not agree with vaccinating women the day after their confinement. Another guardian characterised such a system as cruel, monstrous, and indecent in the extreme. It was ultimately agreed to write to the coroner for a copy of the depositions in these cases.

Birmingham Medical Benevolent Society.—The annual report, lately issued, shows that the invested funds amounted to £10,136, and that during the past year eighteen annuitants had received grants, the yearly value of which had averaged from £20 to £30. The total sum expended in these grants was £405—the same as in the preceding year. The roll of benefit members now contained 249 names, as compared with 246 at the end of the previous year. The number of honorary members remains the same as last year, namely, fifteen.

A Temperance Beverage.—The *Liverpool Journal of Commerce* announces the arrival of the ship *Hilda* with no less than 20,000 gallons of lime juice and essence. This is the second consignment this year by this vessel, which brought previously 50,000 gallons, and illustrates the enormous demand for this juice as a temperance beverage.

Samaritan.—Mrs. Rossiter's Home, Horsfrith Park, Ingatestone, is a private dwelling, and open to none but really poor children—girls under thirteen. It is not a convalescent home, but a holiday place for poor town girls. The poorest and most delicate are preferred in the hope of preventing illness. No payment is accepted for children (those who can pay do not want Mrs. Rossiter's help). Donations sent to secure the admission of well-to-do children cannot be accepted. No appeal is made for help, though Mrs. Rossiter is willing to increase the number of children received as far as she can with the aid of spontaneous donations. All applications should be made by the parents of the children, and be sent to Mr. William Rossiter, 148, Upper Kennington-lane. The parents pay only the travelling expenses, 2s. for each child.

Gratifying Acknowledgments.—The annual report of the Board of Guardians for the Relief of the Jewish Poor in Manchester, while expressing regret at the resignation of the medical officer, Dr. Mascall, testifies to the skill and kindness with which that gentleman had ministered to the poor during a period of ten years. Dr. S. Moritz has been appointed his successor. Acknowledgment is also made to Dr. Leigh and the sanitary officers of the Corporation for their prompt attention to all representations made to them concerning the dwellings of the Jewish poor.

Official Commendation.—The following report is an extract from the Visiting Committee's Book of the Mile-end Old Town Board of Guardians:—"I have to-day visited the workhouse infirmary; the Guardians certainly deserve great praise for the excellent provision made for the sick and infirm, and it has given me great pleasure in witnessing how greatly the condition of these classes has been improved by removal from the workhouse wards. I do not think the present staff sufficient, and I am sure that ward helpers will have to be appointed.—(Signed) LUTLEY JORDAN, Deputy Local Government Board Inspector."

A Veteran Poor-Law Chairman.—As chairman of a board of guardians under the Poor-law, the experience of the Duke of Devonshire is singular, he having been elected for the forty-seventh time chairman of the Ulverston Board of Guardians. The Union is one selected for the experiment of triennial elections, and having given in his adhesion to it, his Grace was again elected chairman, thus constituting him the oldest chairman of guardians in the United Kingdom. He is not an official in name only, but regularly attends board meetings when resident at Holker Hall, his favourite country seat. It is noticed that when his Grace presides there is more business transacted, and less discussion on trivial subjects. His keen insight into financial subjects is proverbial.

The Metropolitan Water Companies.—From the annual report we find that their aggregate capital expenditure has increased by 11·6 per cent. in the last five years, having stood at £11,614,179 in 1877, and at £12,965,589 in 1882. During the same period the water rental has increased by 24 per cent., or from £1,248,116 to £1,547,614.

COMMUNICATIONS have been received from—
Messrs. KROHNE AND SESEMANN, London; THE SECRETARY OF THE SOCIAL SCIENCE CONGRESS, Huddersfield; THE TREASURER OF ST. THOMAS'S HOSPITAL, London; MR. A. BRUCE JOY, London: DR. ALEXANDER, Halifax; THE REGISTRAR OF THE APOTHECARIES' HALL, London; THE SECRETARY OF THE LOCAL GOVERNMENT BOARD, London; DR. JAMES SAWYER, London; MR. J. CHATTO, London; THE REGISTRAR-GENERAL FOR SCOTLAND, Edinburgh; DR. CHARLES WEST, London; DR. B. G. MORISON, London; THE SECRETARY OF THE WEST LONDON MEDICO-CHIRURGICAL SOCIETY, London; MR. JOSEPH HADLEY, London; DR. W. ALEXANDER, Liverpool; THE SECRETARY OF THE PARKES MUSEUM, London; DR. J. W. MOORE, Dublin; DR. WILLOUGHBY, London; THE DEANS OF UNIVERSITY COLLEGE, London; THE SECRETARY OF THE LONDON SOCIETY FOR THE ABOLITION OF COMPULSORY VACCINATION, London; MR. L. M. GRIFFITHS, Clifton, Bristol.

BOOKS, ETC., RECEIVED—
Lehrbuch der Speciellen Pathologischen Anatomie, von Dr. Johannes Orth—Sea-Bathing and the Mineral Waters of Scarborough, by Dr. Alexander—Lettsomian Lectures, by Dr. Sansom—On the Treatment of Wounds and Fractures, by Sampson Gamgee, F.R.S.E.—Hospitals, Infirmaries, and Dispensaries, by F. Oppert, M.D., M.R.C.P.I.—Annual Statement of the Bath General or Mineral Water Hospital for 1883—Annual Report of the Hospital for Epilepsy and Paralysis for 1882—Traité des Signes de la Mort, par E. Bouchut—The Latin Grammar of Pharmacy, by Joseph Ince, F.C.S., F.L.S.—Homœopathy and Gynæcology, by Thomas Skinner, M.D.—Recollections of the Kabul Campaign, 1879-80, by Joshua Duke.

PERIODICALS AND NEWSPAPERS RECEIVED—
Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Students' Journal and Hospital Gazette—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—Le Progrès Médical—Journal of Cutaneous and Venereal Diseases—Physician and Surgeon—Popular Science News, etc., Boston—Vaccination Inquirer—Insurance Gazette of Ireland—Canada Lancet—An Ephemeris of Materia Medica, etc.—Journal de Saxon.

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ORIGINAL LECTURES.

THE LUMLEIAN LECTURES ON URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

By ALFRED B. GARROD, M.D., F.R.C.P., F.R.S., etc.,
Consulting Physician to King's College Hospital.

Lecture III., Part I.

At the conclusion of my last lecture I spoke of the effects of saccharine food and of different alcoholic beverages on the uric acid excreting function.

To-day, before proceeding to the more purely therapeutic part of our subject, I must devote a few minutes to the discussion of other classes of food in reference to the same function; and, first, with respect to the influence of a nitrogenised, and especially of an animal diet. Observations are not wanting to show the effects of a pure meat diet on the urine. Those of Lehmann are, perhaps, the most satisfactory; they are so valuable that I must now call your attention to the results:

He first determined the daily excretion of the principal constituents of his urine when on an ordinary mixed diet; he then placed himself on a purely animal diet (chiefly eggs) for twelve days; afterwards, for another twelve days on a purely vegetable diet; and subsequently, for two days on a purely non-nitrogenised diet, which consisted of fat, milk, sugar, and starch. You will see the results in the table, in which I have left the original numbers obtained by Lehmann, in grammes, as the smaller numbers are easier of comparison with each other than would be the case if the results were reduced to grains.

Table exhibiting the Mean Results of Lehmann's Observations on the Effect of Different Diets on the Excretion of the Urinary Constituents. Expressed in Grammes.

	Total solids.	Urea.	Uric acid.	Salts and extractives
On a mixed diet...	67·82	32·498	1·183	12·746
On an animal diet	87·44	53·198	1·478	7·312
On a vegetable diet	59·24	22·481	1·021	19·168
On a non-nitrogenised diet	41·68	15·408	0·735	17·130

The conclusions which particularly interest us at present are that the total solids, as well as the urea, are much increased by animal food, while they are considerably decreased by a vegetable diet, and still more so by one which is non-nitrogenised; whereas the uric acid is not nearly so much affected by the nature of the food, provided that it contains nitrogen. Thus, it is seen that the urea, on an animal diet, was to the uric acid 53·198 : 1·478; on a vegetable diet, 22,481 : 1·021; and on a mixed diet, 32,498 : 1·183. Estimating the amount of uric acid, on a mixed diet, as 1, animal food brought it up to 1·27; a vegetable diet lowered it to 0·863; and a non-nitrogenised diet to 0·63.

Lehmann found that after the use of purely animal food the urine of man closely resembles that of the carnivorous mammals, becoming of a light amber colour; having a strong acid reaction, and containing neither lactic nor hippuric acid.

On the other hand, after a course of vegetable food, the urine becomes of a brownish-red tint, is much less acid, often deposits the earthy phosphates, and always contains alkaline lactates with oxalate of calcium—in fact, the urine closely approaches to that of the herbivorous mammals. It might be added, though Lehmann does not allude to the fact, that, under these circumstances, there is also found hippuric acid in considerable quantities.

As a result of all the experiments made by different observers—both on man and the lower animals—I think we may fairly come to the conclusion that meat, taken in such quantities only as are sufficient to keep up the nutrition of the body, has no tendency to increase the excretion of uric acid; that, when the diet is purely animal, but the quantity small (as is the case with the carnivorous animals when in confinement), the uric acid, far from being large, becomes exceedingly small in amount, more especially when it is compared with the urea. On the other hand, that the taking of a great quantity of meat—an excess compared with the requirements of the system—tends to increase the uric acid, though, even then, not more than in proportion to the urea. Funke states that uric acid is less affected by food than any other ingredient of the urine; it is, however, influenced by the time of taking it: that is, uric acid is thrown out in larger quantities after a meal than during the hours that an individual is fasting.

These different facts can be advantageously applied in practice in the treatment of gravel and calculus. In such cases there is certainly no reason why a proper quantity of animal food should not be taken; and the knowledge of this is important, seeing that many patients have been lowered in health by being kept on insufficient diet, with the idea that, by these means, a lessening of the excretion of uric acid would result.

Fatty and Oleaginous Food.—With regard to the influence of such food on the urinary excretion, the experiments of Dr. Böcker seem to be most trustworthy; and from them it would appear that no influence whatever is exerted on the excretion of water, urea, uric acid, or any other constituent of the urine, by taking from about a quarter of an ounce to three ounces of butter daily.

Causes of Gravel and Calculi.—In the course of our experience, most of us have noticed that there are certain individuals who are prone, either to pass an urine thick from urates or containing uric gravel, or to void numerous small calculi; others, again, have no such tendency, and only on rare occasions observe any thickness in their urine. Can we link this condition with any other constitutional peculiarity? I think we can; and that we shall find, on inquiry into the history of those liable to pass gravel and calculi, that they frequently inherit gout. In looking over 1900 cases of this disease, which I have had extracted from my books, I find it mentioned that, of this number, comparatively few had passed calculi. If, on the other hand, we examine cases of calculus, we shall find that a much greater percentage of these patients are the children or grandchildren of gouty parents.

In the course of my experience, it has frequently occurred to me to see a man suffering from gout, and to find that he has one child who has had attacks of joint-gout; another who is suffering from eczema; and a third who is passing uric gravel or calculi. It is not very uncommon to find articular gout and calculus present in the same person. Sydenham, in his own person, was a good example of this combination; in fact, we may fairly conclude that those who suffer from an abnormal condition of the uric acid function on the inner side of our imaginary partition, mentioned in the first lecture—that is, in the blood or system at large—are also more prone than others to experience the effects of a morbid state of the same function on the outer side, or in the urinary tract: in other words, gouty subjects, or those who inherit that diathesis, are more liable than others to gravel and calculus.

There are, however, many influences which act strongly in determining the morbid action to the urinary tract—influences which will often cause the occurrence of such troubles in those who do not inherit them. We see, for example, that, in England, stone is more common in some counties than in others, and at one time of life more than at another. How can we account for this?

Anything that checks the cutaneous function, such as the cold east winds of spring, felt so acutely in Suffolk and Norfolk, appears to act as an exciting cause, and it is well known that in these counties gravel and calculus are very common. When the action of the skin is checked, there is no increase of urates, but an undue acidity of the urine, which leads to the precipitation of the uric acid. Cold alone is not necessarily a cause, for in Sweden and Norway calculous diseases are very rare. Another cause which, I believe, leads both to an increase of the excreted uric acid and to its deposition in the urinary organs, is portal congestion. Of the exact pathology of this we are at present ignorant, but, in the prophylactic treatment of gravel and calculus, it is important to look to this point; and much good is produced

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by the frequent use of remedies which tend to relieve such a condition. Hence the value of Carlsbad waters and salts, and of the numerous saline purgative waters which, of late years, have been so much employed. It must always be borne in mind that, in this administration in the diluted form, the water itself becomes an important element in their action upon the system.

Effects of Water on Gravel and Calculus.—I have already told you that water plays an important part in the formation of uric gravel and calculus, and this must be at once evident when we observe that, in different animals, uric acid is thrown out in the solid or liquid condition according to the relation existing between the solids and water contained in their urine. From this, it follows that the proper exhibition of water in the prophylactic as well as the medicinal treatment of calculous disorders must be a subject of much importance.

Many observations have been made on the effect of increasing and diminishing the quantity of water taken with food or when fasting. In the latter case, especially if the water does not pass off by the intestines, it causes the urine to become pale and copious (the *urina potûs* of old writers); but, at the same time, the action of the skin is augmented. It has been asserted that the amount of uric acid is lessened, but it is doubtful whether this is really the case; but any increase in the quantity of the urine helps to keep this principle in solution, and may thus mask its presence.

When the quantity of water taken with food is increased, it appears that certain of the urinary principles are augmented in amount, owing probably to the increased metabolism of the tissues; but, at the same time, it is stated that the uric acid is decreased. Further observations are much required before we can come to any accurate conclusions on this point. That the quantity of water passed by the kidneys in a given time has a great influence upon the physical condition of the urine, is evident. If, for example, a healthy man during one day passes an ordinary quantity of urine, and, during a second day, but half the amount, it is probable that, on the latter occasion, the urine will be turbid and thick from the precipitation of urate of sodium, whilst the first day's urine will remain bright and limpid; and yet the daily elimination of uric acid may be the same on both occasions, and it only requires that an equal quantity of water should be added to the concentrated urine to bring it to the same condition as the more limpid specimen. If a patient continues day by day to pass urine so concentrated that it rapidly becomes thick, perhaps even in the bladder itself, a very slight change in the acidity of the fluid will cause uric acid to be set free and crystallisation to take place, and then uric gravel, in the shape of cayenne pepper deposit, is formed.

If these changes only ensue after the urine has been passed, of course it is of no real consequence; but if they take place while the urine is still within the urinary organs, then either free acid or some urate may become deposited and form gravel, or increase the size of any calculus already existing within the urinary passages. The deposition of uric gravel is of very common occurrence in children; and I know, from clinical experience, that this often depends on the deficient amount of water excreted. I could give many instances of this, but one or two will be sufficient.

1. A little boy, about five and a half years of age, was passing, from day to day, urine which either contained uric acid crystals or gave rise to a copious red sediment almost immediately after it was voided; his health was otherwise good. I had the urine of the twenty-four hours carefully collected, and found that it amounted to sixteen fluid ounces, with a specific gravity of 1031. On simply causing the child to take five fluid ounces of water an hour before breakfast, and the same before his late afternoon meal, the quantity of urine was at once brought up to twenty-four fluid ounces, and the specific gravity reduced to 1017, nor could any uric acid be discovered when the fluid had stood for thirty-eight hours from the time when the last portion was passed. In a few days the quantity of urine was increased to thirty-seven fluid ounces, and the specific gravity lowered to 1013.

2. A little girl, about eleven years of age, had the same condition of urine as the last, red gravel being constantly present. The total daily quantity of urine was twenty-four fluid ounces, specific gravity 1026. By the administration of water before two of the meals the quantity was at once increased to forty-five fluid ounces, with specific gravity 1015, and after a few days to about forty-six fluid ounces, specific gravity 1013, the urine remaining free from any red crystals.

These cases, selected from a large number, are sufficient to illustrate the value of water as a therapeutic agent where there is a tendency to the rapid deposition of uric acid from the urine. In many cases it is only necessary to give simple water, such as is usually supplied for drinking purposes—a fact constantly acted upon by patients suffering from such complaints when they resort to warm mineral springs, such as those of Contrexéville, Vichy, and other places, where, although the mineral constituents of the spring may to some extent influence its action, yet a considerable amount of its therapeutic value is due to the imbibition, at proper times of the day, and under favourable circumstances, of a large amount of water.

The importance of the proper administration of simple water in these cases as a part of the diet is the greater, seeing that the plan of treatment can be pursued for an indefinite period; whereas the duration of a course of mineral waters is necessarily limited to a few weeks. I believe that, as yet, the medical profession have not laid sufficient stress on the proper administration of water in the treatment of gravel and calculous diseases.

Effects of Alkaline Treatment.—In the treatment of uric gravel and calculus, the different alkalies and their salts play a most important part, and it is very desirable that their special actions, as well as their relative values, should be clearly made out: this I now propose to do.

I may at once bring to your recollection the fact that, if we give any fixed alkali in the state of a carbonate, it is absorbed and passes through the kidneys in an unaltered form; that is, a carbonate, when taken by the mouth, appears as such in the urine, and, therefore, necessarily diminishes the acidity of that fluid, sometimes rendering it neutral or even alkaline, according to the quantity administered; so that, if we give, at frequent intervals throughout the day, a quantity of the alkali equal to the neutralisation of about thirty grains of oxalic acid—the average acidity of the day's urine—we shall, as a rule, keep that fluid in a neutral state.

In considering the equivalents of the different alkaline metals whose salts are employed in medicine, we find that the neutralising power for acids of the different bases must vary considerably. The most practical method of estimating this power is to measure the different alkaline metals, in the form of their carbonates, against each other, when we find that seventy-four parts of carbonate of lithium equal eighty-four parts of carbonate of calcium (chalk or its congeners), 106 parts of carbonate of sodium, and as much as 138 parts of carbonate of potassium. This is an important practical fact, and one that must not be lost sight of in the treatment of calculous diseases.

It must, however, be remembered that it is not merely the neutralising power for acids of the above compounds that has to be considered in treating of uric acid disorders; we must also look at the character of the salts which result from the combination of the acid with the metal, for some urates are very much more soluble than others.

In my first lecture I drew your attention to a table of solubilities of uric acid and several of its salts, drawn up from the results of a very careful set of experiments, the accuracy of which may, I believe, be relied on. This table is still before you.

On looking at it, we at once see that a considerable difference in the solubility of urates is manifested. Two of those given in the table are insoluble, viz., those of lead and iron; that is, no amount of distilled water, at the temperature of the body, could, apparently, dissolve either of them to the slightest extent. This fact is most important, though rather with reference to manifestations of uric acid in the system in the shape of gout, than its injurious effects as exhibited in the form of gravel or calculus.

It is a matter of clinical experience that lead-impregnation powerfully disposes to the production of gout; and I can also assert, as a result of long-continued observation, that iron-salts have a considerable tendency to cause a recurrence of an attack, when administered, as they often are, with a view to overcoming debility.

The difference of solubility in the alkaline urates forms a subject of great interest, for the value of a solvent may often be expressed correctly as the product of its neutralising power *plus* the solubility of the resulting salt. Let us take,

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for example, carbonate of sodium. It has been shown that its neutralising power is large compared with carbonate of potassium, 106 parts of the former doing the work of 138 parts of the latter; but, on looking at the table of solubilities, it is seen that the soda-salt has less than half the solubility of the potash-salt. The same remark applies to carbonate of magnesium, as, although it possesses great neutralising power, the resulting salt is very little soluble, and the very sparing solubility of the lime-salt renders its employment as a solvent of uric acid undesirable. Lime-salts, however, have been thus used, as we learn from the composition of the famous quack remedy of Mrs. Stephens, for the purchase of which the sum of £5000 was granted by the Government in the earlier part of last century.

The other properties of the alkaline salts must also be taken into consideration when they are administered as remedies. On comparing a soda-salt with a corresponding potash-salt, it is found that the latter is more prone to produce diuresis than the former; at the same time, there is good evidence that the alimentary canal and its appendages, especially the liver, are more influenced by soda than by potash. This is what might naturally be expected, seeing that true bile consists essentially of glycocholate and taurocholate of sodium. Magnesia-salts act more or less as purgatives, and lime-salts as astringents, but all act as neutralisers of acidity and, to some extent, as solvents of uric acid. Gravel and calculi usually consist of free uric acid, and even the least soluble of the urates, omitting lead and iron, are much more soluble than uric acid itself, which, as we may see from the table, requires as much as 8000 times its weight of water at 100° Fahr. to dissolve it.

There is one alkali—lithia—which will require some few minutes' consideration, and upon which I propose to bring forward several new observations and experiments; but, before proceeding to discuss its value, I may make some remarks on the different salts of the alkalies, some of which are more eligible for exhibition, especially in the treatment of gravel, than the carbonates.

All of us are probably aware that, if an alkaline citrate is given by the stomach, it is changed, either in the blood or kidneys, into the corresponding carbonate. The same is the case when an acetate or tartrate is administered; in fact, most of the vegetable salts are thus decomposed in the system, carbonates appearing in the urine. The establishment of this point is important, inasmuch as we can, by the use of these valuable salts, introduce into the system, through the mouth, salts which have no alkaline action on the stomach, and form, often, an important part of vegetable food, and can still produce the remote alkaline influence where it is wanted; in short, we can often give even an acid salt, grateful and useful to the stomach, and yet have the very opposite effect induced upon the urine.

I will now draw your attention to the salts of lithia, which were first introduced as remedies by myself as far back as 1859. If we look to the atomic weight of the metal lithium, we find it very low, only 7. The number representing the carbonate of lithium is also small—compared with carbonate of potassium it is as 74 to 138; hence the neutralising power for acids possessed by carbonate of lithium is greater than that of carbonate of potassium in the above proportions. Next, if we look at the table of solubilities of the urates, we see that the acid urate of lithium requires only 220 parts of water at the body-temperature to dissolve it; the corresponding potash-salt requiring 500 parts, and the soda-salt as much as 1130 parts, while the magnesia and lime urates take 1600 and 2800 parts respectively; so that, with respect both to neutralising power and solubility, the lithia-carbonate has a great advantage over the corresponding salts of potash, soda, magnesia, and lime.

I must now allude to a paper in the *Medico-Chirurgical Society's Transactions*, vol. xlviii., 1875, by one of our distinguished Fellows, Dr. William Roberts, of Manchester. The subject of this communication is "The Solvent Treatment of Urinary Calculi." I presume that the author's opinions are not changed since then, as, in the last edition of his work on "Urinary and Renal Diseases," the results set out in the paper are embodied.

Dr. Roberts came to the conclusion that potash-carbonate dissolves uric acid more rapidly than the soda-salt. This he ascertained by placing sections of uric acid calculi in phials, and causing currents of the different solutions, at blood-heat, to pass over them at a regulated rate. He also found that the strength of the solution employed was of much importance, the greatest amount of solvent power being exhibited in solutions containing from forty to sixty grains of the alkaline carbonate to the imperial pint (twenty fluid ounces). Below this strength, the power of the solutions gradually declined, until, with those which contained less than three grains to the pint, the solvent power scarcely exceeded that of water. On the other hand, if the strength was above sixty grains to the pint, the pieces of the calculus became encrusted with the alkaline bi-urates which were then deposited, and thus the further action of the solution was impeded. This was especially noticeable when the strength of the solutions was much above 100 grains to the pint.

Even without the actual experiment with pieces of uric calculi, I think we could predict that potash would prove a more powerful solvent than soda; for we have only to glance at the table to see that urate of potassium requires, at the body-temperature, only 500 parts of water to dissolve it, whereas the corresponding soda-salt takes as much as 1130 parts. The soda-salt certainly has an advantage in its greater neutralising power, but not sufficient to make up for the far less solubility of the resulting urate.

In the paper in the *Medico-Chirurgical Transactions*, and in his book, Dr. Roberts has the following foot-note with reference to the action of carbonate of lithium. He says: "Some experiments were also made with carbonate of lithia, which has been vaunted in recent times as a solvent for uric acid. Its power was found much inferior to that of carbonate of potash and soda. Its reputation seems to have been gained through its comparative insolubility. Only weak solutions of it *could* be employed,"—emphasis being particularly laid on the word "could." I refer to this passage because other authors have evidently been influenced by the statement; for example, Sir Henry Thompson, in his little work on "The Preventive Treatment of Calculous Disease," almost repeats the above words, when he says: "Dr. Roberts finds carbonate of potash to be the most powerful solvent; better than soda, much better than lithia."

Having myself introduced lithia-salts to the profession as internal remedies, and having used them continuously for twenty-five years, I felt it was my duty to bring forward evidence in support of their value as therapeutic agents, and to ascertain the truth or error of the statement which had been put forward as to their comparative inutility.

For this purpose, I have recently had a series of experiments made, the results of which are seen in the table on the board.

TABLES.

Effects of Solutions of Carbonates of Sodium, Potassium, and Lithium, upon Fragments of Uric Acid Calculi.

Strength: 60 grains to 20 fluid ounces. Temperature 100° Fahr. Time of action, twelve hours.

In nine experiments—three with each carbonate—the solvent powers were as follows:—

With Carbonate of Sodium:
21·2—18·1—15·3 per cent. Mean = 18·2 per cent.

With Carbonate of Potassium:
28·6—27·6—38·3 per cent. Mean = 30·5 per cent.

With Carbonate of Lithium:
43·8—58·6—47·7 per cent. Mean = 50·0 per cent.

In three experiments. Strength of solutions, 50 grains to 20 fluid ounces. Time, twelve hours. Temperature, 100° Fahr.:

With carbonate of sodium	... ...	16·2 per cent.
With carbonate of potassium	... ...	23·1 „
With carbonate of lithium	... ...	37·7 „

One experiment:
Carbonate of lithium—100 grains to 20 fluid ounces.
Solvent power—70·2 per cent.

Two experiments, using carbonate of potassium and lithium, 20 grains to the 20 fluid ounces:

With carbonate of potassium	... ...	21·2 per cent.
With carbonate of lithium	... ...	38·1 „

Two experiments, using carbonate of potassium and lithium, 10 grains to the 20 fluid ounces:

With carbonate of potassium	... ...	11·2 per cent.
With carbonate of lithium	... ...	17·5 „

The substance employed was a large uric acid calculus given to me by my friend Mr. Erichsen. It was first cut to

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ascertain its internal structure, and to see if this was pretty uniform throughout; then a portion was broken up, and the fragments washed with distilled water, and carefully dried. About equal weights of the calculus were put into three bottles, and solutions of neutral carbonates of sodium, potassium, and lithium were added to them.

The solutions were of the strength of sixty grains to the twenty fluid ounces; the action upon the calculus continued for twelve hours, at the temperature of 100° Fahr., with frequent agitation. Separate quantities of the calculus were taken, here called Nos. 1, 2, and 3. No. 1 was first treated with the lithia solution, then with those of potash and soda; No. 2 was treated first with the potash solution, then with those of soda and lithia; and No. 3 with the three solutions in the order, soda, lithia, and potash.

The quantity of the solution used in each case was the same. The results of these experiments are very striking. Let us first consider the soda numbers; we find that the percentage of solvent power in the three experiments was 21·2, 18·1, and 15·3, the average being 18·2 per cent. The percentage of the potash numbers was 28·6, 27·6, and 35·3, the average being 30·5 per cent. The corresponding lithia numbers were 43·8, 58·6, and 47·7, the average being 50·0 per cent. In all three cases the difference between the mean and the extremes is not very large; and such differences must always exist when we use an impure substance, such as the fragments of a calculus, which is never composed of a pure chemical salt. We see, then, that in solutions of the strength mentioned, the value of the lithia-salt over that of potash, and still more over that of soda, is most evident. Other experiments were afterwards made with solutions of different strengths. Thus, in three experiments, the solutions contained fifty grains to the twenty fluid ounces; time, twelve hours; temperature, 100° Fahr.; with frequent agitation.

The carbonate of sodium solution dissolved 16·2 per cent.
The carbonate of potassium „ „ 23·1 „
The carbonate of lithium „ „ 37·7 „

In another experiment, the sixty-grain lithia solution being used, but the time altered, at first to ten hours at 100° Fahr., then to eight hours at about 60° Fahr., the solvent power was 60·8 per cent.; but, when a solution containing one hundred grains to the twenty fluid ounces was employed, the solvent power was as high as 70·2 per cent.

Lastly, it will be observed that when the comparison of the solvent power was made between the potash and lithia salts, using twenty and afterwards ten grains to the pint—the quantity used by Dr. Roberts in his lithia experiments—the results were in each case more than 50 per cent. in favour of the carbonate of lithium.

It will be seen from these experiments that so far as soda and potash are concerned the results obtained exactly agree with those of Dr. Roberts; they exemplify the greater solvent power of the latter over the former—a result which might have been clearly anticipated,—but, on the other hand, they are totally opposed to his conclusions with respect to lithia. How is this to be explained? On looking at the solubility of urate of lithium, as seen in Table 1, we find it more than twice that of the potash salt, or as 220 to 500, and we can scarcely believe that in solutions of the two carbonates the uric acid would be found to be most soluble in the one which contained the alkali which gave the more insoluble urate; this would be absurd—in fact, we should anticipate that the lithia solution would prove as superior to the potash as we have already found the potash to be to the soda solution.

We must look for some means of explanation. Dr. Roberts used the expression "only weak solutions of carbonate of lithia *could* be employed," italicising the word "could"; and he appears to have used in his four experiments, two of which are given in the *Medico-Chirurgical Society's Transactions*, solutions of the strength of ten and twenty grains to the twenty ounces, whereas in the case of the potash he found that a sixty-grain solution is the most powerful. Now, it will be seen in the table that solutions of carbonate of lithium were employed containing sixty and even as much as one hundred grains to the imperial pint, and that, in the case of lithia, as the strength was increased the solvent power also was augmented. I should imagine that Dr. Roberts either used an impure carbonate of lithium or assumed that only one grain was soluble in the fluid ounce, as he used only ten and twenty grain solutions; whereas as much as one hundred grains can be dissolved, at the temperature of the body, in the imperial pint of water. Impurity of the salt and the use of solutions which were far too weak will at once explain the discrepancies and the cause of the erroneous statements with regard to the solvent power of the lithia salts. No one who has thoroughly investigated the action of these salts, in comparison with those of soda and potash, as internal remedies can come to any other conclusion than this, viz., that lithia salts are far more powerful solvents of uric acid than potash salts, while these latter are more efficacious than those of soda.

We have only to take three small phials, filled with a solution of the three carbonates of the same strength, and to put into each the same quantity of small uric calculi, the amount being such that the lithia will dissolve them. If we carry these in a warm pocket, after a short time it will be seen that all the calculi have disappeared from the lithia solution, while more than half are left undissolved by the potash, and about four-fifths by the soda solution.

I have been informed by some patients that they have been deterred from using lithia-salts, although they have found them valuable, by having been told that their employment would prove injurious, owing to their caustic effects upon the renal organs. In answer to this objection, I may say that I have found the action of carbonate of lithium to possess less destructive power than the corresponding salts of potash and soda upon animal tissues.

The only effect that I have ever noticed has been that, when the quantity is increased beyond a certain amount, a little tremor of the hands is produced, which passes off at once on the diminution or omission of the dose of the salt. I have known patients, of their own accord, continue the use of lithia-salts for more than ten years, with the effect of entirely preventing the recurrence of the symptoms to remove which they were first prescribed, and without the production of any injurious effect. For myself, I have not the least doubt as to the value of lithia-salts as therapeutic agents, and am convinced that by their employment depositions of uric acid in the renal organs can to a large extent be prevented. Free dilution and administration on a fasting stomach are points of much importance, which should be attended to in the administration of alkaline remedies. I have been much in the habit of using potash with lithia, in the form of the citrate or the carbonate; the former to give neutralising, the latter to increase the solvent power.

It concluding my remarks on the action of alkalies, I may state that I do not myself believe in the value of any injections into the bladder in the treatment of vesical calculus; at the very best, the process must be most tedious; and at the present day, when the surgery of the subject has reached to such great perfection, when a calculus can often be removed completely from the bladder in a few minutes without the use of the knife, I cannot but think that the surgeon is better qualified for the treatment of such cases than the physician.

THE PARASITES OF MARSH FEVERS.—Dr. Laveran, of the Val-de-Grâce, in a communication to the Paris Hospital Society (*Union Méd.*, June 12 and 14), states that the observations which he formerly made in Algeria as to the presence of well-defined parasitic organisms (which he describes at length) in the blood in marsh fevers have been fully confirmed by subsequent researches. Their pathogenic character has been proved by a large number of facts which enable him to come to these conclusions:—1. These parasitic elements exist always in the blood in cases of impaludism; and even when the examination of the blood of the living does not always exhibit them, they are still always to be found at least after death in the capillaries of the spleen. 2. They are always found in direct ratio with the severity of the case. In individuals who succumb through some complication in simple intermittent they are found only in small numbers in the liver and spleen; but in those who die from pernicious fever they exist in large numbers in all the organs and vascular tissues. 3. They precede a paroxysm of the disease, and when they are found in the blood we may almost certainly predict that a paroxysm is about to occur, although no elevation of temperature or other morbid sign exist. 4. These elements are never found in diseases unconnected with impaludism. 5. These elements disappear rapidly under treatment by quinine.

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ORIGINAL COMMUNICATIONS.

THE ORATION OF THE HUNTERIAN SOCIETY.

By E. G. GILBERT, M.R.C.S. Eng.(a)

MR. PRESIDENT AND GENTLEMEN,—It was with great hesitation that I accepted the honour of delivering this address, yet, under the circumstances in which I was asked by the Council to do so, I felt that I ought not absolutely to refuse it.

It would be useless for me to sing the praises of John Hunter, as they have been so often sung before by songsters so much more musical and able. His indefatigable industry, his care in observation and in drawing inferences, and his anatomical skill, can hardly have been praised, I think, too highly; and the benefits these admirable qualities have enabled him to confer upon us, his successors, must be very great—by the illustration he has afforded us of the true and only method of investigating phenomena, whether healthy or diseased; by important discoveries in anatomy, physiology, and surgery; and by leaving us that grand memento of his industry and skill—his museum. His failings may not, perhaps, have been so frequently referred to; but from them, too, useful lessons may be learned. Perhaps our grateful posterity may say of some of us that that was the *principal* way in which *we* afforded them instruction, if not the only one. In reflecting on the history of Hunter's life, one cannot help a feeling of great regret that the character and the career of so highly endowed a man, and of one who made so good a use of his talents, should have been marred by the want of religion in the true and literal sense of the word—self-restraint. But for this want his success in practice would probably not have been so tardy, and his life would have been more prolonged. The former result, so far as we are concerned, is no cause for regret; because, if his practice had occupied him more, he would have had less time for his experiments and dissections; but for the latter we can feel nothing but regret, both for his sake and our own. It seems to me very likely, however, that his almost incessant expenditure of nervous energy, and his short hours of sleep, were powerful causes of the irritability of his temper, and hence that, although far from excusing its outbreaks entirely, they render them more excusable than those of a man whose nervous system has been exposed to no such praiseworthy sources of exhaustion. Hunter was, moreover, a great—I might say a passionate—lover of order, and this valuable trait must have exposed him to very frequent irritation, from the great difficulty there is in getting those about one, and especially those on whom one is dependent, to be particularly punctilious about all the minutiæ of their work. If some one would devise a plan for even a moderate supply of such individuals, he would surely be entitled to the most lively, general, and enduring gratitude.

Hunter's opportunities for exercising those faculties which qualified him so highly for investigation and research, and for thus following the natural bent of his mind, were happily extremely favourable. Had his time and energies been entirely or nearly absorbed by the daily routine of practice, these opportunities would not have existed; and to that routine he had a great dislike, doubtless because in it he found no scope for methodical or experimental research—his great source of pleasure. He would spare no trouble to see a case shedding light upon some debated point in pathology or physiology, or exhibiting some unusual phenomenon; but it was a great bore to him to attend to anything which did not present some such interest.

Now, if the routine of consulting surgical practice is a bar to, rather than an occasion for, scientific investigation, that of general practice must be much more so; and it seems to me difficult to see how Hunter's example can be followed at all by the general practitioner, unless it be in a very few instances under very exceptional circumstances; and that there is, as a rule, some great obstacle to this, is, I think, evident from the fact that so very small a proportion of general practitioners contribute to the literature or advancement of their profession. This, I think, is a great loss to the general practitioner himself, to the cause of medicine, and to the public at large; and it seems to me worth asking whether it is a necessary loss, and whether it does not arise from causes which might be to some extent remedied.

One of these causes is, that much of a general practitioner's time is occupied in what one may call the business part of his practice—providing his patients' medicine, making out their bills, and all that springs therefrom. There are great difficulties, I believe, in getting rid of this, but I am not convinced that they are insuperable. If druggists could be made to see that they might profitably dispense medicines at a much lower rate than that which at present prevails among them, the great difficulty, which there now is, in the medical man's getting rid of his dispensing, would, I believe, be overcome; and I do not see why a druggist should not find it answer his purpose to dispense medicine for as little as a medical man really does. I say for as little as a medical man really does, for if nothing is charged for medicine nominally, yet practically that must be done—the cost of it must be recovered from one's patients in some way. I once calculated how much my medicine cost me per bottle on the average, and found it to be about 2½d., allowing nothing for pills and other solids, and using chiefly tinctures; and I cannot help thinking that the druggist might be content with a profit of 300 or 400 per cent., and the extension of his business that would accrue; but I have never been able to persuade one so, perhaps because with the extension of dispensing they foresee a decline of prescribing—a reason which, in our view, would tell on the other side. One objection urged against the abandonment of dispensing is that one's patients would often go to the chemist for a repetition of their medicine instead of coming to consult us. But I do not think we should lose anything by that, except perhaps while the change from one mode of practice to the other was in early progress; for it would make prescriptions more valuable, and would raise the fees paid for them, and also destroy the druggist's interest in prescribing, and induce him to send people to the medical man to be prescribed for, since he would still have to make up their medicine.

To get rid of account-making would involve a greater revolution than to get rid of dispensing, and could only be done slowly. There would be no difficulty in patients paying the fee on the occasion of each attendance: it only wants to be made customary. How could this change be brought about? I would suggest, by making it known that the fee for which no account had to be sent in would be considerably less than that of which an account had to be kept. This might involve a little pecuniary sacrifice at first, but it would lead to a continually increasing number of needy and careful people paying their fees on each occasion, till the custom became somewhat general; and when this state of affairs had been brought about, the medical man need have less hesitation in demanding its observance in any instance in which he particularly desired it. That people will pay in this way when under pressure to do so, I can bear witness; for it has often happened to me that those who have been in my debt a long time, and from whom I saw there was no chance of obtaining payment, have applied to me for attendance on subsequent occasions, and consented to pay a fee on each attendance, and often have soon paid in that way a sum exceeding in the aggregate the old-standing debt they had neglected.

But there is, in my opinion, a circumstance affecting the general practitioner still more potent in preventing his enjoyment of any opportunity for following Hunter's example, and for advancing the science of medicine. It is this: that his field of observation is far too wide, and continually becoming wider, so that, although he may always have a considerable number of patients under his care, he is unable, even if he have the time, to concentrate his attention on any particular class of cases or on any particular phase of disease in such away as to study it effectively. Even if he have under his care at the same time, or in the course of a few weeks, a few cases of the same disease, or some sufficiently similar to be compared—*i.e.*, to furnish data for comparative observation or possibly experiment,—they are too few to be of much value in that point of view by themselves; and then the impressions which he has gathered from their observation, generally more or less undefined and indistinct and inconclusive as they are, fade, to a great extent, from his mind during the busily occupied interval which elapses before any more instances of the same kind come

(a) Delivered before the Hunterian Society, February 14, 1883.

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under his notice. I do not say that nothing can be learned by observation carried on under this difficulty. Much, doubtless, has been learnt so; but probably that which has been learnt already is that which requires, in order to learn it, the least facility of observation, and only those who have greater and more continuous facilities for observation of more limited fields are likely to learn much more. It might be objected that taking careful notes of one's observations and cases would obviate the disadvantage arising from the separation of similar cases by considerable intervals of time. I think this is so only very partially; and, besides, notes are useful and essential to the thorough investigation of the most rapid and continuous succession of cases. The most careful notes will convey to the mind a much less perfect recollection of a case in the distant past than the recent memory of one observed with care and interest; and points which the mind passes by as of no value, and forgets almost immediately when observed in isolated cases, are forced into prominence by their repeated appearance in a rapid succession of numerous cases. I think the difficulty of gathering new and useful information by the general practitioner about disease from the circumstance to which I am alluding is probably underrated very much. I will try to illustrate it by a few facts gathered from records of seven of my first years of practice, during which time I was busily employed among the lower classes of people. Let us take acute croupous pneumonia, because it is a disease generally easily diagnosed, and one whose progress and recession are easily watched, and also one of common occurrence, especially among the class of people whom I was at that time working amongst. During the seven years I had forty-eight cases—not quite an average of seven a year, or one every eight weeks. The busy, harassing life of the general practitioner greatly impairs his memory of the details of individual cases in the course of eight weeks, and consequently prevents their being compared by him effectually with those of similar cases occurring after that interval. These cases impressed me vividly on two points only that are not universally recognised—the large amount of confidence with which we may look forward to recovery from acute pneumonia, when occurring in a previously healthy individual at neither extreme of age; and that there is sometimes a short stage at the beginning in which no physical signs of thoracic disease are to be detected, and perhaps no local symptoms of it, and yet the character of the attack and of the fever is such that pneumonia may be diagnosed.

Erysipelas, independently of surgical practice, is not an uncommon disease; but during those seven years only forty-three cases came under my notice—on an average, one in two months. Hæmatemesis I do not think you will consider at all a rare symptom, and yet I had only six cases in seven years, and probably not twenty in twenty years. I have not chosen these diseases because I happened to have fewer of them than of any others. That was not the case; but the multiplicity of diseases is so great that if one sees but a few cases of each it makes a large total. Besides that, a very large proportion of general practice is made up of attendance upon trivial derangements, in the way of dyspepsia, catarrh, diarrhœa, exhaustion, etc. Carbuncle no one would call rare, but in those seven years I had but two cases, and I do not think I have met with them more frequently since. At that rate how could one ascertain whether carbuncle does best with crucial incisions or without, or any other point which might still be doubtful, and require for its solution a comparison of cases treated in different ways? During the seven years I had but eleven fractures of bone, and that among a working population, and when I attended a great number of men in clubs. Those fractures might not have included two of the same bone or two requiring similar management. In surgery, especially, this infrequency of opportunities for practice in any given kind of case tells against the general practitioner, because nothing requires frequent repetition for its perfection so much as manipulative procedure. The same thing is, however, essential to render the knowledge gained by observation at all complete, as we see from the following facts. It often happens that when we first become acquainted with two men somewhat alike, we cannot distinguish one from the other, when he is alone; and yet, after very frequently seeing them both for some weeks, they seem to us so different, that we wonder we ever thought there was much resemblance between them. In the same way we perceive the differences in the appearance of the members of our own families so strongly in comparison with the power of a stranger to do so, that to us they may all seem very different from one another, while to him they seem very closely alike. This shows the impossibility of recognising differences in face at first, which repeated observation makes perfectly obvious; and still more of remembering those differences at first, although repeated observation at short intervals produces such a vivid impression of them on the mind that their recollection requires no effort. What applies to faces in this matter does so more strongly still to cases of illness, because their features are not, generally speaking, so prominent as noses and chins.

In order to compare accurately the progress of patients it is necessary, in addition to taking notes and measurements of periods of time and other things, to keep distinctly in mind the various circumstances of all kinds influencing the patients, in order to estimate their respective total influence in each case before drawing a conclusion; and as this cannot be done with mathematical precision, the finer differences can only be detected when a considerable number of cases are compared. Neither can the influencing circumstances referred to be stated with such precision on paper as they can be mentally estimated; but that mental estimate rapidly deteriorates, and hence the great advantage, in a scientific point of view, of a continuous succession of similar cases at much less distant intervals than they are met with by any general practitioner, however well occupied he may be. Another great disadvantage under which the general practitioner labours in both a scientific and practical point of view (if they are separable) is that, however hard he may try in his scanty hours of leisure to keep himself abreast of the advance in the knowledge of disease and its treatment (which is in itself an impossible task throughout the whole of his vast sphere), the opportunity for him to apply what he has last learned is often so slow in coming that when it comes the new knowledge is gone, leaving perhaps a slight sense of confusion about that which was possessed before.

Surely it would be a great advantage to all concerned if this state of things were remedied to some extent by a division of the field of labour, when practicable, similar to that which exists among consultants. What consultant would think he could acquire so great proficiency in medicine, surgery, and obstetrics—all three—as he exhibits in his own department of the healing art? If none would, it stands to reason no other man can excel in them all so much as he might in any one; and yet, in addition to undertaking them all, the unfortunate general practitioner has other heavy burdens from which the consultant is free. Why then, where there is a sufficient population, should not the medical practice be divided in a different way from that which now obtains? Instead of each medical man doing everything, why should not some take surgery, some medicine, and some obstetrics? Suppose in a place where there are six practitioners, one-sixth of the practice is surgical, and two-sixths obstetric or gynæcologic—does it not follow that the whole would be better done, that there would be less discomfort to the individual practitioner, and more likelihood of gain to medical science, if one of those men took all the surgery, two others all the obstetric or gynæcological practice, and the other three all that which was medical? For my part I think even some further division in the last would be beneficial. And further, if this would be an improvement in the condition of the profession, what is there to prevent our bringing it about ourselves? By each practitioner's declining those cases which lie outside his province, it would be at once effected; and at the same time competition among the whole would be diminished. This, I should imagine, would be most easily arranged at first in small towns; but the example once set, would, I think, be certainly followed in other places, and indeed perhaps forced upon the medical men, by the selection of different individuals among them for different branches of practice by the public. Certain it is that those divisions in medical practice, which now exist, are not the result of caprice, or of accident, or of unworthy motive, but of a natural law, whose working we cannot restrain in this matter more than in any other; and as it is a law whose operation is essential to the development of any complex organism, such as the society of which we form a part, we ought not to wish to restrain it, even if we could. The dangers which it involves, like every other change, can be

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guarded against. The principal one perhaps would be that some practitioners would be jealous of others entrenching on their province; this would be avoided by each judging the others very liberally, and being very scrupulous about his own acts.

In speaking of obstetrics I should not wish to condemn any man to an unbroken and perpetual round of midwifery, but think that, to render such a scheme as I have suggested complete, the ladies should be handed over on that occasion to other ladies, who have been properly trained to attend upon them, and who in case of difficulty could call in the surgeon, or the obstetrician, if there was one.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

CASES OF COCK'S OPERATION, FOLLOWED BY INCISION OR DILATATION OF THE STRICTURE AND RESTORATION OF THE NORMAL URINARY PASSAGE.

(Under the care of Mr. MORRIS.)

[From notes by the Dresser, Mr. R. S. Bowker.]

Case 1.—Stricture of Urethra—Ulceration—Extravasation—Recovery.

Albert C., aged forty-seven, was admitted under the care of Mr. Morris on August 3, 1882.

Previous History.—The patient says he has suffered from stricture for some fourteen years, and that four days ago he was straining to pass water, when he suddenly noticed a swelling between his legs and in his scrotum. His urine comes away in drops only, and he states that during the last four days he has not passed more than half a pint of water.

State on Admission.—On examination there is found a hard swelling in the perineum, and the scrotum is distended and discoloured. In the out-patient department a No. 5 gum-elastic catheter was passed, but only about two ounces of thick urine were evacuated. The temperature is 101° Fahr.; pulse 112, soft and weak. He has had rigors at intervals for the last three weeks. Mr. Morris thinks that ulceration in a dilatation of the urethra behind the stricture has in all probability occurred, giving rise to (1) perineal abscess, and (2) urinary extravasation.

August 3.—Patient was brought into the operating theatre and put under the influence of an anæsthetic. Mr. Morris then performed Cock's operation, and passed a gum-elastic catheter through the wound into the bladder. At first a quantity of thick ropy mucus, then a flow of urine passed, and then the bladder was washed out with warm Condy's fluid and water. The catheter was not left in the bladder. Incisions were made into the scrotum and perineum. Brandy (six ounces daily) and a mixture containing quinine were ordered. Hot fomentations of lead and carbolic to be applied to the scrotum and perineum every two hours, and the wound was ordered to be irrigated with carbolic lotion (one in eighty).

4th.—Patient seems pretty well and cheerful. The urine escapes at the wound, none having passed through penis. Temperature 97·6°; pulse 120.

5th.—Is still much the same, though he is nervous and despondent. Temperature 98·8°; evening temperature 100°. Some water passes through the penis, though the greater bulk passes through the wound; it has rather an offensive smell.

12th.—Wound looks more healthy; most of his water passes through it. Temperature 98°. The temperature rises slightly in the evening.

18th.—Seems very well to-day, and complains of no pain. Temperature 98·2°. During the irrigation to-day a large slough came away; it looked like cellular tissue.

20th. Wound looks cleaner, and patient says he feels well. Temperature 98·2°.

24th.—Patient was brought into the theatre, chloroform administered, and Mr. Morris passed a No. 6 gum-elastic catheter on a stilette; it was fastened in the bladder. Temperature 98·4°.

25th.—Patient seems fairly well, though weak. Brandy reduced to two ounces daily. Passed about a pint and a half of urine through the catheter. Temperature 98·4°. Urine, specific gravity 1020; neutral, no albumen.

26th.—Throughout yesterday passed only about three-quarters of a pint of urine. During the night the urine would not pass at all through the catheter, and he was consequently in great pain. However, after a time it commenced to come through the wound again. There is a nasty yellow muco-purulent discharge from the penis. Temperature 98·6°. Mr. Morris withdrew the No. 6 catheter, on which there was a considerable phosphatic deposit; he then passed a No. 9 gum-elastic, and drew off a considerable quantity of water. Catheter was left in, and the bladder washed out with acid. nit. dil. ℥ss., glycerini ℥x., aquæ ℥j.

27th.—Catheter was found stopped up. A stilette was passed in, and bladder was then washed out.

28th.—Catheter again stopped up; it was withdrawn, another passed, and bladder washed out. Urine has improved in appearance. Wound going on nicely. His general health is good. Catheter was not left in, but is to be passed every other day, and bladder washed out.

29th.—Urine has passed away through the wound, and some through the penis. Temperature 100·2°. A mixture containing ℞. acid. nit. hydrochlor. dil. ℥xx., tr. opii ℥iv., inf. calumb. ℥j. t. d. s. was ordered.

September 4.—Catheter passed; bladder washed out; urine greatly improved; acid reaction; says it is better than he has known it for years. Catheter passed every two days.

17th.—Wound much about the same. A little water still passes through it, but the greater quantity through the penis. Urine gives acid reaction, and is much clearer—clearer, he says, than it has been for fourteen years.

21st.—Wound almost healed up, though a little water still passes through it. He gets up now.

October 9.—Wound gives him pain, and scalds when water is passed; there is but a small orifice at superior extremity of wound, through which a probe passes some distance. It looks slightly red at its edge, and feels a little indurated, and there is a little more discharge.

13th.—Hot lead poultices to be applied, and continued for a day or two. Soon after this date the man left the hospital, the wound closed completely, and No. 9 catheter was passed from time to time (once or twice a week) as long as he continued to attend.

Case 2.—Stricture of Urethra—Extravasation of Urine.

Charles J., aged sixty-four, a porter, was admitted on October 9, 1882, under the care of Mr. Morris.

Previous History.—The patient states that for the last three days he has had great difficulty in micturition, and that, to try and relieve this, yesterday at midday he had a hip-bath. This, he says, gave him great relief. He then noticed that his scrotum was swollen, and that this swelling increased rapidly. He has since passed only a very small quantity of urine, and that not in a stream, but in driblets. He states that he has never before suffered from any difficulty in micturition. Was in the hospital twenty-nine years ago for varicose veins.

State on Admission.—Patient complains of feeling dull and drowsy. His scrotum and penis were, on examination, found to be *enormously* distended and œdematous. The scrotum is the size of a child's head. On the right side of the penis is a large gangrenous-looking bleb. There is no hypogastric dulness. Tongue moist and slightly furred. The swelling is confined to scrotum and penis, and does not extend beyond the middle line of perineum, nor to the thighs or the abdomen. Temperature 100·6°; pulse 109, small and weak.

Treatment.—Catheters had been tried, but not the smallest size could be passed. At 1 o'clock p.m. chloroform was administered, and Mr. Morris made a series of short incisions into the most tense parts of the swelling, through the skin. Cock's operation for perineal section was then performed, and a large gum-elastic catheter introduced through the wound, but no urine could be drawn off until after some thick glairy mucus, of the consistence of white of egg, and of a nasty ammoniacal odour, had been evacuated. The bladder was then washed out with warm water, and the

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catheter tied in. A lead poultice was then applied to the parts into which extravasation had occurred.

October 10.—Patient says he feels "much easier" this morning, though he had not passed a very good night. The urine drains freely away through a tube attached to the catheter. Pulse 80. Tongue rather dry, white, and furred. Appetite good, though he had no solid food until this morning, when he had a little bread. During the night he had four pints of milk, some tea, and a little brandy. His bowels have not been open since the operation. Temperature 100·4°, pulse 96. The patient is to have ordinary diet. Hot fomentations are to be applied to scrotum and to wound in perineum; balsam of Peru to gangrenous sore on penis. Brandy ℥iv. daily; ℥j. brandy c. tinct. opii ♏xx. and hot water ℥j. statim.

11th.—Patient is ordered boiled mutton, a pint of milk, one egg, and some pudding. Temperature 99·2°. The catheter came out of the wound during the night, but his water passes freely through the wound, and some also comes through the penis. Evening temperature 101°.

12th.—Temperature 102·4° (a little later 102·6°). Patient had a slight rigor this morning. 11.15: The patient is now in a profuse sweat; bowels not yet open; the scrotal swelling is visibly less, and one of the short incisions made in scrotum is showing signs of sloughing.

13th.—Temperature 98·6°. Bowels open twice yesterday, and twice through the night. To take the following mixture:—℞. Ammon. carb. gr. iv., tinct. cinchonæ flavæ ℥ss., decoct. cinchonæ ad ℥j., t. d. s. Says he feels better this morning. Has had no more rigors. The slough on penis seems to be extending a little, and the smell is becoming very offensive. Appetite is good; has eaten some boiled fowl. Evening temperature 103°.

14th.—Temperature 97·8°. Patient says that he had rather a bad night, and sweated a great deal, but has been more comfortable and cooler since five o'clock this morning. He seems very well now (11.30 a.m.). Bowels were open three times during the night, and once this morning. Scrotum looks about the same, though perhaps it is a little smaller. Smell is very offensive. Water passes freely through the wound, and also through the penis. Evening temperature 104°.

15th.—Temperature 100·2°. ℞. Quiniæ sulph. gr. v., suc. linimonis ℥ss., aquæ ad ℥j., t. d. s. Bowels open three times during the night, and once to-day.

The progress of the case was highly satisfactory. After the inflammatory œdema caused by the extravasation had subsided, a large part of the scrotal swelling proved to be an encysted hydrocele, which was tapped, and large numbers of spermatozoa were found in the fluid. After a second tapping it did not refill. Before the perineal wound had healed an incision was made forwards from it upon a probe passed along the urethra, through the wound, so as to divide the stricture, which was very hard, thick, and gristly. A full-sized catheter was then passed, retained for a few days, and subsequently passed at intervals. He is now quite well, has a good stream, and passes No. 11 for himself.

(To be continued.)

LUNATICS IN PRUSSIA.—The number of lunatic asylums increased from 118 (46 public and 72 private) in 1875 to 159 (66 public and 93 private) in 1879, therefore at the rate of 33·8 per cent. The patients augmented from 18,761 (10,127 males and 8634 females) in 1876 to 26,188 (14,248 males and 11,940 females) in 1879, which corresponds to an increase of 39·7 per cent. in the three years. In proportion to the inhabitants of Prussia there were in the asylums, at the end of 1879, 9·18 lunatics per 10,000, viz., 10·08 males and 8·30 females. The different forms of insanity were as follows:—Melancholia, 3399 (1343 males and 2056 females); mania, 3417 (1443 males and 1974 females); secondary mental disease, 10,749 (5560 males and 5189 females); paralytic mental disease, 1925 (1626 males and 299 females); mental disease with epilepsy, 2181 (1296 males and 885 females); idiocy and cretinism, 2161 (1311 males and 850 females); imbecility, 1318 (734 males and 584 females); delirium potatorum, 931 (866 males and 65 females). As to ages, those of the females were less than the males, excepting in lunatics above sixty years of age. The mortality of the lunatics during 1879 was 833·70 per 10,000, viz., 970·45 males and 672·26 females.—*Deutsche Med. Woch.*, May 23.

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Medical Times and Gazette.

SATURDAY, JUNE 23, 1883.

THE REPORT OF LORD MORLEY'S COMMITTEE: THE ARMY HOSPITAL REPORT.

SUCH a very large part of the big Blue-book that gives the outcome of Lord Morley's Committee is taken up by the inquiry into the efficiency and services of the Army Medical Department during the campaign in Egypt, that there is some risk of its overshadowing everything else that was brought before the Committee. But, paramount as is the importance attaching to the consideration of the conduct of the medical officers, and of the immense difficulties they had to overcome in organising hospitals when supplies were wanting, and transport could not be had, yet it must not be forgotten that the conduct of a subordinate branch of the Medical Department was much called in question. Indeed, the Committee which, with some alterations, carried out the whole of the enormous inquiry into the medical management of the Egyptian campaign, was originally appointed in June, 1882, to inquire into the organisation of the Army Hospital Corps, in consequence of very grave complaints made of its working during the campaign in South Africa. Appendix No. 6 of the Egypt Blue-book gives the proceedings of that Court of Inquiry so far as they went; but we do not propose to consider them much here, as the subject is, to a certain extent, merged in the more complete investigation of the alleged "shortcomings" of the Corps in the Egyptian Inquiry; and certainly the real defects of the Corps have been brought out more fully in that inquiry, although not more distinctly, than in the "South African" one. It is to be noticed, however, with regard to the "Cape" investigation that the Committee arrived at the opinion "that, as regards the general result of the inquiries, the more serious allegations against the Army Hospital Corps have not been substantiated." Those of our readers who are curious as to the value of *volunteer* female assistance (we are not speaking of trained female nurses) will do well to read the evidence at page 605, in order to learn what uncalled-for annoyance feminine "gushing" can give. As a mere matter of curiosity, too,

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it is worth while to note the impetuosity of Lord Wolseley, who, with regard to this very volunteer, offers the opinion (page 599):—"I am sure that the patients in a ward where there was a lady nurse would always receive the wine, food, etc., ordered them by the doctor; I am therefore of opinion that it was very wrong to have prevented that lady (the amateur in question) from entering the wards at Pietermaritzburg"; while other witnesses, who were rather better judges, thought differently apparently, for we read at page 605 that the lady asked "to be permitted to nurse a lieutenant of the 2nd Battalion R.W. Kent Regiment suffering from enteric fever"; and that this, "at the request of the officer concerned, was declined, he having expressed himself highly pleased with the attendance he was at the time receiving from the Army Hospital Corps." But we must pass on to the inquiry as to the conduct of the Corps in Egypt, and notice the conclusion arrived at by the Committee, page xix., par. 105—"There is a general concurrence of opinion that the Army Hospital Corps is not in a satisfactory condition." We accept the conclusion, and ask—Where lies the blame? What is the remedy? The real defects of the Corps seem easily to be traced, and it may be as well here to say a few words as to the history of the Corps, since it throws some light upon both the faults which exist and the remedies which have been suggested. In the old days the hospital attendants were regimental old soldiers, who were the friends and comrades of the patients. If not the best, these nurses were the kindest that sick men could wish for. But as long ago as 1857, "Sidney Herbert" reported to Major-General Peel, then Secretary of State for War, "The whole hospital system of the British Army is essentially regimental: *a system which it is most important to preserve* [the italics are our own], but which ought not to exclude every other, inasmuch as it is capable [incapable?] of adapting itself to the hospital requirements of an army in the field, when, as invariably happens before long, the regimental hospitals alone prove insufficient for the number of sick." The regulations of 1857 provided accordingly for an Army Hospital Corps to serve with the sick in general hospitals, but to be commanded by combatant officers. By degrees the opinion gained ground that the old absurd traditional jealousy of doctors exercising military control was a mistake, and that they should be supreme in their own department. The regimental system died out, and in 1877 the command of the Corps was handed over to the doctors, and the only non-medical officers allowed to survive were gentlemen whose duties were confined to the "Pay-" and "Quartermaster" departments of the Corps. Now, there is doubtless a blot in this new system, and it shows itself at the very time when it is most important that there should be no blot at all. We think the "Minute" of Colonel Redvers Buller (Appendix 6, page 603), who detected the weak point at the Cape, is remarkably judicious. "The great blot on our hospital management is that there is no intermediary between the doctor and the patient except the orderly. There is, to put it shortly, no nursing control. The doctor has plenty to do, the wardmaster has plenty to do, and the orderly has plenty to do. The doctor can to a certain extent supervise the wardmaster, but the latter cannot in time of pressure supervise the orderly. Some intermediate and *quasi* independent supervision such as that of nurses is much wanted. It should be recollected that the comfort of the patient depends upon the orderly."

In the report of Lord Morley's Committee (par. 106) it is stated, "The evidence which we have received indicates that the orderlies were not systematically or adequately supervised in the hospital wards, and that in some cases they were careless and irregular in their attendance." We find also that the Committee recognise the need of the "missing link" between the doctor and the orderly, and seek the remedy, in the employment of trained nurses. They say (par. 204), "The employment of trained nursing sisters in military hospitals has already been dwelt upon. In time of war their services are specially valuable." "A sufficient number of trained nursing sisters should be placed at the disposal of the principal medical officer, to be distributed by him as circumstances may require." The "Committee" do not use the words of Lord Wolseley, although no doubt they share his opinion (6215), "Although it is not, perhaps, a complimentary way of describing them, they are the best spies in the hospital upon everybody." It was, perhaps, natural that the necessity of finding "the missing link" should give a grand opportunity to the advocates of the restoration of military command; but it is painful to see the depths of ignorance, the want of charity, and the inveterate prejudice exhibited by some of the old school of combatants in their endeavours to prove the inferiority of medical men; though it is not worth while to quote their opinions, as "the Committee" are clearly of opinion that the doctors, if allowed fair play, are quite capable of doing their duty, without the assistance of combatant officers. There is no doubt that the want of constant supervision was the great blot in the working of the Hospital Army Corps' system, and there is no doubt also that the defect can, and will, be easily remedied. There are, however, other minor faults which will have to be attended to. The men engaged for service in the Corps must be *classified*, and paid, promoted, and employed according to their capabilities. At present, every man enlisted is supposed to be fit to be a nurse, a cook, or a bearer, as the necessities of war require. There are dozens of paragraphs in the evidence which show that no distinction was made as to the nature of the employment given to the men. Sometimes the exigencies of war forbade all selection (par. 9359 of the Minutes of Evidence); but there does not seem to have been much attempt to consider special qualifications at any time (par. 6649); and the strangest thing of all is, perhaps, to learn, as we do from the evidence, that nursing, "the highest duty that the Hospital Corps can be called upon to perform," is the worst paid (par. 570) of all! Cooking, too, has been much neglected; but all these points have been noticed by "the Committee," and must unquestionably be rectified. We have waded through an enormous amount of evidence of complaints made by officers and men against individual members of the Army Hospital Corps. Many of the complaints are childish, but no doubt some were well founded, and we believe they would not have occurred if there had been some one official keeping "watch and ward" over the orderlies, and ready at all times to report any complaint to the medical officer in charge.

THE HOUSE OF COMMONS ON VACCINATION.

On Tuesday evening the House of Commons spent some hours in considering the value of vaccination, with the very satisfactory result that they decided, by the crushing majority of 270 in a house of 302, that, in the opinion of the House, "the practice of vaccination has greatly lessened the mortality from small-pox; and that laws relating to it, with such modifications as experience may suggest, are necessary for the prevention and mitigation of this fatal and mutilative disease." The debate, which had been long and anxiously looked forward to by the anti-vaccinationists, was raised by Mr. P. Taylor's motion, "That it is inexpedient and unjust to enforce vaccination under penalties upon those who regard it as unadvisable and dangerous." Mr. Taylor, however, and his lieutenant, Mr. Hopwood, did not confine themselves

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to arguing against compulsory vaccination. They insisted that vaccination is in itself an evil, and that not only it does not prevent small-pox, but it introduces diseases, and increases the general mortality. Mr. Taylor asserted that, looking at the history of vaccination, the balance of evidence is against it, and that it has been a failure from the first, that it saves no lives under any theory, and that, as a factor in national mortality, small-pox is nowhere at all; that medical men were beginning to find out that it is an imposture, and that he was convinced that were not only compulsory vaccination, but vaccination itself abolished, there would be no great consternation among medical men. He declared that the upholders of the present system are really only some dozen fanatics who hold official positions, and whose *raison d'être* is to maintain the system. He spurned the "old nursery fable" that nurses in small-pox hospitals who had been vaccinated never died of the disease, and declared that the fact is that many such who had been revaccinated had died of small-pox. Mr. Hopwood attributed all the diminution that has taken place in the mortality from small-pox to sanitation; and both asserted that cancer had been largely communicated by vaccination. It would be a waste of time and of the space at our command to reproduce the so-called arguments of these gentlemen; they are well known, and have been refuted over and over again; and been over and over again reproduced. Sir Lyon Playfair's reply was most telling and complete. There was nothing new, it may be said, perhaps, in the statistics which he used with such effect, but he presented them in a masterly way, and his speech will have as much weight with the public as it had with the House of Commons. As to the charge that vaccination has communicated syphilis, he observed that before 1871, 153,316 soldiers had been revaccinated, and though syphilis is a common disease among soldiers, a military surgeon had stated that not one case had happened where that disease had been communicated through vaccination. Since 1853, 17,000,000 children had been vaccinated in this country, and it is very doubtful whether there have been three or four specific cases in which that disease has ever been produced. As regards skin diseases, he, of course, admitted that, as the result of irritation caused either by teething or by vaccination (or by any other local irritant), skin diseases may occur, but they are very often simply *post hoc*. Of this he gave a good illustration. "One of the policemen of the House," he said, "came to me last week, and supposing me to be, not a doctor of laws, but a doctor of medicine, said, 'I wish to consult you, sir, upon a very serious eruption which is all over my body, and produced by revaccination.', I replied, 'That is very interesting; let me see it.' The eruption was very decided, and the policeman stated that he had had it about a month. On being asked when he was revaccinated, he replied, 'Seven years ago.' It was a case of *post hoc*, and therefore was supposed to be *propter hoc*." But it would be just as sensible to prohibit drinking water because people sometimes got typhoid from drinking contaminated water, as to dispense with a remedy which is efficacious over the whole community, because a few very rare cases occurred in which it had communicated a disease. In speaking of the power of vaccination to protect from small-pox, Sir Lyon Playfair showed that in the last century, before the discovery of vaccination, the average rate of mortality from small-pox in England was 3000 per million. At the beginning of the present century vaccination was introduced, and as its value became known, voluntary associations were formed to provide it gratuitously; and, after these had been at work some forty years, the average mortality from small-pox had fallen to 600 per million. Between 1841 and 1854 State-aided vaccination reduced the average mortality to 305 per million. It was still further reduced while compulsory vaccination was but very imperfectly carried out; and from 1871 to 1873—the period of real compulsory vaccination—the average mortality was only 156 per million. He showed, also, how effectively small-pox had been stamped out in Scotland in 1872-73 by vaccination. When the epidemic of that period spread into Scotland, the children all over the country were revaccinated, and the disease was stamped out. Sir Lyon Playfair took up, one by one, the other accusations made against vaccination, and completely answered them all. The President of the Local Government Board also spoke very positively and forcibly in refutation of the arguments used by Messrs. Taylor and Hopwood, remarking, by the way, that if the statements made by those gentlemen as to the effects of vaccination had any force in them, he could only say that, having been vaccinated several times, he was astonished that he was still alive; and taking up, principally, some points lightly handled by Sir Lyon Playfair. It is very satisfactory, nowadays, to find a President of the Local Government Board venturing to uphold unhesitatingly and positively the protective power of vaccination; though he owns to doubts as to the wisdom and expediency of cumulative penalties for disobedience to the vaccination laws—doubts with which many will sympathise who have no sympathy with anti-vaccinationists.

Sir Lyon Playfair's speech will serve for a long time as the most ready, concise, and effective answer to anti-vaccination declamation; and though it will probably have no effect whatever on such disputants as Mr. P. Taylor and Mr. Hopwood, the profession and the public will be grateful to Sir Lyon Playfair for placing at their service so clear and cogent a statement of the reasons for the faith that is in them as regards the value and efficacy of vaccination.

THE SUNDERLAND CATASTROPHE.

The appalling catastrophe which occurred last Saturday afternoon at the Victoria Hall, Sunderland, is in many respects without a parallel in the annals of this or any other country. The fact that close on two hundred children were suffocated to death, at the conclusion of a public entertainment, on the staircase of a large hall, without any of those in the body of that hall having any suspicion of what was going on, is in itself almost sufficient to pass comprehension. Similar accidents have from time to time had to be deplored, but in such there has always been a panic, usually consequent upon an alarm of fire. Here, however, there was no alarm, no panic of any kind. It appears that at the close of the entertainment some toys were being distributed, in accordance with previous announcement, to the children in the body of the hall: those in the gallery, seeing this, feared that they would be altogether forgotten, and therefore determined to go downstairs. At once there commenced a regular stampede, some three hundred children or more rushing down the stairs pell-mell. At the foot of the steps, which were sufficiently broad for many children to go abreast, was a folding door so fastened as only to permit one person at a time to pass through. Whether this door was fastened when the rush began, and if not, by whom it was fastened, are matters of great moment which will have to be decided by the coroner's jury, and we must therefore wait for the evidence on this point. This much, however, is certain, that at this partially closed door a block occurred, and that the children behind kept pressing on, knowing nothing of what had happened, until the whole well at the foot of the stairs was filled with a pile, six feet high or more, of children. In but a very few minutes nearly two hundred were suffocated—for the blackened and swollen faces of the majority seem to indicate, as would be natural, that this was the cause of

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death; though in a few instances death probably resulted from shock, as these signs of suffocation were not found in all the bodies. It is, of course, always very easy to be wise after the event; and nothing is easier than in the present instance to point out that, could such an accident as this have been foreseen, it could most assuredly have been perfectly provided against. But, without in any way wishing to prejudge the investigation which has now been officially opened, and without claiming any greater foresight than others, we cannot help asking whether all necessary precautions had been taken to insure the safety of the children in case of fire. It seems to us that no special provision for even such an emergency had been made; and if the outrush of children from the gallery had been due to a panic of fire, we should now have had to deplore a far greater loss of life than even that which actually occurred. We shall doubtless be told that the door would have been wide open, and that thus there would have been no impediment to the safe and satisfactory egress of all the children from the gallery; but does anyone in his senses believe that a lot of children, many of them of quite tender years, could run down several flights of stairs and turn sharp corners without any of their number falling? The result of one fall would be to cause a block which would in a very brief space of time extend across the whole width of the staircase, and cause an impassable barrier; and indeed, for aught that we know at present, the block on the occasion we are referring to may have been caused in this manner. Thus, then, we have arrived at an indirect cause of Saturday's disaster—we mean the massing together of such numbers of young children without a sufficient number of older persons in authority over them. As a general rule, at school treats and on similar occasions, ample care is taken that adults shall be present to look after the children; and the necessity for some such precaution as this will be obvious to everyone who knows anything of children. They cannot be expected to consider the wisdom of their actions; and what one does the rest are likely to imitate, without thinking what the consequences may be, or whether the means they are taking are those best calculated to attain their object. Discretion is not an attribute of children. It is clear, therefore, that the mere aggregation of such numbers of children, with no one to control or keep them in order, constitutes a most unsatisfactory and perilous state of affairs. We could not help being struck with the remarks which the Home Secretary is reported to have made on Monday last, in the House of Commons, in reply to a question on the subject. After observing that in the case of a large concourse of people out of doors it was usual for the police to provide against disorder or disturbance, he said: "But it does not seem to be thought equally necessary to take similar precautions in regard to concourses of people in large buildings, when, as it seems to me, those precautions are, if possible, even more necessary." With this last sentiment we are entirely in accord, but we feel curious to know how long Sir William Harcourt has held this opinion. If more than a week, it seems to us a matter for great regret that he should not have sooner taken steps to make known his views, if not to have introduced a Bill into Parliament to insure an attendance of police sufficient to maintain order at all public meetings, whether indoors or out of doors. At any rate, after this plain declaration of his opinions, it is his bounden duty to do his best to give practical effect to those opinions. Doubtless, it will occur to many to ask how it came about that so many parents allowed their children to go promiscuously to an entertainment without inquiring what steps would be taken to insure their safe custody; but it must be remembered that the poor are accustomed to let their children take care of each other and of themselves from a very early age, and a child of ten years is considered quite old enough to take charge of a couple of younger brothers or sisters. In the present case, the presence of two or three men or of half a score of women in the gallery would almost certainly have sufficed to prevent the catastrophe.

The subject of the means of exit from theatres and public buildings is one that is constantly coming before us in one shape or another, but it is to be hoped that one result of the Sunderland calamity will be the enactment of some stringent and effective laws in regard to it. We are all aware that during the last few years lessees and managers of theatres have felt that they must do something to satisfy the public, and we find accordingly, in most of the theatres, mysterious doors in various corners and passages, labelled "extra exit to ——— street," and sometimes we are assured in very large type that all the doors open outwards; but, as a matter of fact, these extra doors are always closed throughout the performance, and, so far as our experience goes, are unprovided with a doorkeeper, and therefore, for all practical purposes, they might as well not exist, as they would be shut just at the time when they would be needed. If an extra exit is to be of any service in the time of need, either there must be a man actually stationed at the door, or else the door must be so arranged as to be easily pushed open by the first comer. But in last Saturday's disaster we do not consider that the door played so very important a part. If it had been wide open, or even if there had been no door at all, it seems to us, for the reasons we have already given, that an accident of as great or even greater magnitude might have occurred. The occurrence in question was wholly preventable, and the duty of providing against the possibility of a similar accident, so-called, rests with the Government.

THE WEEK.

TOPICS OF THE DAY.

À propos of the question as to the success of the Hospital Sunday collections in really increasing the funds of our metropolitan hospitals, the following curious paragraph, which appeared in a recent number of our contemporary the *Globe*, may be instructive:—"Something, it seems to us, ought really to be done to regulate the manner in which individual custodians of the Hospital Sunday collections at different churches are allowed to deal with the charity. One congregation in a wealthy suburban neighbourhood subscribed £112, of which £30 went to church expenses, £40 to pay off an old debt on the Sunday-schools, and £42 finally reached the Hospital Fund. If the collection next year should be a complete failure, the public will know who to blame." For the correctness of the information thus given, we offer no guarantee; but if authentic, it tends considerably to strengthen the arguments that we have consistently put forward, to the effect that Hospital Sunday has not proved the boon to the London hospitals that its promoters intended. In the first place, the total sum realised upon each anniversary is lamentably small when compared with the relative amounts obtained in country towns; and the distribution, though conducted upon the most equitable principle, embraces so wide a field that the amounts awarded are insignificant, when it is remembered that this novel institution has seriously curtailed the old annual subscription list of the different charities. His Royal Highness the Prince of Wales, in presiding at the recent anniversary of the Royal Hospital for Diseases of the Chest, very aptly observed that the true test of a charity's repute was the number of its annual subscribers—subscriptions being

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withheld or given according to the appreciation of the work done. It is claimed for the Hospital Sunday collection that it secures the small subscriptions of many who would otherwise contribute nothing at all to these charities; but we venture to think that, after all, this is clutching at the shadow at the expense of the object. We fear that careful inquiry would establish the fact that since the introduction of this movement into the metropolis the regular annual subscriptions of the supporters of the different hospitals have seriously diminished, and that there has been a constantly increasing difficulty in getting donations, a very frequent and ready reply to appeals being, "We give all we can spare to the Hospital Sunday Fund."

The Executive Committee of the Volunteer Medical Organisation recently met for the transaction of business at the National Aid Society's office, York-buildings, Adelphi, which has been lent to them as the temporary headquarters of the movement. The Secretary reported several important additions both to the General and to the Executive Committee, and, on discussion, it was considered that the names on these committees now offered sufficient guarantee of vitality to warrant request being made to persons of high position in the country to enrol themselves as patrons of the movement. A sub-committee to carry out this object was appointed. The annual subscription for the organisation was fixed at not less than five shillings; donations were also invited, and a satisfactory sum was promised by the members then present. It was announced that a bearer company was being formed at St. Mary's Hospital, and that arrangements had been made to commence drill at once. It may be said that, so far, the movement is succeeding satisfactorily.

An inquiry was held last week by Dr. Danford Thomas at the St. Pancras Coroner's Court, touching the death of a young woman, aged thirty, who died from the effects of burns received through the explosion of a paraffin oil lamp. On the evening of the 4th inst. she was putting the lamp out, when it exploded, setting fire to her clothes, and she was so badly burned that she was taken to the Temperance Hospital, where she ultimately died. The Coroner observed that he had held several inquests lately on persons whose deaths had been caused in a similar manner by means of the cheap inferior paraffin oils that were now sold; and expressed the opinion that steps ought to be taken to prevent the sale of these inferior oils to the poor, many of whom did not know the dangers attending on their use. The jury, agreeing with the Coroner, added a rider to their verdict, to the effect "that having heard in evidence that there are oils of an inferior kind sold in the parish, of a character likely to explode, they desire specially to call the attention of the sanitary authorities of the parish to this case, with a view to establishing an analysis of all oils for burning, in common use."

If the combined effort which is now being made to procure cheap fish for London, more especially for the working classes, fails in its object, it is to be feared that we shall once more be handed over to the monopolists who have so long succeeded in keeping up the price of this important article of food. Meanwhile, the Fish League are endeavouring to popularise fish as an article of diet amongst the poor of the metropolis. A meeting, having this object in view, was recently held under their auspices in the Vestry Hall, Peckham. The chair was taken by Mr. Duckett, who said that the subject for consideration was the best and cheapest way to supply the poorer classes with wholesome fish. To accomplish that end they would have to be prepared to grapple with the fish-carrying smack-owners, the railway companies who charged so high for carriage, and the Corporation of London, who would not part with their monopoly without a long and severe struggle. The Secretary having entered into the details of the scheme, a resolution was proposed, and carried with but few dissentients, to the effect that the meeting earnestly recognised the necessity for a practical movement to cheapen the fish supplies for the people, and to supersede the present system by which the price of fish had been maintained, placing it beyond the reach of the humbler portion of the population.

A young man was lately charged at the Lambeth Police-court with endeavouring to obtain, by false pretences, a sum of money collected at St. Jude's Church, Peckham, in aid of the Hospital Sunday Fund. He had a circular printed, purporting to emanate from the Secretary of the Fund, requesting clergymen in the South of London not to send in the sums collected, as heretofore, but to hand them to their collector, who would call for them. The rector of St. Jude's, mistrusting the circular received by him, communicated with the Secretary of the Fund, and when the writer of the circular presented himself to receive the amount, he was handed over to the police. Several similar circulars were found upon him, but he was unable to give any explanation of the charge when taken to the station, and the magistrate remanded him for further inquiries.

Efforts have been made for some time to have the burial-ground attached to Holy Trinity, Gray's-inn-road, laid out as an open space for the public, the main difficulty in the way being that while the ground belongs to Holborn parish it is situated in St. Pancras. The owners have expressed their willingness to agree to the suggested improvement, and, in reply to a memorial presented to the Metropolitan Board of Works, an offer has been made, that if the rector and churchwardens of St. Andrew's, Holborn, agree to convey the burial-ground in question to the Vestry of St. Pancras, and that body consents to accept it and lay it out, and maintain it as a place of recreation for the public for ever, the Metropolitan Board will contribute one-half the cost of laying out the ground. An appeal is now to be made to the St. Pancras Vestry to accept this proposal, and a strong hope is expressed that they will undertake the responsibility, thus conferring a great boon on the inhabitants of the locality.

THE PARKES MUSEUM OF HYGIENE.

We learn that Mr. Mark H. Judge, who has been Secretary and Curator of the Parkes Museum of Hygiene since its foundation in 1878, has resigned his office, the enlarged sphere of work caused by the establishment of the Museum in Margaret-street demanding more time than he is able to spare. The Council of the Society, in accepting this resignation with much regret, expressed their high appreciation of the value of his services.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

At an ordinary meeting of the Council of the Royal College of Surgeons, held on Thursday, the 14th inst., Dr. Robert Barnes was admitted a Fellow of the College; Drs. J. E. Bristowe, W. H. Dickinson, S. J. Gee, and F. T. Roberts were re-elected Examiners in Medicine; and Drs. John Williams and G. E. Herman, Examiners in Midwifery. Sir Henry Thompson was nominated for the Professorship of Surgery and Pathology, in place of Mr. Jonathan Hutchinson, F.R.S., who did not seek re-election. Messrs. Flower and Parker were re-nominated for the Hunterian Professorships of Comparative Anatomy and Physiology, and Mr. Schäfer was nominated for the Arris and Gale Lectureship on Anatomy and Physiology, Mr. Power having declined being re-nominated. Mr. F. S. Eve was nominated for re-election as Erasmus Wilson Lecturer on Pathology. Mr. Cadge moved—"That it is expedient that at the election of the

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Council the Fellows shall be allowed to vote either in person or by voting-paper." This was duly seconded, and, after a lengthy discussion, the Council resolved that the motion be referred to a committee to consider the expediency of the proposed change, and, if deemed expedient, in what manner the alteration may be best effected. The committee will be appointed at the next meeting of the Council.

EPIDEMIC PNEUMONIA.

An interesting epidemic of croupous pneumonia, which seems to point to its infectious character, is the subject of a paper by Dr. Heinrich Schmidt, of Königsbrunn, in the *Berliner Klinische Wochenschrift*, No. 23. The outbreak occurred at Zang, a village of 549 inhabitants, situated on the Aalbuch, and surrounded by woods. The inhabitants are hard-working, and their food is coarse and frequently scanty. The water-supply is bad. Typhoid fever occurs only sporadically, and ague is unknown. An epidemic of measles occurred amongst the children in the month of March, 1882. Ordinary croupous pneumonia occurs pretty frequently. A case of pneumonia occurred on April 5, which, however, does not belong to the epidemic under notice. The first case of the epidemic occurred on May 11, and between that date and June 18 seventeen cases occurred. On July 10 a case of pneumonia also occurred, but this was not part of the epidemic. Two of the cases ended fatally, and four ran an abortive course. The cases all occurred in neighbouring houses. Six cases occurred in a very poor family, whose hygienic surroundings were very bad. The period of incubation seems to have been in most cases about five to eight days. The weather in May was cold, but warm in June. Most of the epidemics of pneumonia have been described as occurring in closed places, usually institutions or prisons. Kerchensteiner observed an outbreak of pneumonia which spread like an epidemic, and was of a typhoidal character. The overcrowding of the sleeping apartments he considered as a most favouring circumstance. Inoculation of animals with the blood of these pneumonic patients gave no result. Penkert, in the *Berliner Wochenschrift*, Nos. 40 and 41, 1881, described an epidemic occurring in a small place of about 700 inhabitants. He considered that the infectious material had been carried from a neighbouring churchyard by the wind to a school where the first twelve cases occurred, and that the disease afterwards spread from person to person. The epidemic was of a mild character, differing from most epidemics described. The *Deutsche Vierteljahrschrift für öffentlich Gesundheitspflege*, 1882, Bd. ii., pages 366 and 367, mentions an epidemic comprising seven cases occurring in Uster, three of which ended fatally. The cases were described as typhoidal pneumonia. In Börner's *Jahrbuch der practische Medicin*, 1882, page 239, an epidemic is mentioned by Schwede and Münnick. It comprised fifteen children out of fifty, and occurred within thirteen days in a small village, whilst in the neighbourhood no case occurred. Epidemics of pneumonia have been noticed in garrisons—in the 1st Army Corps at Königsberg, Dantzic, and Grandenz, commencing in January, 1875, and ending in July, 1875. Another epidemic occurred in the 4th Army Corps in the winter of 1875 and 1876. The symptoms in both epidemics were almost the same—prodromata, with various general symptoms, high fever, and at the commencement no distinct local signs in the lungs; next, severe head-symptoms, and profound prostration of strength; then local mischief in the lungs, and with it increased rise of temperature; no true crisis, or only after the seventh day, then diarrhœa. Very frequently there was considerable swelling of the spleen and liver, with slight jaundice, marked and rapidly occurring heart-failure.

MEMORIAL BUST OF THE LATE DR. THOMAS HAYDEN, OF DUBLIN.

Shortly after the lamented death of this distinguished physician, in October, 1881, a committee was formed for the preparation of some permanent memorial of him. This it was decided should take the form of a bust, the execution of which was entrusted to Mr. James Cahill, a pupil of the late eminent sculptor, Mr. John Hogan. On the completion of the work the Committee decided that the King and Queen's College of Physicians, in which Dr. Hayden had filled the post of Vice-President for two successive years, and where it was well known that he was soon to have occupied the presidential Chair, would be its fittest guardians. On the receipt of the official letter of the College accepting the charge with much gratification, the bust was transferred to the hall of the College, where it is to be seen in company with the memorials to Graves and Marsh, and Stokes and Corrigan, and many others who have been the pillars of the Irish school of medicine. The bust stands on a beautifully finished pedestal of red Cork marble, into which is inserted a small white facet, with the modest inscription: "Thomas Hayden, F.K.Q.C.P.I., Vice-President 1875-7; died 1881. Presented by some friends." The College of Physicians is to be congratulated on the possession of such a memorial to one whose motto, not unfitly, was "*Prava ambitione procul.*"

THE HEALTH OF BARBADOS.

Our attention has been called to a correspondence that has recently taken place between the military and civil authorities at Barbados in reference to the erection of public latrines and urinals by the latter outside Bridgetown, and to a Minute by the Board of Health, Barbados, on the healthiness of the island. The subject was brought forward, in the first instance, by Surgeon-General Hoile, who, in a letter to the colonel commanding the troops, pointed out the necessity for establishing public urinals and latrines, with a view to improve the sanitary condition of the garrison and its suburbs. This was followed later on by a letter from Dr. Holton (the Principal Medical Officer for the West Indies), who expressed himself very strongly as to the insanitary condition of Barbados. The Board of Health replied at some length to this latter charge; in reference to the former point, they expressed the opinion that "latrines in such situations (*i.e.*, along the crowded thoroughfares leading through the garrison) would prove only hotbeds of disease, and in a short while become so great a nuisance that the military authorities would be the first to demand their removal." Of course, this is only an expression of opinion, but in regard to the general question of the healthiness of Barbados the Board did not confine themselves to mere impressions, but dealt with stubborn facts and incontrovertible statistics. In the first place they compared the military death-rate at Barbados with that at Bombay. At the former station it was 7·49 per 1000, at the latter it was 37·09. And they further showed that during the eleven years 1870-80 there was not one death from climatic causes, and only one (and that a very doubtful one) from insanitary conditions, amongst the troops. Next it was shown that the death-rate amongst the civil population at Barbados will compare very favourably with the principal towns in Great Britain. The next two tables, compiled from the Army Medical Report for 1880, "conclusively prove Barbados to be one of the healthiest stations of the British Army, either in or out of the United Kingdom; for while, as regards deaths from all causes, it ranks as healthier than five out of fourteen districts in, and nine out of thirteen districts out of, the United Kingdom, when the cause of death is ascertained it is found to rank equally with the

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four healthiest districts in the United Kingdom, and the two healthiest out of Great Britain; or, in other words, there was no station of the British Army in 1880 healthier than Barbados." During the ten years 1870-79 the military returns showed Barbados to be the healthiest station of the British Army. The Minute concluded by a comparison of the mortality in the various portions of the West Indies, and some remarks on the yellow-fever epidemic in Barbados during 1881. In the face of the numerous statistics to which we have just referred, the collection of which, we may observe, was a task of no mean proportions, it will be very difficult for Dr. Holton to substantiate his charges, and we must acknowledge that the Board of Health have satisfactorily refuted the accusations made against the island.

UNIVERSITY OF DUBLIN.

At the annual meeting of the Senate of the University, held in the Examination Hall of Trinity College on Wednesday, June 20, the following graces from the Provost and Senior Fellows of Trinity College were submitted to the Senate:—That the degree of Doctor utriusque Juris be conferred (*honoris causâ*) on His Excellency Earl Spencer, K.G., Lord Lieutenant of Ireland, and on General Lord Wolseley, G.C.B.; that the degree of Magister Artis Obstetricæ be conferred (*honoris causâ*) on George Hugh Kidd, M.D.; and that the degree of Magister Artis Ingeniariæ be conferred (*honoris causâ*) on Robert Crawford, A.M., Professor of Civil Engineering. Dr. Kidd, who is thus about to receive the degree of M.A.O. (*honoris causâ*), is the able and highly esteemed Master of the Coombe Lying-in Hospital, Dublin.

WOUND OF VAGUS NERVE.

The following case is of interest in relation to the question of the possible effects which may follow division of the par vagum on one side of the neck. The patient was a man aged forty-nine years, the subject of a tumour in the neck of long duration, which, in the course of eight weeks, rapidly increased in size, induced much pain, and was associated with marked emaciation (*Berliner Klin. Woch.*, No. 21). The tumour occupied the left side of the neck, displacing the larynx to the right; it was of the size of two fists, but little movable, and was crossed by large veins. No signs of pressure on the vessels or nerves were detected. The lungs yielded no physical signs of disease. Notwithstanding the connexions of the tumour, its removal was decided upon. Much difficulty was encountered in the course of the operation. The internal jugular, being adherent to the tumour, was ligatured and divided. The vagus nerve was apparently much displaced, for it was divided under the notion that it was the descendens noni. Later on in the operation the vagus was again cut through, so that a portion of it about six inches long was removed. After the operation the pulse was 120. Some râles could be heard in the left lung, and the left vocal cord was paralysed. Six hours later the pulse was 90; the respirations were 30. After this the patient did fairly well till the tenth day, when fever set in; and on the twelfth a rigor occurred, which was repeated the next day. The patient died on the fourteenth day, only a little purulent sputa having been coughed up. At the autopsy some broken-down blood-clot was found at the site of each ligature on the internal jugular vein, but not an extensive thrombosis. The muscles of the left vocal cord were already in a state of fatty degeneration. In the bronchial tubes of the left lung only purulent matter was seen; the right lung was œdematous and congested, but there was no bronchitis. The brain and the heart showed no morbid signs. Dr. Riedel, who had performed the operation, regarded the unilateral bronchitis and disease of the left vocal cord as directly dependent on the removal of the large piece of the left vagus nerve in the neck. The pyrexia and the rigor which ushered in death were looked upon as probably of embolic origin, though there was no post-mortem evidence to substantiate this view.

GLASGOW AND THE MEDICAL ACTS AMENDMENT BILL.

A meeting of gentlemen interested in the proposed Medical Acts Amendment Bill was recently held in the Merchants' Hall, Glasgow, the Lord Provost presiding. The first resolution, proposed by Mr. McLaren, Chairman of the Chamber of Commerce, and seconded by Sir James Watson, expressed dissatisfaction with the great preponderance of university nominees on the proposed Medical Board for Scotland, as likely to tell prejudicially on the extra-mural schools. Professor Leishman, who is at present Dean of the Medical Faculty of the University, without moving an amendment, pointed out that the Royal Commissioners showed in their report that they had come to the conclusion that the examinations of the corporations were not altogether satisfactory, and that a preponderating influence on the Board was simply the due of the universities. He further contended that St. Andrews had, as regards its Medical Faculty, no interests in common with the other universities, and that it had allied itself in the conducting of examinations with the corporations in Edinburgh. The proportion of university to corporation votes was thus really not eight to three, but seven to four. He, with the other professors of the University, was fully alive to the fact that the extra-mural schools were a source of strength both to Glasgow and to Edinburgh University. He was therefore quite willing that something more should be given to the corporations, but the demand for three more representatives was excessive, and could not be listened to by the universities. The resolution was then put and carried, as was also another proposed by Mr. W. McEwer, recommending that the corporations should have equal representation with the universities on the Medical Board of Scotland. A third resolution, expressing the opinion of the meeting that it would tell disastrously upon the extra-mural schools if their students were to be compelled to pay the Medical Board a larger fee than students of the universities, was likewise adopted. On the motion of Bailie Wilson it was agreed to embody the three resolutions in a petition for presentation to Parliament.

THE PARIS WEEKLY RETURN.

The number of deaths for the twenty-third week of 1883, terminating June 7, was 1180 (659 males and 521 females), and of these there were from typhoid fever 52, small-pox 21, measles 20, scarlatina 1, pertussis 18, diphtheria and croup 39, dysentery 3, erysipelas 5, and puerperal infections 6. There were also 51 deaths from acute and tubercular meningitis, 209 from phthisis, 31 from acute bronchitis, 70 from pneumonia, 126 from infantile athrepsia (48 of the infants having been wholly or partially suckled), and 31 violent deaths (23 males and 8 females). The total mortality this week has been again very low, although deaths from some diseases have been frequent. Thus, there were 52 deaths from typhoid fever in place of 35 of the preceding week—a very abnormal increase for June, for which no explanation can be offered. The rise will probably not continue, as there were only 72 admissions from typhoid fever in place of 88 for the preceding week. Athrepsia has increased its number of victims, and in children brought up by the bottle there have been 71 deaths, in place of the 59 and 48 of the two preceding weeks; and in those who were suckled there were 48 deaths in place of 34 and 27. The increase of deaths from this disease is the

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usual consequence of hot weather, and during the exceptional heat of 1881 there occurred 314 deaths from athrepsia in one week. Scarlatina has very few victims in Paris, and small-pox and pertussis have not varied in frequency since April. The births for the week amounted to 1247, viz., 634 males (453 legitimate and 181 illegitimate) and 613 females (444 legitimate and 159 illegitimate): 110 infants were either born dead or died within twenty-four hours, viz., 64 males (38 legitimate and 26 illegitimate) and 46 females (34 legitimate and 12 illegitimate).

ALUM IN THE TREATMENT OF PHTHISIS.

MANY physicians, both on the Continent and in some of our colonies, as well as at home, accept the doctrines of Koch without question. One of the natural consequences of this acceptation is the search after some remedial agent which shall possess the capacity of checking the growth of the micro-parasite which is the reputed chief etiological factor of the disease. Dr. Julius Pick has put on record the results of his experience in this matter with the preparations of alum (*Wien. Med. Wochen.*, No. 19). The author seems to consider that he has proved that the benefits which accrued from the employment of these therapeutical agents were marked, and all that could be desired. The outlines of one case, which was diagnosed to be tuberculous infiltration of both lungs, chiefly at the apices, are faithfully recorded. At the beginning of January of this year the treatment was commenced, and consisted of an inunction with fat performed twice daily over the whole body, of a diet composed of bread and milk, together with the internal administration of a pill three times a day two hours after food. This pill consisted of a quarter of a grain of metallic aluminium, a grain and a quarter of undried alum, with the same quantity of pure carbonate of lime. After eight days the diarrhœa ceased, the appetite improved, the fever abated, and the night sweats became less. Notwithstanding this favourable progress the composition of the pill was somewhat altered; instead of the undried alum the same dose of an extract of the malate of iron was substituted, and some extract of taraxacum was used to make up the preparation. Two of these pills were prescribed in the morning, three at midday, and two at night. The inunction with fat was proceeded with. It need hardly be said (for the case would scarcely have been published else) that the physical signs and symptoms of the disease gradually diminished to a practical zero. The correctness of the original diagnosis is of course taken for granted. The above sketch is a fair representation of the illogical mode of thought current among not a few medical men.

BENEFICENT BEQUESTS.

FOLLOWING upon the death of Mrs. Buchanan, of Morayplace, Edinburgh, a number of bequests made by her late husband will become payable twelve months hence, and among the list of recipients is the Glasgow Royal Infirmary for £10,000. The residue of the deceased lady's estate, after payment of bequests and certain legacies to private persons, will be paid to the directors of the Buchanan Institution. ——Mr. Robert Couper, of Millholm, in the parish of Cathcart, who recently died, has left the following sums for charitable purposes:—West of Scotland Seaside Home, Dunoon; Mission Coast Home, Saltcoats; Kilmure Seaside Convalescent Home—each £200; the Blind Asylum, the Eye Infirmary, the Maternity Hospital, and the House of Shelter for Females, Glasgow, each £100. Sums varying in amount from £2000 to £100 are left for other charitable purposes. He then directs the sum of £6500 to be expended in the erection of a hall with a room for a library, and a reading-room, and a house for the hall-keeper and librarian, in old or new Cathcart villages. He bequeaths £500 to defray the cost of furnishing the hall, library, and reading-room, and of procuring a suitable supply of books; also the annual interest of £500 for the regular supply of newspapers and periodicals, and for keeping up the supply of books; and £2000 to provide, in so far as necessary, for the payment of a hallkeeper and librarian. The residue of his fortune, after making certain provisions of a private nature, is to be used for the erection of a hospital or infirmary on the south side of the river Clyde, in or near Crosshill, and of a convalescent home in connexion with the hospital. His trustees are directed to proceed with the erection of the hospital so soon after his death as they find that the funds at their disposal are sufficient for the purpose. It is supposed that the sum left by this gentleman will insure the erection at a very early date of the institution, which has so long been desired by many of the inhabitants of the south side. The trustees are empowered to take all necessary steps for the regulation and proper management of the institution, and to apply for a Royal Charter or an Act of Parliament for incorporating the infirmary and the convalescent home.

COLLEGIATE PRIZES.

THE following are the subjects for the "Jacksonian" and "Collegial Triennial" Prizes of the Royal College of Surgeons. The former, for the present year, is "The Pathology, Diagnosis, and Treatment of Obstruction of the Intestines in its various forms in the Abdominal Cavity"; for the ensuing year, 1884, it is "The Surgical Treatment of Uterine Tumours, both Innocent and Malignant." For the Triennial Prize, to be awarded in 1886, the subject is "The Nature of Inhibitory Action in the Animal Body, to be elucidated by original research."

POST-HEMIPLEGIC DISORDERS OF MOVEMENT.

A VALUABLE communication on the above subject by M. Demange will be found in the May number of the *Revue de Médecine*; it is based on a study of eleven cases, of which nine proved fatal. In each of these an autopsy was made, and a drawing is given of the morbid appearances found in the brain. The cases are all very well reported except in one particular, and that is, that from first to last there is no mention of the ophthalmoscopic appearances in any of the patients. In this respect, however, M. Demange does not differ from his compatriots, for we may say, without fear of contradiction, that it is quite exceptional to find any note as to the state of the optic disc in the cases published in the various French journals. Notwithstanding this omission, however, the paper constitutes a distinct advance in our knowledge of the different varieties of post-hemiplegic movement. These movements, according to the author, may be divided into two groups: in one they supervene spontaneously, apart from voluntary movements (of this kind are hemi-chorea, hemi-athetosis, and hemi-paralysis agitans); in the other group the movements are produced only during the performance of voluntary acts (of this kind are hemi-ataxy and hemi-tremor of the type of disseminated sclerosis). These movements may coincide in the same patient, or they may succeed one another. In all the patients, of course, there was hemiplegia, and in all there was hemi-anæsthesia. As regards the lesions found, in one it was almost confined to the posterior segment of the internal capsule (case of hemi-chorea); in six cases the lenticular nuclei were affected (in some of these the internal capsules were also involved, in others the optic thalami—one case of hemi-paralysis agitans, four cases of hemi-athetosis, and one of hemi-sclerosis disseminata); twice the lesion was cortical and subcortical,

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at the region of the motor convolutions, the central ganglia being quite normal (one case of hemi-athetosis and one of hemi-ataxia). No special seat, then, can be assigned to the lesion, judging from the form of the trembling. The anatomical condition which gives rise to the production of the trembling would appear to be the irritation of the motor fibres at any point of their course, whether in the internal capsule, the lenticular nucleus, optic thalamus, or motor convolutions, and the form of the trembling would, in the author's opinion, be dependent, not upon the seat of the cerebral lesion, but upon the state of the muscles of the paralysed side—muscles whose tone and contractility vary according to the patient, the duration of the hemiplegia, and the state of descending degeneration of the pyramidal fibres. The author sums up the conditions necessary for the production of these movements as follows:—1. The hemiplegia must not be flaccid and complete. 2. The secondary contraction must not have given rise to an absolute rigidity. The paper concludes with some remarks on bilateral hemiplegia due to symmetrical cerebral lesions.

UNIVERSITY OF DUBLIN.—SCHOOL OF PHYSIC IN IRELAND.

It is announced that on Saturday, September 29, the Provost and Senior Fellows of Trinity College will proceed to elect a Professor of Anatomy and Chirurgery in room of Dr. Alexander Macalister, resigned. It will be remembered that Dr. Macalister has been lately appointed to the Chair of Anatomy in Cambridge University. Hence his resignation of the Professorship in Dublin. Among probable candidates two are conspicuous, namely, Dr. Thomas Evelyn Little, the present University Anatomist, and Dr. D. J. Cunningham, the Professor of Anatomy in the School of Surgery of the Royal College of Surgeons in Ireland.

EXCISION OF HARD CHANCRE.

Professor Lassar has come (*Berliner Klin. Woch.*, No. 23) to the conclusion that excision of a hard chancre is an operation which ought to be largely practised. He argues that it can do no harm, that it replaces an unhealthy sore by a healthy clean wound, and thus offers a chance of preventing the general infection of the system. It is generally taught, however, and we believe truly taught, that at the time of the formation of a hard sore the nearest lymphatic glands are already involved and infected. The eradication of the disease would not, therefore, be possible by the excision of the open sore; just as it would be useless to excise an epithelioma when the glands had already become affected. The question whether it would not be a wise thing to remove any continuing source of infection of the system no doubt arises; and should it be raised, the excision of a chancre is, after all, but a small affair.

THE BEER QUESTION IN THE PARIS HOSPITALS.

The peremptory circular of M. Quentin, the Director-General of the Assistance Publique, in which he states that —"I have decided that beer, being neither an aliment nor a medicine, shall be no longer supplied, except on special occasions," has caused great indignation among the members of the medical staffs of the hospitals, who were not consulted on the matter. And even the orders for beer signed by the *chefs de service*, which were promised to be fulfilled on approval by the Administration, are now stopped, the Administration having declared that it will no longer supply beer even on the request of the *chefs de service*. The following note has been forwarded to the Director:—"We, the undersigned surgeons of hospitals, considering that beer is both an aliment and a medicine, keenly regret the suppression of this drink in the hospital services, and hope that the decision will be reconsidered.—Le Fort, Trélat, Duplay, Depaul, Panas, Verneuil, Desprès, Tillaux, Nicaise, Reclus, Lannelongue, Richelot, Humbert, Terrillon, Monod, Bouilly, Schwartz, Pozzi, Marchand, Berger, Gillette, Le Dentu, Delens, Lucas-Championnière, Anger, Polaillon, Guéniot, Marc Sée, Cruveilhier, Horteloup, Périer, Kirmisson, and Terrier."

SOCIAL SCIENCE CONGRESS.

We are authoritatively informed that the selected questions for consideration in the Health Section of the Social Science Congress, to be held at Huddersfield during the first week in October next, are—1. Is the modern system of education exerting any deleterious influence upon the health of the country? 2. Is it desirable to take any, and what, further measures to prevent the spread of zymotic diseases through the milk-supply of our towns? 3. Is it desirable to amend or extend the Habitual Drunkards Act, and, if so, in what direction. They are all three, undoubtedly, questions of great and wide-reaching importance; and should a clear and definite answer be, as a result, given to any one of them, the country will have cause to be grateful to the Social Science Congress.

THE WHITECHAPEL DISTRICT AND UNHEALTHY DWELLINGS.

The report on the sanitary condition of the Whitechapel district for the quarter ended March 31 last, presented to the Board of Works for that portion of the metropolis by Mr. John Liddle, the Medical Officer of Health, shows a favourable condition of affairs as regards the mortality from epidemic diseases. The deaths from these diseases during the quarter under notice numbered twenty-eight, whereas in the corresponding quarter of the previous year they amounted to ninety-two. That this reduction is not entirely due to improvement in the house accommodation of the district may be gathered from a statement which Dr. Liddle publishes, showing that many unhealthy buildings have recently been put up in that neighbourhood. Speaking of a block of buildings erected within the last two years in Shepherd-street, Spitalfields, he points out that these tenements, consisting of fifty-three rooms, are occupied by 151 persons; and the sanitary arrangements are very unsatisfactory, as there is no yard or open space for the use of the occupiers. The water-closets, fourteen in number, are placed in the passages on the several floors and adjoining the rooms. The want of light rendered eight of the rooms totally unfit for human habitation, and the owner, by notice, had been compelled to close them. Even on a bright day the occupiers were obliged to resort to lamps and candles to enable them to perform their domestic work. A similar state of things is recorded respecting some premises known as Plough-street-buildings, inhabited by foreigners very dirty in their habits. These latter buildings are stated to have been built within the last four years, and Mr. Liddle's report would certainly suggest the reflection that the official inspection in that part of London must be very lax, if such dwellings can be run up without let or hindrance on the part of the properly appointed inspectors.

The *London Gazette* of the 19th inst. announces that the Queen has been pleased to direct letters patent to be passed under the Great Seal, granting the dignity of a Knight of the United Kingdom of Great Britain and Ireland unto Alfred Roberts, Esq., Honorary Secretary and Consulting Surgeon to Prince Alfred Hospital, Sydney, New South Wales. According to Churchill's "Directory," Mr. Alfred Roberts, who is a Member of the Royal College of Surgeons

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of England, is "Consulting Surgeon to the Sydney Hospital" and "Director and Honorary Secretary to Prince Alfred's Memorial Hospital"; he is also a member of the Examining Board in the Faculty of Medicine, University of Sydney.

A Committee of the House of Lords, in considering the London and North-Western Railway (Additional Powers) Bill, has declined to confirm the decision of the House of Commons to let the Company take half of the disused St. James's Burial-ground at Hampstead, and sanction their appropriation of sufficient to make a roadway, with the addition of a small triangular piece—*i.e.*, sanctioning all that the railway company originally desired, and leaving the remainder as an open space for the public.

At the Levée held by H.R.H. the Prince of Wales, on the 15th inst., Dr. Grainger Stewart was presented on his appointment as Physician-in-Ordinary to the Queen in Scotland. The Professor has quite recovered from his severe illness, and began work again in Edinburgh on Monday last.

The Duchess of Albany will formally open the new building of the Chelsea Hospital for Women, in the Fulham-road, on Tuesday, July 10.

Dr. F. J. Mouat, General Inspector to the Local Government Board, will take the chair on the occasion of the lecture at the Parkes Museum on Thursday, 28th inst., by Mr. E. C. Robins, F.S.A., on "Hospital Construction."

Dr. William Collingridge, M.A., M.D., S.Sc. Cert. Camb., Medical Officer of Health of the Port of London, was a successful candidate in the recent examination for the degree of Master of Laws of the University of Cambridge.

The new buildings of the Medical Society of London are now completed; and it is announced that the annual *conversazione* of this Society will be held on Monday, July 2. Professor Lund will deliver the annual oration at 8.30 p.m. H.R.H. the Prince of Wales has announced his intention of being present at the *soirée* afterwards.

The annual dinner of the St. Andrews Graduates' Association takes place on Saturday, June 30, when a strong muster of the graduates is expected to meet the Lord Rector, Sir Theodore Martin, K.C.B., who has accepted the invitation of the President and Council.

We understand that the Boylston Prize, awarded by a committee appointed by the Harvard University, Massachusetts, U.S., has just been conferred on Dr. P. M. Braidwood, Senior Surgeon to the Wirral Children's Hospital, Birkenhead. The subject selected this time for the prize—which is a marked honour—was the pathology and treatment of measles and allied diseases.

Death while Injecting a Nævus.—A Chicago correspondent writes:—One of our oldest surgeons, a professor of surgery, while conducting a clinic last week, introduced a little patient who was suffering from nævus of the face. After describing the case he proceeded to inject a few drops of the solution of chloride of iron into the tumour. Immediately there was a slight convulsion, and the child was dead. Though used a number of times by this operator, during a practice extending over thirty years, this is the first accident attending his use of the remedy. It is one of those occasional unanswerable arguments which come up against the use of dangerous means to an end, when safer agencies are available.—*Phil. Med. Times*, March 24.

MEDICAL MATTERS IN PARLIAMENT.

House of Commons—Thursday, June 14.

The Small-pox Hospital at Darenth.—Replying to a question from Mr. Alderman Cotton, Mr. G. Russell stated that the Local Government Board, after full consideration, had given their general approval to the proposal of the Metropolitan Asylums Managers to purchase 120 acres of land at Darenth for the purpose of providing a hospital for small-pox convalescents, and for patients having the disease in a mild form; and the Board were not acquainted with any reason why they should not formally sanction the purchase. The information laid before the Board as to the locality did not support the statement that the proposed hospital would be "in a large residential locality." And with regard to the institutions to which it had been stated the hospital would be in close proximity, the Kent Penitentiary was about three-quarters of a mile from the land on which the new hospital would be, the City of London Pauper Lunatic Asylum was about a mile and a quarter, and St. Vincent Industrial School about two miles off. The Metropolitan District Asylum, under the same Board of Managers as would be the new hospital, was nearer, but the two would be separated by a large belt of land.

Provisions as to Infectious Diseases in the Metropolis.—Mr. Alderman Cotton having asked whether the President of the Local Government Board had declined to receive a deputation of metropolitan guardians with reference to this subject,—Sir Charles Dilke said: The Board have had communicated to them a scheme for the care and maintenance of cases of infectious disease in the metropolis, which was ordered to be prepared at a conference of guardians, and the Board were asked to receive a deputation on the subject. The said scheme contemplates that the thirty metropolitan boards of guardians should be empowered to deal with pauper cases, "each union in its own locality," that non-pauper cases should be referred to the sanitary authorities, and that those authorities should provide hospital accommodation. The Metropolitan Asylums Board was constituted because the boards of guardians had not made any adequate provision for cases of infectious disease. The Local Government Board believe that, independently of the expense which the establishment of such a large number of hospitals—each with its own staff of officers—would involve, it would in the cases of several unions, such as the Strand and Westminster, be almost impossible for the guardians to obtain suitable sites for hospitals within the unions for small-pox cases. So far as the Board knew, not a single board of guardians in the metropolis has expressed its concurrence in the scheme; and it appeared to the Board that there would be no advantage in receiving the proposed deputation.

The Army Hospital Inquiry Committee.—Mr. Heneage inquired whether the Secretary of State for War concurred in the view taken by this Committee as to the scope of the inquiry; what further inquiry he proposed with reference to those officers of high rank who were charged with declining to assume the responsibility of their position, and to undertake any initiative themselves in order to supply the wants or alleviate the sufferings of the sick and wounded; also in respect of the responsibility and blame that was stated to rest upon Sir John Adye and Deputy Surgeon-General Sir J. Hanbury for permitting the state of things described by Lord Wolseley, without, as was alleged, any attempt on their part to remedy the hospital deficiencies.—In reply, the Marquis of Hartington stated that the Committee seemed to have taken a just view of their instructions, which had been read to the House of Commons on November 28, last year. In these circumstances he was not prepared to admit that any limitation had been placed on the scope of the inquiry beyond that with which the House was acquainted. Without in any way accepting the statements of the hon. member as to charges to be preferred against gallant officers, he would say that he proposed to carefully consider the recommendations made by the Committee with the object of remedying any deficiencies pointed out in hospital arrangements, medical organisation, etc.; but he did not contemplate a further inquiry such as that suggested in the question.

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Visitation of Army Hospitals.—Mr. C. Roundell inquired whether, under the Army Regulations, adequate provision was made for the regular visitation of hospitals by responsible officers, other than those of the medical staff, while the army was in the field; and the Marquis of Hartington replied: "The Queen's regulations explicitly hold general officers responsible for seeing that hospitals are frequently visited, either by themselves or by other officers under their direction."

MONDAY, JUNE 18.

The Sanitary Condition of Whitechapel.—Mr. Bryce inquired whether the attention of the Secretary for the Home Department had been called to the two last reports presented to the Whitechapel District Board of Works by the Medical Officer of Health on the sanitary condition of the district, in which he condemned as unsanitary and ill-arranged several buildings recently erected in that district, and expressed the opinion that amendments in the existing Building Acts were urgently required; and whether, if sufficient powers to prevent the erection or order the closing of unsanitary dwellings were not now possessed by local authorities, he would undertake to bring in a Bill to amend the Building Acts in this important particular, by investing the proper local authorities with such powers.—Sir W. Harcourt replied that he should be glad to bring in Bills upon this and many other subjects, but there was no time for them.

Vaccination in St. Pancras Workhouse.—Mr. Hopwood having put to the President of the Local Government Board a series of questions in regard to the case of Rosina Walsh,—Sir C. Dilke replied: Dr. Dunlop states that his own experience of the vaccination of women at an early period after labour extends to nearly 1500 cases, and that these vaccinations have not been attended by any injurious effects. The depositions taken by the coroner do not show that Mr. Whitefoord gave any evidence to the effect that the woman's arms clearly showed that she had already been vaccinated and revaccinated; but the woman herself stated that she had been vaccinated in infancy and about seven years ago. Dr. Dunlop says he does not remember having asked in the particular case whether the woman had ever been revaccinated, but that it was his usual practice to do so, and that there were no marks suggestive of anything like recent vaccination. If he did not make the inquiry mentioned, the Board consider he should have done so. The woman stated that her arm was swollen and bad after the vaccination, and that she had it in a sling. According to the evidence of Dr. Dunlop and the midwife, the arm of the woman when she left the workhouse had only dry scab on it; and there is no evidence that she "suffered severely" from the effects of the operation.

HOUSE OF LORDS—TUESDAY, JUNE 19.

Public Health (Dairies, etc.) Bill.—Lord Carlingford, in moving the second reading, stated that the object of the Bill was to transfer from the Privy Council to the Local Government Board the power of making orders for the protection and the regulation of dairies and cowsheds. The administration of the matter was a sanitary question, and ought to be in the hands of the sanitary authorities.—Lord Balfour and the Duke of Richmond approved of the measure for England, but thought it was not required for Scotland.—Lord Carlingford was under the impression that the proposed change was needed as much in Scotland as in England, but would inquire into the matter. The Bill was then read a second time.

HOUSE OF COMMONS—TUESDAY, JUNE 19.

Vaccination.—Mr. P. Taylor called the attention of the House to the laws relating to vaccination, and moved, "That in the opinion of this House it is inexpedient and unjust to enforce vaccination upon those who regard it unadvisable and dangerous." The motion was seconded by Mr. Hopwood.—Sir J. Pease held that the balance of evidence was decidedly in favour of vaccination, but that it seemed certain that the operation was not always harmless, and thought that therefore accumulated penalties were unjust and inexpedient. He moved as an amendment, "That a Select Committee of this House be appointed for the purpose of ascertaining whether a limitation of the accumulation of penalties for non-vaccination can be effected without endangering the practical efficiency of the Vaccination Acts."—Sir Lyon Playfair, in a most admirable and cogent speech, showed the value and efficiency of vaccination, and the enormous benefits it has conferred upon mankind; and was supported by Dr. Cameron, Sir Trevor Lawrence, and Mr. T. Collins.—Sir C. Dilke also spoke very decidedly in favour of vaccination, but avowed his sympathy with those who objected to cumulative penalties. He acknowledged, however, that he was very doubtful whether the House of Commons or the country would be in favour of the abolition of cumulative penalties.—Mr. Sclater-Booth said he had no doubt that the application of the law required to be supported by some system of cumulative penalties; but the administration of the law ought to be placed in the hands of some authority more responsible to the House than the local authority which now administered it.—Sir J. Pease withdrew his amendment; and Sir Lyon Playfair moved the following amendment:—"That, in the opinion of this House, the practice of vaccination has greatly lessened the mortality from small-pox, and that the laws relating to it, with such modifications as experience may suggest, are necessary for the prevention and mitigation of this fatal and mutilative disease." The amendment was carried by 286 votes for, to 16 against it.

Mr. Kennard obtained leave to introduce a Bill making it compulsory on all constructors of public buildings that doors shall be hung so as to open outwards. The Bill was brought in, and read a first time.

FROM ABROAD.

THE UNITED STATES ARMY MEDICAL SERVICE.

THE *Louisville Med. News*, March 10, furnishes the following account of the Army Medical Service:—"In almost all the prominent medical colleges of the United States there are to be found every year certain students preparing for the public governmental service. Of the several departments of this service, that of the army is probably the most popular. The career offered to the young medical man entering the army has, along with its hardships, two very great attractions—permanence and diversity. The Medical Corps contains men of the highest order of scientific, literary, and professional attainments. American medical literature has been enriched by the labours of Otis, Billings, and Woodward; and other members of the department have made valuable additions to medical science and practice. The area of our country is so great, and the territorial borders so wide, that the posts of duty extend from the Atlantic to the Pacific, and from Canada to the Gulf of Mexico. Thus the medical officer has facilities for familiarising himself with the climate and topography of every portion of our vast country, and gaining invaluable knowledge and experience. His associations are unusually pleasant, for the medical officers are held in high esteem by the line officers. The War Department is liberal in its provision of books, journals, instruments, microscopes, and other means of scientific study.

"The Medical Corps of the Army is composed of a Surgeon-General, an Assistant-Surgeon-General, a Chief Medical Purveyor, 64 Surgeons, and 125 Assistant-Surgeons. The Surgeon-General has the rank of a brigadier-general, the Assistant-Surgeon-General that of a colonel, 4 Surgeons rank as colonel, 10 as lieutenant-colonel, and 50 as major. These grades are maintained according to seniority in the service. On being appointed, the medical officer becomes an assistant-surgeon, with the rank and emolument of a first lieutenant of cavalry, which is $1500 per annum. After three years he becomes a captain, with pay of $2000 per annum. He holds this rank until a vacancy occurs to promote him to the rank of major—that is, to a full surgeoncy—when he receives $2400 annually. When, by seniority, the surgeon becomes a lieutenant-colonel and colonel, his pay advances correspondingly to $3000 and $3500. An addition of 10 per cent. is made to the pay every five years; and in addition to these rates of compensation he is furnished with quarters according to his rank, and forage for his horses when in use. The Surgeon-General and Assistant-Surgeon-General are selected from the whole corps.

"While this compensation is not very attractive when compared with the incomes of practitioners of average success, and such as is acquired by men of the order of talent

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required for admission into the army, yet it is permanent and is not reduced by illness or discontinued by leave of absence. For admission to the army, an applicant must apply to the Secretary of War for an invitation to appear before an Army Medical Board for examination. The application must appear in the handwriting of the applicant, and must state date and place of his birth, and place of which he is a permanent resident, and must be accompanied by certificates, based upon personal acquaintance, from at least two persons of repute, as to citizenship, character, and moral habits. Testimonials as to professional standing from the professors of the medical college at which he graduated should also accompany the application, if they can be obtained. The candidate must be between twenty-one and twenty-eight years of age (without any exceptions), and a graduate of a regular medical college. Political influence is of no value whatever in securing admission to this department of the public service. The Board of Examiners is not over-exacting, but the examination is rigid. It is authoritatively stated that during the sitting of the Board, which was in session in New York from November, 1877, to June, 1882, 258 candidates were invited to appear. Of this number forty-two failed to appear, 126 withdrew after a partial examination, fifty-one were rejected, and thirty-nine were appointed. In addition to a thorough knowledge of the profession, a liberal education is required. When competing candidates are equal in medical attainments, preference is given to the one possessing the largest share of general, scientific, and literary acquirements. The examination is both written and demonstrative. Some knowledge of the sciences collateral to medicine is essential. The physical examination of candidates is rigid. In addition, each candidate is required to certify that he labours under no mental or physical infirmity nor disability of any kind which can in any way interfere with the most efficient discharge of his duties in any climate.

"With the advantages and attractions of the Army Medical Service, as we have presented them, it is our duty to connect the facts relative to its hardships. The graduate who enters the Medical Corps soon realises that he must, for the most part, forego the comforts and delights of a permanent home and of a domestic life. He has no control whatever over the time of his going or coming, or the place of temporary residence. He never becomes an integral part of any particular community, and is moved from one place to another according to the customs of military life expressed through the department at Washington. The greatest danger to his habits and mode of work comes from the *ennui* and monotony of garrison life. The army, nevertheless, presents powerful attractions to many young graduates, and the life has a fascination both winning and strong. The Medical Corps of the United States Army is composed of gentlemen of great refinement, scholarship, and professional ability."

The U.S. Navy Medical Service.

In the same number of the *Louisville Medical News* is an account of the Medical Service of the Navy. After adverting to the education and examinations required, which are similar to those demanded for the Army, the following statement is given:—

"On entering the Service, the Assistant-Surgeon is paid at the rate of $1700 a year when at sea, $1400 when on shore duty, and $1000 when on leave or waiting orders. After three years' service, two of which must be spent at sea (or, as now ruled, in a receiving ship), he is entitled to examination for promotion, and, if successful, becomes a Passed Assistant-Surgeon, with the relative rank of master or lieutenant, and is paid $2000, $1800, or $1500, according as he is at sea, on shore, or on leave. After five years his pay is increased to $2200, $2000, and $1700. Since 1846 it had been the law that the second examination, like the first, should be competitive, the officer taking new rank accordingly. By the law of 1877, however, this rule was changed, and the place gained on the register at the first examination remains unchanged. Subsequent promotions are by seniority only, and the examinations are, by usage, less rigid than the first two, the officers' record becoming an important element in the decision. Surgeons have the relative rank of lieutenant or master, and are paid—the first five years, $2800, $2400, and $2000; the second five years, $3200, $2800, and $2400; the third five years, $3500, $3200, and $2600; and the fourth five years, $3700, $3600, and $2800. After twenty years they are paid $4200, $4000, and $3000. Medical Inspectors have the relative rank of commander, and Medical Directors that of captain, which is the highest rank attainable by a staff officer, excepting the Chief of the Bureau, who while so acting holds the relative rank of commander. Directors and Inspectors, while at sea, are paid $4000. Under other circumstances, the rank gives no advantage in the way of pay.

"*The Marine Hospital Service* belongs to the Treasury Department, and originally had for its work the care of the sick and injured sailors of the Merchant Marine Service. Hospitals were provided for the Service throughout the country. Quite recently the Marine Hospital Service has by an Act of Congress been entrusted with important sanitary duties in connexion with epidemics. This has very greatly added to the scope of work in this department of the public service. The clinical work accomplished by the officers of this Service may be judged of by the fact that 36,184 patients were treated during the year ending June, 1882."

REVIEWS AND NOTICES OF BOOKS.

The Student's Guide to Dental Anatomy and Surgery. By Henry Sewill, M.&L.D.S.R.C.S. Eng., formerly Dentist to the West London Hospital, etc. Second Edition. J. and A. Churchill. 1883. Pp. 228.

The second edition of this clearly written manual has been revised throughout by the author, with the assistance of Mr. Arthur Underwood, of the Dental Hospital of London. We have no doubt its popularity and usefulness will be maintained.

Meade's Manual for Students preparing for Medical Examination. Fifth Edition, entirely re-written by James Cantlie, M.A., M.B., F.R.C.S., Assistant-Surgeon and Demonstrator of Anatomy, Charing-cross Hospital; and Daniel Colquhoun, M.D. Lond., M.R.C.P., Assistant-Physician and Lecturer on Botany, Charing-cross Hospital. London: Henry Renshaw. 1883. Pp. 508.

The names of the editors by whom this new edition has been brought out will be sufficient guarantee of the manner in which it has been done. The book is one of a class which we do not admire, but, granting the necessity of such books, the present one is as good as any of its kind.

Epitome of Skin Diseases. By the late Tilbury Fox, M.D., and T. Colcott Fox, M.B. Third Edition, by T. Colcott Fox, M.B. London: Henry Renshaw. 1883.

A new edition of a work, which has already been received with so much favour by the profession at large, requires no special commendation from us. The general plan of the work has been adhered to in this edition, viz., that the first few chapters are devoted to the study and classification of skin diseases and the main principles of diagnosis and treatment. Then follows a description of each disease arranged in alphabetical order, with the treatment appropriate to each appended, and at the end of the book a list of remedies and favourite prescriptions of standard authorities. The author has evidently taken considerable pains to make the work in keeping with modern knowledge, and we may specially instance the articles on leprosy and the guinea-worm disease as a proof of the care that has been bestowed upon this edition. The book is of a handy size, and is well adapted to meet the wants of students.

The Annual Report of the Royal Edinburgh Asylum for the Insane for 1882.

Insistence has been laid in these columns on the desirability of a discussion by medical superintendents of lunatic asylums of the wider and more generally interesting social and legal questions of their speciality, in the reports which they present annually not only to the profession, but to a considerable circle of intelligent laymen. To the importance of this opportunity Dr. Clouston is fully alive, and his Annual Report is rich in valuable facts, and intelligent comments of far more than mere technical or professional interest. In

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taking this most desirable and praiseworthy course, Dr. Clouston necessarily lays himself far more open to criticism than by a mere dull record of the annual routine, and it is the more incumbent on us to express a hearty general concurrence with the scope and method of his Report, since there is much in its details with which we cannot agree. Dr. Clouston is under the disagreeable necessity of recording a high death-rate and a low percentage of recoveries, together with a singularly large proportion among the admissions of those cases—the acute and recent—that are the most amenable to treatment and most justify a favourable prognosis. This record, so far from being any slur upon the management and treatment carried out at Morningside, is an emphatic proof of the untrustworthiness of mere statistics unless they are so copious as to submerge all perturbations, or unless allowance is made for disturbing influences. How perplexing and how powerful such influences are may be judged by the experience of two asylums of about the same size, both in the neighbourhood of London, in one of which general paralytics form a very large proportion of the admissions, while in the other they are almost unknown. A comparison of the statistics of these two asylums would, of course, be totally misleading. Similarly, if we compare the 10 per cent. death-rate of Morningside, where scientific treatment is carried to its highest level, with the 5 per cent. death-rates of our large imbecile asylums, where curative treatment is no part of the programme, we are comparing things that are not properly comparable, and such comparisons can only mislead. In the few pages to which the Report before us extends, it is, of course, impossible to do more than set down general conclusions, without indicating the process by which they have been arrived at; but Dr. Clouston appears prone to lay down categorically statements that must be taken, some as conditional, and some as very doubtful until and unless he is able to furnish us with the facts in proof. Such a statement is the following:—"There can be no doubt that as at present constituted there are only a small minority of the human race who can be made insane in the ordinary sense. By starvation, or poison, or fever, they can be made temporarily delirious, and their mental functions may be destroyed by organic brain disease; but true insanity cannot be produced in them by any cause known to us." Does not Dr. Clouston admit that every case of insanity is a case of brain disease; and if so, then necessarily of "organic" brain disease, unless by "organic" he means "*gross*" disease? Another such statement is the following:—"There is not the least use denying," says Dr. Clouston, "that this liability [to insanity] is one of the penalties of a high brain-development, especially if this is continued for several generations. There are few families who have produced more than their share of very extraordinary men or women that have not also produced more than their share of insane members." If this is true, it is discouraging indeed; but until some proof of it is forthcoming we fail to see that the assertion is of much more use than the denial. The question, "What do you mean by recovery?" that was put with such earnestness by Mrs. Wadman, receives from Dr. Clouston a more definite and encouraging answer than the anxious widow was able to get; and the remarks upon the kinds and degrees of recovery from insanity are sound and sensible. The following passage is too good and too important not to be quoted entire:—

"I anticipate that future improvements in the treatment of the insane will take chiefly the following directions:—The first and the most important, I take it, will be, that the attendants will be better and more systematically trained, that more intelligent classes will take to this work, and that it will become a life-work for more persons. The second direction in which there is room for improvement is, in knowing the disease more thoroughly, so that our treatment will be more individualised, special moral and medical arrangements being applied with more exactitude and certainty than we are able to do at present towards the direct cure of special symptoms and special cases. That is, such means of treatment as work, amusement, walking, seclusion, bathing, open doors, parole, and diet, will be applied in suitable form and degree to each case, instead of a somewhat hap-hazard application to classes. A better knowledge of the disease will enable us to forecast the result in individual cases better than we now do. Another direction in which improvement may be looked for, will be such knowledge of the disease that we shall be able to tell better than we can now do the proper time for the discharge from the asylum in certain cases, consistently with safety, and with the least risk of relapse. There is much room, too, for improvement in our knowledge of the right mode of treating certain bad symptoms, and individual cases of an unfavourable type, to minimise the bad effects of such cases and symptoms. It may be that it will be considered a right thing to give the benefit of the best arrangements that the highest skill and knowledge can devise to those mentally afflicted persons who can derive benefit from them, and to provide less expensive arrangements for those who will not do so. That is, the curable cases, and some of the appreciative and intelligent of the incurables, will be sent to fully equipped asylums, while the more fatuous and incurable will have comfortable but less costly provision made for them."

In the science of insanity, as in other applied sciences, the ability to forecast correctly the course of events is at once the measure and the aim of our progress, and it is to the labours of such men as Dr. Clouston that we look for the attainment of this foreknowledge.

Murray's Complete London Time-Tables, Diary, and Suburban Railway Guide. London: Alf. Boot and Son, Printers.

THIS is a most comprehensive little volume. In addition to its railway information, it contains a reduced "district railway" map, which, notwithstanding its small size, is perfectly intelligible to a Londoner; a diary for the month; a list of cab-fares from several of the railway termini; and a list of theatres and other places of amusement. In printing the time-tables, different colours have been adopted for the various lines. Thus, the trains starting from Waterloo are on white paper, those from London-bridge are on yellow, the District and Metropolitan tables are on pink paper, and so forth. This should materially facilitate a reference to any particular line. A copious index to the stations is given at the commencement of the book. In spite of its minute size, the type is perfectly clear throughout—a matter of the utmost importance in a railway guide.

BOROGLYCERIDE.—In the *Phil. Med. News* (May 26) Dr. Faught states that he has employed boroglyceride, or "Barff's Preserving Compound," very successfully as a local application in the form of a 50 per cent. solution in glycerine. It is a good antiseptic astringent, which checks excessive discharge and sloughing; it is a decided antiseptic, and acts as a deodoriser. Applied to poultices, it keeps them moist and sweet for a long time. It is very valuable in leucorrhœa and subinflammatory conditions of the cervix. A piece of oakum of sufficient size is spread out, and half an ounce of the 50 per cent. solution poured on it; the oakum is then folded around it, and a string attached enabling the patient to remove it. This will remain sweet and clean in the vagina for twenty-four hours. Or gelatine pessaries, containing from 25 to 75 per cent. of pure boroglyceride, may be inserted by the patient, and the results are surprising and speedy. Dr. Webster Fox, writing in the same number, states that he has employed the boroglyceride with great advantage in catarrhal affections of the eye and ear.

INDIAN-CORN SILK IN CYSTITIS.—Within the last two or three years increasing attention and commendation have been given in Southern Europe to a remedy so characteristically American in its botanical origin, that we almost blush to think that its medicinal use should have been discovered abroad. We refer to the silk or stigmata of the maize, which is used with asserted most excellent results in uric acid gravel, cystitis, and also as a diuretic in dropsy. It is affirmed to have upon the genito-urinary mucous membrane an anæsthetic influence which is unrivalled, relieving the pain of nephritic colic, gravel, and calculous affections in a way that even morphia fails to do. Dr. Vauthier, of Belgium, states that its activity is due to an acid, to which he has given the name of maizenic; whilst more recent writers surmise that there is an alkaloid in it. The infusion (two ounces to the pint of boiling water), taken *ad libitum*, has been used. The dose of the maizenic acid is said to be one-eighth of a grain, whilst Dr. Ducaire administers the extract in doses of half a drachm daily.—*Phil. Med. Times*, April 7.

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PROVINCIAL CORRESPONDENCE.

MANCHESTER.

June 20.

Dr. Borchardt's Opening Address at the Annual Meeting of the Lancashire and Cheshire Branch of the British Medical Association: The Feeding of Infants and its Relation to Infant Mortality—Appointment of Resident Medical Officer at the Manchester Royal Infirmary—Award of the Turner Scholarship for 1882-83.

At the annual meeting of the Lancashire and Cheshire Branch of the British Medical Association, which was held here on Wednesday, June 13, the newly-elected President, Dr. Borchardt, set an example that his successors might do well to bear in mind, and, at least now and then, to imitate. Instead of delivering a formal inaugural address of wearying length, he took the opportunity of making a few pithy and sensible remarks on a subject to which for many years he has devoted special attention, namely, the feeding of infants and its relation to infant mortality. Acknowledging at the outset that the existing social conditions of our large manufacturing towns render it impossible that all the children of the poorer classes shall be reared on the "blameless food at the mother's breast," he proceeded to speak of the relative value of the various substitutes available. In reference to the many artificial foods that so energetically compete for popular favour, he declared, as the result of a large experience, that no vegetable preparation was comparable in suitability to good fresh milk as a diet for infants under a year old. Theoretically, he said, no doubt condensed milk appeared to possess many advantages, but in practice it was found that not only did different brands vary considerably in nutritive value, but that the enormous percentage of sugar in all the ordinary varieties produced chronic indigestion, and, as a consequence, a disposition to rickets. Fresh cow's milk, then, being the only substitute for mother's milk suitable for young infants, it became very important to inquire whether proper means were taken to insure that the milk supplied in this district was pure and good. The milk-supply of Manchester, he said, was derived from dairies of the sanitary condition of which we were totally ignorant. We knew nothing of the health of the animals, or of the fodder on which they lived; of the health of the milkers, or of those in contact with them; of the cleanliness of the dairies; of the wholesomeness of the water used for cleansing the vessels; or of the arrangements of the places in which the milk was kept. It was highly necessary that dairies should be placed under proper sanitary control, so that information might be obtained on all these points, and an assurance given to the public that they are conducted in conformity with sanitary laws. Then, with regard to the distribution of milk to the people: there exist, said Dr. Borchardt, in Manchester at present about 1536 registered milk-houses. Each house is placed under a district inspector, whose duty it is to ascertain that there is no direct communication between the sleeping-rooms of the dwelling and the place in which the milk is kept. For the superintendence of the milk itself there is one official for the whole of Manchester, who collects specimens for examination by the city analyst, and acts as prosecutor and server of warrants in cases of detected adulteration. The speaker concluded by suggesting that, if necessary, fuller legal powers of sanitary inspection should be obtained, and that the Corporation should transfer the control of the milk-supply from the committee in whose hands it now lay, to the Health Committee which had already done much good work, and whose province it should be to deal with all matters so closely affecting the health of the population.

In seconding a vote of thanks to Dr. Borchardt for his address, Professor Gamgee alluded to the importance of invariably sterilising cow's milk by boiling. He said it was not sufficient to warm it just until a froth formed on the surface; it should be actually boiled, so as effectually to destroy any organisms that may happen to be present.

It was almost to be expected that such plain speaking as Dr. Borchardt's would arouse official susceptibilities, and it therefore excited no surprise when the Medical Officer of Health for Mid-Cheshire, from which district a large part of the milk-supply of Manchester is obtained, wrote to the newspapers somewhat angrily repudiating the idea that there can be any possible connexion between the condition of the Cheshire dairy-farms and the excessive death-rate of the infant population of Manchester. "It betrays," Mr. Fox thinks, "an ignorance which is puerile and ludicrous, to place the two in any kind of relationship." Perhaps, however, as he speaks of "the water-supply and general sanitary arrangements of the farms" having for many years received "due attention," he has for the moment forgotten how, not many years ago, a serious outbreak of typhoid in the neighbourhood of Manchester was clearly traced to one of the dairy-farms in his own district, in which the pump and ashpits were in such close juxtaposition that no sooner had typhoid entered the dwelling than the pump-water, fouled by the excreta of the sick, promptly became a fruitful source of infection.

The appointment of Resident Medical Officer at the Royal Infirmary, rendered vacant by the resignation of Dr. Steell, has been filled by the election of Dr. Grant, who for several years has held a similar post at the Cheadle Convalescent Hospital. It is no secret that, in choosing Dr. Grant, the Board acted in direct opposition to the wishes of the Medical Committee, who had, by a unanimous vote, decided in favour of a candidate who had not only the recommendation of having been a student of the Manchester School, but also that of having recently terminated an exceptionally long list of successes at the University of London by winning the gold medal at the M.D. examination. As Dr. Grant's career at Edinburgh had, however, been of nearly, if not quite, equal brilliancy, the Board failed to recognise any striking difference between the two as regards professional merit, and were therefore chiefly influenced in their decision by the fact of Dr. Grant having already held several similar appointments, while his fellow-candidate had not. Those who know Dr. Grant best, and especially those who remember in what estimation he was held at Edinburgh, are perfectly satisfied that he will quickly prove himself a most capable and valuable officer, and that very soon no one will regret his election.

The Turner Scholarship, value £25, which is offered annually to the competition of students who have completed four years of study in the Owens College Medical Department, has this year been awarded to William Thorburn, B.Sc., a son of our esteemed Professor of Obstetrics. The examination for the scholarship embraces the subjects of the third and fourth years' courses.

The Medical Defence Association and the Government Medical Bill.—At a meeting of the Council of the Medical Defence Association, held on the 15th inst., the following resolution was proposed by Surgeon-General Gordon, C.B., seconded by Dr. Danford Thomas, and carried unanimously:—"That the members of the Council of the Medical Defence Association, while they foresee that in the practical working of the proposed Medical Act some modifications may be found necessary, are of opinion that on the whole the Bill fairly meets the interests of the public and the present requirements of the profession of medicine. The only point the Council would seriously press is, that in order to prevent unnecessary legal complications and definitions in the future, some simple but sufficiently distinctive title ought to be assigned to the licentiates of the new Medical Boards." It was further resolved to send a copy of the above resolution to the Vice-President of the Privy Council.

Alteration in the Construction of Catheters.—Dr. Steensen, writing to the *Boston Med. Journal* (May 10), after adverting to the danger of introducing disease-germs, putrefying substances, into the urethra by means of the catheter, and the admitted necessity of cleanliness of these instruments, especially of those repeatedly in use, as in diseased prostate, points out that in soft catheters decomposed blood, etc., may be often squeezed out from *below the eye*, which might give rise to infectious disease. This may be prevented in metallic catheters by boiling them, but, of course, this could not be done for soft catheters, while if they are disinfected in carbolised water they swell up too much. Dr. Steensen, therefore, suggests that soft catheters should be so made that the *parts below the eye should be solid.*

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GENERAL CORRESPONDENCE.

THE APPROACHING ELECTION AT THE COLLEGE OF SURGEONS.

Letter from Sir W. Mac Cormac.

[To the Editor of the Medical Times and Gazette.]

Sir,—I enclose a copy of the reply I have sent to Mr. Wheelhouse in answer to a letter, which you have doubtless seen, addressed to the candidates for election in the Council of the Royal College of Surgeons. I am, &c.,

Harley-street, June 16. W. Mac Cormac.

Harley-street, W., June 15.

Dear Sir,—Should I be fortunate enough to be elected a member of the Council of the College of Surgeons it will become my duty to help, to the best of my ability, to carry on the business of the College. I shall also endeavour to promote all that may appear most conducive to the dignity and prosperity of an institution of which not English surgeons only, but surgeons all over the world, are proud.

Until I have an opportunity of fully considering the merits of a question, and more especially its bearings on a particular case, I should be sorry to pronounce judgment. I shall therefore, if elected, enter the Council free to follow that course which may appear the best, and I must decline to pledge myself beforehand to a particular line of conduct.

I find that the question of Fellows voting "either in person or by voting-paper" has been referred to a committee of the Council. If successful as a candidate I should have to consider the report of this committee, and it appears to me wrong to prejudge so important a matter.

Faithfully yours,

C. G. Wheelhouse, Esq. William Mac Cormac.

THE CURABILITY OF UTERINE DISPLACEMENTS.

Letter from Dr. P. F. Mundé.

[To the Editor of the Medical Times and Gazette.]

Sir,—In an editorial on the "Cure of Backward Displacements of the Uterus," which appeared in the number for May 19, 1883, of your esteemed journal, you very kindly refer to an article by me on this subject, read before the International Medical Congress in 1881, and published in the *American Journal of Obstetrics* for October, 1881, and remark that both Dr. Löhlein, of Berlin, and myself, in our papers on this interesting topic, "seem to have left out of sight . . . . another view, which is that the displacement may often be quite innocent of causing trouble." Hence "it must matter little whether it be removed or not, and perfect health must be quite compatible with its existence. Drs. Mundé and Löhlein both omit to state whether or not their patients continued to suffer from any symptoms. They assume that, because the displacement was not removed, the subjects of them must still be regarded as out of health." And you proceed, very correctly, to criticise this assumption, and assert your opinion that many women with retro-displaced uteri may still enjoy perfect health. Herein, Mr. Editor, I, for my part, quite agree. But remember that my article was headed "The Curability of Uterine Displacements," not the *Removal of the Symptoms of the Displacements*. Therefore, when I asserted that of 403 cases of backward displacement only eight were cured, I meant that in only those eight cases was the *displacement* rectified permanently, and the *normal* position of the uterus restored for good. The *symptoms* produced by the displacement certainly were relieved in many cases by the treatment employed, even though the malposition was but temporarily benefited, or not at all. Of this latter class of cases I could cite many instances, notably such in which the symptoms for which the patient sought treatment depended more on the hyperæmia of the uterus and para-uterine cellular tissue, and on so-called "chronic pelvic peritonitis and cellulitis," with or without adhesions, than on the displacement itself. Although it was not my purpose to detail these cases (for the consideration of the relief of the symptoms depending on displacements of the uterus lay outside of the scope of my paper), I did refer in a general way to this result of treatment, and in order to set myself right on the subject I beg leave to trespass so much on your space as to request the *verbatim* reproduction of a few lines of my paper treating specially of this point:—"How many of these 184 cases of uterine displacement treated by supports of one kind or another were *permanently cured*, I am unable to say, for probably the same reason that has prevented other observers from collecting positive data, viz., because the patients who find themselves benefited by a supporter go on wearing it for awhile, finally remove it themselves, and finding their relief to continue without the pessary, do not return, and are thus lost sight of. That they do not return is no proof, however, that their displacement was *cured*. It was temporarily relieved, the symptoms it produced gradually disappeared, and then the pessary could be dispensed with. That such cases were not cured is sufficiently proved by the constant return of the patients months or years after the pessary had been removed by themselves or the physician, with a return of the same symptoms, and on examination the same old displacement is found. It had persisted during the interval, but its symptoms had been temporarily relieved. This holds true particularly of posterior displacements."

Surely, Mr. Editor, the above quotation embodies substantially the same idea as that advanced by you—that uterine displacement *alone* need not *necessarily* produce symptoms.

By making space for this communication you will greatly oblige Yours, &c., Paul F. Mundé.

20, West Forty-fifth-street, New York, June 5.

THE CONTAGIOUS DISEASES ACTS.

Letter from Mr. F. C. Banks.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your issue of the 16th inst. you reproduce a letter from Dr. A. Conan Doyle, of Portsmouth, stating that "thirty diseased women had left the hospital" there with the "avowed intention" of meeting a return transport laden with troops from India. The feelings of those who have brought about the stoppage of the compulsory examination of women, you say, "must be the reverse of satisfactory" because of this incident, which Dr. Doyle calls "an ounce of fact." Permit me to say that the feelings of repealers are not at all affected by Dr. Doyle's glowing picture—for the very best of reasons, the statement being absolutely untrue. Nothing but sheer ignorance of the powers of the Acts, as still enforced, could have led Dr. Doyle to believe such a cock-and-bull story, or respectable journals like yours to quote it as a weapon against the late action of the Government. On reading Dr. Doyle's letter in your local contemporary, I knew at once that somebody had misled him. I wrote to him and he courteously replied that he had been misinformed, and that the Resident Medical Officer at the Portsmouth Lock Hospital had assured him that "there was no foundation for the story." Dr. Doyle wrote and contradicted his statement, but the editor of the paper in which his letter prominently appeared was content with putting the contradiction in an obscure column. It is certain, therefore, that his "ounce of fact" is mere nonsense, and that the medical profession, and the public through its influence, will be all the better if such ounces of fact are first as carefully tested as ounces of physic before their administration. I am, &c.,

Frederick C. Banks.

2, Westminster-chambers, S.W., June 20.

NEW INVENTIONS AND IMPROVEMENTS.

PIXENE.

This is an elegant preparation of tar which forms an agreeable deodorant, as it is devoid of the objectionable smell of tar. We believe it will be approved of in the sick-room on this account, though it will not altogether supersede the ordinary preparations of tar in the treatment of chronic eczema. It was originated and is manufactured by Mr. J. Wheeler, of Ilfracombe.

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REPORTS OF SOCIETIES.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

FRIDAY, MAY 18.

DR. W. MOORE, President, in the Chair.

COMMUNICATIONS—(1) EXOPHTHALMIC GOITRE; (2) POLYPUS OF THE VOCAL CORD; (3) SOME FORMS OF DILATATION OF THE COLON.

1. MR. JOHN B. STORY read a paper recording three cases of exophthalmic goitre. The cases occurred in women, two of whom were unmarried. The following were the points of interest:—Two of the patients were sisters; and the third exhibited the remarkable, and probably unique, complication of double optic neuritis, which, however, had subsided at the time the patient came under observation. In this patient the goitre was more marked on the left side, and the palpitations did not occur until five years after the goitre and exophthalmos; in the other two the goitre and exophthalmos were more marked on the right side, and the palpitations were the earliest symptoms observed. Mr. Story called attention to the support these three cases gave to the theory propounded by Dr. William A. FitzGerald in the *Dublin Journal of Medical Science* for March and April, 1883.

The PRESIDENT said that although the disease was almost peculiar to females, he recollected three cases in which it occurred in males, the course being short—not quite eighteen months. On the other hand, he had seen it run on for eight or ten years in females. He instanced a remarkable case in which symptoms of exophthalmic goitre occurred temporarily from sudden shock. A young girl opened a letter telling of her brother's death. Her pulse became 140, with exophthalmos and thyroid enlargement. In forty-eight hours the exophthalmos receded, and her pulse fell to normal. To him the disease appeared to be of neurotic origin.

2. Dr. WALTER SMITH related a case in which he had successfully removed a small polypus from the right vocal cord of a lady, aged thirty years, by Voltolini's sponge abrasion method. About Christmas, 1881, loss of singing voice came on. This was followed by hoarseness, which persisted for a year. In December, 1882, the patient consulted Dr. Smith, who recognised the existence of a pale red pyramidal tumour attached to the edge and lower surface of the anterior third of the right vocal cord. After a short preliminary training, he succeeded in passing a moistened sponge, about the size of a hazel-nut, beyond the growth, and then forcibly withdrawing the sponge through the rima and bearing towards the right side, was fortunate enough to detach the little tumour, which came up adherent to the sponge and was preserved. Immediately after the operation, voice was restored, the hoarseness had disappeared, and she was able to sing. Six weeks subsequently she reported herself as perfectly clear in voice. The operation is a safe and painless one, and suited to a limited number of cases.

Dr. BEATTY remarked that the attachment of the tumour to the under part of the vocal cords favoured its removal by Voltolini's method. He had met another case in which, owing to its position anteriorly, this method failed.

3. Dr. HENRY KENNEDY read a paper on some of the forms of dilatation of the colon. He began by observing that the affection was frequently overlooked; and, in confirmation of this, he detailed some cases which were so obscure as to prevent any diagnosis being arrived at, and others in which the diagnosis was wrong. He believed, nevertheless, that a correct diagnosis could be made; but it was necessary that the idea of such a possibility should, in the first instance, be entertained. The condition of the patients who had this affection was always that of impaired health. With this state, when the patients, who were usually thin, were examined lying on their backs, there was chronic tympany, though not necessarily to a great degree. Pressure on the abdomen did not cause pain. In conjunction with these symptoms the author stated that the main characteristics of the disease were the fæcal discharges, always dark, pasty, and unformed. He insisted particularly on the persistence of such discharges for weeks, months, and even years, during which periods the patients were constantly subject to attacks of diarrhœa, acute or chronic, and were liable even to perforation of the bowel, and rapid death. Having detailed cases, he considered the prognosis should always be guarded. Treatment could much benefit those cases, but he doubted whether a complete cure could be effected.

Dr. GUNN asked if electricity had been tried, and quoted a case of atonic condition of the large bowel in which it seemed to have proved of benefit.

Dr. FINNY, criticising the premises upon which Dr. Kennedy based his cases, said that although he had laid stress upon three diagnostics of the state of the colon, he had not adduced any conclusive evidence to show that the condition referred to existed. He, too, bore testimony to the great advantages of galvanism applied by a rectal rheophore in cases of atony of the bowels.

Dr. H. KENNEDY replied. He said he did not use electricity in any of his cases, nor had he had any post-mortem examination. He saw no reason to dissociate the symptoms.

The PRESIDENT congratulated the Section on the success of its first session, which had now come to a close.

THE OPHTHALMOLOGICAL SOCIETY.

FRIDAY, JUNE 8.

R. BRUDENELL CARTER, F.R.C.S., in the Chair.

ADJOURNED DISCUSSION ON EYE SYMPTOMS IN SPINAL DISEASE.

Dr. WALTER EDMUNDS related a case in which the chief point of interest was the occurrence of complete temporary blindness. The patient was a man aged fifty-seven, who had had syphilis nine years before he came under observation; six years later he fell from his horse and hurt his neck; and three months after his first fall he again fell from his horse during, as he thought, an attack of unconsciousness. Soon after this, he one day suddenly became blind, without any giddiness, headache, vomiting, or loss of consciousness; the blindness remained for a quarter of an hour. At subsequent periods he had three attacks of vomiting. When he came under observation his gait was awkward, but not ataxic; the pupils did not react to light, and during accommodation the right reacted less than the left.

Mr. J. B. LAWFORD read some brief notes of seven cases of general paralysis of the insane, with optic atrophy:—1. A man with ataxic symptoms, loss of knee-jerk, and paralysis of the sphincter ani. Both discs were pale, especially the right; vessels natural. Later on he became blind, and the optic discs white. The case proved fatal, and microscopical examination of his cord revealed sclerosis of the posterior white columns. 2. A man, aged thirty-seven, who had been intemperate. Early in his illness he had had an epileptic fit. Later, there was contraction of the lower limbs, with exaggerated reflexes. He could see well; the right optic disc pale and atrophied. At a later stage both discs were found to be atrophied. 3. A man, aged forty-seven, who had atrophy of optic discs and rigid contraction of limbs; both discs were pale and white, with sharply cut edges. 4. A man, aged thirty (intemperate), whose reflexes were exaggerated. The left pupil was smaller than the right; both acted to accommodation, but badly to light. The limbs were contracted. Later on, the pupils became smaller, but equal; the right was more pale than the left. The patient was not actually blind. 5. A man, aged thirty-seven, who had a spastic gait, with exaggerated patellar and other reflexes; the ophthalmoscopic appearances were normal. Later, the left optic disc was found to be pale, the right very much so; the vessels were normal. 6. A woman, aged forty-seven (intemperate), who had been under observation for some time with general paralysis of the insane. The left eye had no perception of light; with the right she could just see her hand. There was advanced atrophy of both discs, and eventually she became quite blind. 7. A man, aged thirty-eight, single, and sober in his habits. There was a history of an unilateral epileptiform convulsion. The right eye was divergent, and that pupil larger than the left. Thus out of these seven cases it was seen that spinal symptoms were present in five. He had lately examined the eyes of twenty-two patients at

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Bethlem suffering from general paralysis, and found atrophy of the discs in three patients only (included in the above). In all of these there were symptoms of lateral sclerosis. He did not think that in this class of patient changes in the pupil had any such definite relation to spinal symptoms.

Mr. R. Marcus Gunn said that, in response to the question in the memoranda with regard to the proportion of cases of optic atrophy in which symptoms of locomotor ataxy could be observed, he might state that out of eighteen cases that had been admitted during his term of office at Moorfields, two undoubtedly had the disease, and in three others there was a suspicion of it. As to the date at which the atrophy supervened, out of nine cases of ataxy seven had optic atrophy, and in all it appeared during the first stage. In five of these cases the changes were more marked in the left eye, in two in the right eye, and in three cases the changes were known to have commenced in the left eye. Three instances of temporary arrest of the atrophy, and even of slight improvement, were given; and, in conclusion, Mr. Gunn related the case of a woman who, after an attack of intermittent fever, became the subject of widespread paralysis which lasted for two years. She also had exophthalmic goître. About a year ago it was noticed that the pupils were small, and did not act to light, but acted to accommodation; that there was paresis of the external rectus, slight ptosis on the left side, and that the knee-jerks were diminished. Recently it was ascertained that the paralysis of the ocular muscles had disappeared, that the pupils acted to light and not to accommodation, and that the knee-jerk was absent.

Dr. Mahomed gave the following history of the two patients whom he had shown at the meeting on the previous evening:—The first patient was a man who had not restrained himself either in the matter of drink, smoking, or sexual indulgence. In June, 1882, he had commenced to suffer from pain in his head, which came on suddenly, and about the same time he noticed increased frequency of micturition and increased thirst. There was atrophy of both optic discs, the patient had what he called "electric" pains in both arms and legs; he had never had any fits; his knee reflex was rather exaggerated; there was no ankle-clonus, no want of co-ordination, no paralysis, and no anæsthesia. The patient was blind with the right eye and with the inner third of the field of the left eye. The polyuria varied much; at no time was any sugar found. The pulse was firm; the tension of his arteries high. The pupils reacted to light. His other patient was a man with early symptoms of ataxy. He had had vomiting, with exacerbations like gastric crises, except that the vomiting continued for three months, and that there was more pain than was usual in that state. He had the Argyll-Robertson pupil, and atrophy of both discs. There was no incoördination. There was loss of sensation on the backs of both arms, and paralysis of the external rectus. Dr. Mahomed proceeded to express his admiration of the paper read on the previous evening by Dr. Gowers, as well as of the previous work in this direction done by him. He thought that there was a strong tendency nowadays to overlook the important principle of the continuity of structure and function of the whole nervous system. In this respect it closely resembled the circulatory system. He believed that disorder of function may be widely diffused, and lead to changes throughout the system. It should be borne in mind that the optic nerve—the only one which could be studied in man during life—was the most sensitive portion of the whole nervous system, and that the changes which could be seen taking place in it might be going on through the rest of the body at the same time to a less extent; the same remarks would apply to the ocular reflexes. He thought that individual symptoms derived their importance from clinical observation. Thus the knee-jerk was absent in other diseases besides in locomotor ataxy, and even in about 2 per cent. of healthy persons. Ankle-clonus certainly occurred in hysterical paralysis, several instances of which he had known get quite well. Nystagmus was a symptom the cause of which was but little known, and he instanced the case of a girl with a very neurotic family history who had nystagmus, as had also two of her brothers. He believed that atrophy of the optic nerve might be a part of a local or general change. Symptoms might be due to varied causes besides those of central disorder; they might mean functional disturbance, though no doubt they most frequently depended upon grave organic disease.

Dr. Seymour J. Sharkey contributed an account of three cases. The first was that of a woman who, at the age of twenty-nine, began to suffer from giddiness, thickness of speech, trembling (on the right side chiefly), and severe headache. Three months later, the case came under the care of Mr. Hulke, at the Royal London Ophthalmic Hospital, for optic neuritis and defective sight in the left eye. She came under the care of Dr. Sharkey when thirty-four years of age; there was then incomplete atrophy of both optic discs, and distinct symptoms of disseminated sclerosis. The second case was that of a man who came under care when twenty-two years of age. The right disc was then hazy and slightly œdematous. A year later, he was admitted into St. Thomas's Hospital, under the care of Mr. Nettleship; and the right disc was found to have passed into a state of grey atrophy. The left disc could be only imperfectly seen, owing to old corneal opacities. Three years later, when twenty-six years old, he came under Dr. Sharkey's care with characteristic symptoms of disseminated sclerosis. The third case was that of a man aged forty-two, who presented symptoms of the same disease. These symptoms were said to have been present for about fifteen years, but his sight had only been failing for about twelve months. His vision was $\frac{20}{70}$; and the discs were slightly pale and misty all over, the borders being nowhere quite clear. Vision subsequently slightly improved.

Mr. Nettleship made some observations on some of the points relating to optic atrophy in Dr. Gowers's address. He thought there were clinical reasons for believing that optic nerve changes in locomotor ataxy began at the disc, not in the trunk of the nerve or optic tract; he had seen no unequivocal cases of spinal disease in which sight failed before ophthalmoscopic changes became apparent, whilst it was commonly observed, on the other hand, that the appearances of atrophy were more pronounced than the condition of the sight would lead us to expect. Of seventy-two patients under his care with progressive atrophy of the optic nerves, thirty-six were undoubtedly tabetic, eight had symptoms of mixed spinal and cerebral disease (allied to general paralysis), seven had some other forms of chronic spinal disease not ataxy, eight had, besides optic atrophy, reflex iridoplegia ("spinal pupils"), but no other symptoms of disease of cord or brain; in the remaining thirteen there was no proof of disease of the nervous system, but in some of these the notes were incomplete. He had been struck with the rarity of the complete absence of spinal symptoms in progressive atrophy. Alluding to the mode of failure of vision in progressive atrophy, he pointed out that the field of vision is often invaded in a precisely symmetrical manner in the two eyes, although, at any given time, one eye is usually worse than the other. He had only seen two or three cases in which one eye became quite blind before the other began to fail.

Mr. Brudenell Carter had not intended to take any part in the discussion, but he thought that there was one point of great practical importance in connexion with the subject, and that was, when a patient had optic atrophy to know to what class it belonged, and what would be the course of the disease. He had always looked upon the presence of the knee reflex as an argument against spinal disease, and as justifying a hopeful prognosis, but it seemed doubtful now whether so much reliance ought to be placed upon this test, and he hoped to get some definite information in regard to the matter.

Mr. McHardy briefly alluded to the case of a young woman under his care who had disseminated sclerosis, and whose right eye was perfectly natural, whilst the left showed pigmentary retinitis and atrophy of the disc.

Dr. Gowers, in reply, thanked the members for the way in which they had received his paper. Mr. Gunn's case was, he thought, of great interest, but at the same time of great complexity; but it was valuable because the loss of reflex action to light preceded the loss of knee-jerk. He fully admitted the great importance of the general principles laid down by Dr. Mahomed, but at the same time he had always been much struck with the way in which local diseases affected the nervous centres; and he regarded the nervous system as containing one tissue but many organs, and instanced ataxy as an essentially local disease. He thought that Dr. Mahomed's first case could hardly be diagnosed, the symptoms were so complex. The pains were the only evidence of tabes. The

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polyuria reminded him of a case where a tumour was found just above the chiasma. There might be such a tumour in this case, but it would not explain the headache. The fact that the pains in the limbs had lasted so long, and still the knee-jerk was present, was strongly against the diagnosis of tabes. With regard to the absence of knee-jerk, he wished to say that for the last five years he had never failed to find it present where no nervous symptoms existed; complete relaxation of the flexor tendons was absolutely essential. He had one caution to give in regard to testing the pupils to light, and that was to take care that the patient did not use his accommodation. Dr. Sharkey's cases of disseminated sclerosis were very interesting. He thought sight might fail from a patch of sclerosis in the course of the nerve, of which the disc revealed no signs. The case that Mr. Nettleship had referred to as an instance of optic atrophy coming on in connexion with acute spinal disease was too complex to be fairly considered. Probably the optic nerve symptom and the spinal symptoms were both due to the same cause.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 12.

JOHN MARSHALL, F.R.S., President, in the Chair.

THE final meeting of the session was held as above. The papers were of varied interest, but no great amount of discussion followed.

Among the books presented to the Society the Secretary announced that Sir Arthur Watson, on the suggestion of Dr. George Johnson, the executor, had presented such books from the collection of his late father, Sir Thomas Watson as were not already in the Society's library. Apart from their value as additions, these books will possess a special interest as having been the property of one of the most leading physicians of his day and generation.

Papers by Dr. Thin, Dr. Colcott Fox, and Sir Henry Thompson were then read.

ON THE BACILLUS OF LEPROSY.(a) BY GEORGE THIN, M.D.

A bacillus having been found in leprous tissues in Norwegian leprosy by Hansen, in the leprosy of Southern Europe by Cornil and Suchard, and Majocchi and Pellizzari, and in a leper from South America by Kœbner, the author made a series of investigations with the object of extending the inquiry regarding the presence of the parasite to the leprosy of other parts of the world. He has found it in three cases of Chinese leprosy in material supplied him for the investigation by Dr. Manson of Amoy, in West Indian leprosy in tubercles sent him by Dr. Hillis of Demerara, and in the epiglottis of a leper who died in New South Wales, the larynx having been sent him by Dr. Maclaurin of Sydney. He has also observed bacilli in the freshly drawn blood of a leper patient from Hindostan, which evidently had escaped from a ruptured lepra cell that was present in the preparation. In all the cases examined by him the size and arrangement of the bacilli were uniform. In the leprous infiltration of a leper tubercle the bacilli are in such numbers that under a low power the part seems to be filled with them. The author is disposed to believe that in the skin the bacilli are always contained in cells. They are mostly seen either in the lepra cells or arranged in groups which correspond to cells that in the course of preparation have ceased to be visible. The smallest cells of the leprous infiltration do not exceed white blood-corpuscles in size, but even the smallest of them contain bacilli. The author found in one section small cells, containing bacilli, distributed singly through the prickle-cell layer of the unbroken rete mucosum. He believes them to be white blood-corpuscles carrying bacilli, the corpuscles having migrated into the rete. This preparation shows that the statement which has been made by some authors, that the bacilli are never found in the epidermis so long as the membrane is entire, is not of universal application. He had also found in a preparation a lymphatic vessel in the papillary layer of the skin, with a lymph corpuscle containing bacilli lying in the lumen of the vessel. On the border of the vessel there were isolated single groups of bacilli, corresponding to lepra cells. The part of the cutis in which the vessel was found was free from leprous infiltration, the infiltration of the tubercle being situated more deeply in the corium. The facts that cells have been found in the epidermis containing bacilli, and that a lymph corpuscle containing bacilli has been found in a lymphatic vessel, suggest that these corpuscles are at least one of the media by which the parasite is conveyed from one part of the body to another. The site of predilection of the parasite in the skin is the deeper part of the corium, the part which is least richly provided with blood-vessels. The paper is illustrated by drawings accurately drawn to scale, showing the bacilli in the leprous tissues. The bacillus lepræ is shown by these drawings to be the same in size as the bacillus of tubercle, of which, for the sake of comparison, drawings were also given; all the drawings being made by Mr. Thurston. The beaded appearance of the tubercle bacillus (suggestive of spore formation) is not found in the bacillus lepræ. Drawings made to the same scale of bacilli from cold mutton infusion and from a section of a putrid cornea are also given. These organisms are much thicker than the bacilli of leprosy, but do not materially differ from them in length. As exceptional forms, rods of double the ordinary length were observed. In these cases, although the sheath was continuous, breaks in the protoplasm showed the tendency in the organisms to break up into rods of a definite size. After the author had sent his paper to the Secretary of the Society, he had examined the tissues in a case of leprosy, in which the disease was acquired in Hindostan. Bacilli were found in large numbers, and having the same form, size, and containing properties as those found in the other cases examined. He had also found bacilli in the blood-vessels in two cases. He had further, by improved results in preparation, been able to easily distinguish in the bacilli in leprous tissues a beaded appearance indicative of spore formation, identical in this respect with the similar appearance observed in tubercle bacilli. The observation of this beaded appearance establishes a point in favour of the morphological similarity between tubercle and leper bacilli. They are thus the same in size and form, they both contain spores, and they both retain fuchsin stain after the action of dilute nitric acid has bleached the tissues and elements amongst which they lie.

The PRESIDENT remarked on the great importance of the subject, and the interest attaching to the fact that the same kind of micro-organism was found in the disease in different parts of the world. It would appear from the facts adduced that the organisms were the special part of the disease, and the term "lepra cell" was, therefore, not correct: the cells were ordinary cells changed by the organisms, and in no other sense special.

Dr. SOUTHEY had served on a committee appointed by the Clinical Society to inquire into this subject. He had examined Dr. Thin's specimens, and thought that the presence and specificity of the bacilli were satisfactorily demonstrated. Some of the bacilli had appeared to him to be free in the tissue, though the majority of them were found in the so-called "lepra cells." In the former case they had burst their way through and got into the surrounding tissue; and this appeared to him to explain the manner in which the disease spread.

Dr. THIN, in reply, especially drew attention to the relative sizes of different kinds of bacilli. (The diagrams shown were drawn to scale.) Size, by some authors, was considered as diagnostic. He himself had come to the conclusion that all the varieties were of much the same size. Something depended on the length of time during which the tissue was kept in alcohol. In preparing the slides it was very important to have perfectly pure dyes. Hence it mattered little what colour was used.

ON URTICARIA PIGMENTOSA. BY THOMAS COLCOTT FOX, M.B., M.A.

The object of the paper is (1) to place on record an additional case of this rare affection; (2) to trace the history of three cases, originally described by Dr. Tilbury Fox, over a period of about ten years; (3) to describe the result of a microscopical examination of sections; and (4) to present a tabular summary of the nineteen cases now on record, and review the nature and course of the disease. The history of the three cases described by Dr. Tilbury Fox shows that the

(a) The research which is reported on in this paper, forms part of a series of investigations on the parasites of the human skin, towards which grant has been made by the Scientific Grants Committee of the British Medical Association.

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special eruption is at the present date no longer evolved, although ordinary urticaria is occasionally seen in two of the cases, and some old stains in all three are in process of dying away. The microscopical examination of sections clearly proves, in the opinion of the author, that the lesion is of an urticarial nature, and the appearances are those of a chronic localised œdema. The clinical evidence also seems overpowering in favour of the view that the affection is a very chronic urticaria commencing in infancy, and peculiar in that the wheals are long, persistent, and not evanescent, and that there is a special tendency to pigmentation of the wheals. This pigmentation is apparently derived from two sources, viz., in some measure from the breaking down of escaped red corpuscles so commonly seen in the class of erythemata, and also from some special source connected possibly with hepatic derangement.

Dr. THIN remarked that he had examined a case of Mr. Baker's. He did not consider it a lupus, but rather as allied to granulation tissue. The new growth consisted essentially of a cell infiltration, with destruction of tissue below the papillary layer. Duhring considers the cases to consist of two classes—one with and one without cell infiltration; the one allied to urticaria, the other not so.

TWELVE CASES OF TUMOUR OF THE BLADDER (TEN IN THE MALE AND TWO IN THE FEMALE), IN ALL OF WHICH AN OPERATION HAS BEEN PERFORMED FOR THE REMOVAL OF THE GROWTH; WITH THEIR HISTORIES AND THE RESULTS. BY SIR HENRY THOMPSON.

The object of this paper is to give the author's experience of the surgical treatment of tumours of the bladder. He presented an account of five cases to the Society in January last, since which time he has operated on seven additional cases. The history, treatment, and histological examination of each of these are given in detail. The entire group is, therefore, now considered as a whole; and the facts which they present are discussed with a view to the lessons they may offer for our guidance in the future. Most of the tumours are presented for inspection, and microscopic preparations from some of them are also shown.

Table of Cases of Operation for Vesical Tumour, by Sir Henry Thompson.

No.	Case.	Age	Duration of symptoms.	Earliest sign observed.	Result of urine examination.	Complication with calculus.	Nature of tumour.	Result of operation.
1	T. R.	29	3½ years	Blood in the urine	Not examined, no growth being expected; the operation was made for a supposed encysted calculus	A small oxalate of lime and phosphatic calculus crushed	Papilloma	Living and well.
2	Mrs. F.	30	6 „	Ditto...	Ditto...	...	Papilloma villous (Mr. S. Boyd)	Living and well.
3	B. G.	46	1 year	Frequent micturition; blood much later	Much large cell-growth; various forms	...	Fibro-sarcoma (?) (Mr. S. Boyd)	Died few days after operation; no autopsy; probably some giving way of bladder at base of tumour.
4	Dr. M.	52	5 years	Blood in the urine	Shreds formed of fusiform cells	...	Villous papilloma (Dr. H. Gibbes)	Well nearly six months; recently a second operation; since which no bleeding.
5	E.K.G.	67	6 „	Ditto...	Ditto...	A small uric acid calculus crushed	Papilloma, resembling structure of "soft warts" (Mr. Shattock)	Returned to the Cape; probable reappearance of the tumour.
6	T. F.	67	3 „	Ditto...	Numerous fusiform cells and fibres	...	Villous epithelioma (Dr. H. Gibbes)	Recent signs of reappearance of tumour.
7	W. W.	63	7 „	Ditto...	Well-marked villous growth	...	Villous papilloma (do.)	Living and well.
8	J. M.	64	1 year	Ditto...	Never found any characteristic *débris* in urine	...	Composed of normal bladder tissue with villous structure added; no structure resembling malignant growth was found	Died two months after with secondary malignant growth in thigh.
9	Mrs. O'B.	65	7 years	Ditto...	Large spindle-shaped cells	Calculus in left kidney, large; both kidneys diseased; pyelitis	Villous papilloma (Mr. Eve) ...	Died three days after with suppression of urine.
10	J. S.	53	2½ „	Frequent and painful micturition; blood at later stage	No characteristic *débris* found	...	Villous cancer (do.)	Died few days after operation.
11	W. D.	65	1 year	Blood later ...	Numerous long cells and fibres	...	Tissues like those of the walls of the bladder, and some villous growth in small quantity on surface (Dr. H. Gibbes)	Died fourteen days after operation, of exhaustion.
12	C. C. S.	56	2 years	Pain first; blood later	Nothing found ...	...	Tumour not removable; a portion taken away is regarded as resembling a "hypertrophy of the submucous coat of the bladder; no villous growth is present (Dr. H. Gibbes)	Living; symptoms relieved at present—probably from drainage of bladder.

Total result—7 recoveries, more or less partial; and 5 deaths.

Dr. PAVY was pleased to think that a class of very disappointing cases was at last being brought within the reach of surgical interference. Speaking from the physician's standpoint—for these cases frequently came to the physician—he had experience of the inefficacy of styptics and other medicinal remedies, and he regarded the recommendations which he had just heard as most important.

Mr. BERKELEY HILL, since the last discussion, had operated on three cases, with cure in one case, great relief in a second, while the third had proved fatal. He was cheered by hearing that Sir H. Thompson did not consider that entire removal was essential to success, for in his cases he was sure that he had not removed all. Perhaps with the new instruments shown this evening a more complete removal would have been possible. But it was very easy, unless great care was exercised, to get hold of the bladder wall and excise a piece of that.

Mr. BARKER had explored a case believing a tumour to be present, but had not found one. There had since been cystitis, and the man's condition remained unsatisfactory.

Mr. MORGAN referred to a case in which he had operated. The patient was relieved for a while; the growth, however, recurred, and death resulted from hæmorrhage. The condition of the bladder, as found after death, showed plainly that radical cure would have been impossible. He should like to know Sir Henry Thompson's treatment of cases in which the papillomatous condition was extensive and not very prominent; and he further asked whether calculous deposit was commonly passed per urethram in these cases.

Mr. ROGER WILLIAMS briefly alluded to two cases, in one of which an exploration had detected a tumour which was too large for removal, and in the other a sarcomatous growth had been found; in the latter case there was a constant but slow hæmorrhage which was weakening the patient considerably.

The PRESIDENT asked concerning the diagnosis of such cases previous to incision and exploration.

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Sir H. THOMPSON replied. It was a growing conviction, he said, that the cases are more numerous than was formerly thought, notwithstanding the comparative fewness of museum specimens. We ought not, he thought, to open the bladder for malignant disease; yet the natural outcome is death, and, although in a few cases you shorten the life of the doomed, yet the other cases are a clear gain. What has become, he asked, of these cases in the past? Most of them had been treated by the physicians in the first place; then sent on to the surgeon, who, not finding a stone in the bladder, had referred them back to the physician. They had gone back to the country, had gradually died of hæmaturia, and there was neither record nor post-mortem. Exclusive of malignant cases, he thought about one-half of the cases would be relieved by operation. An exploratory incision was useful in order to make a diagnosis; he could not recommend the application of strong acids or other caustics through such an opening. He never attempted to insert his finger at the same time as the forceps; his object was to avoid cystotomy as being more dangerous. A kind of sound was shown which was intended to take the place of the finger. It was well, in the first instance, to clearly locate the growth with the finger, then withdraw it, and pass in the forceps afterwards.

A DEMONSTRATION OF A METHOD OF OBTAINING GRAPHIC RECORDS OF THE MOVEMENTS OF THE FINGERS AND UPPER EXTREMITY, ETC., AND ALSO FOR ENUMERATING SUCH MOVEMENTS. BY DR. FRANCIS WARNER.

The apparatus consists of—(1) a set of motor tubes to be attached to the hand; (2) a frame supporting recording air tambours; (3) a new form of electrical contact-making tambour; (4) a new and simple form of counting machine, worked by an electrical current interrupted by movements of the contact-making-tambour, thus automatically registering the finger movements. Tracings are shown of the spontaneous movements of infants, and the effect of light and sound upon such movements; indications of the time of an infant's sucking movements; ankle clonus; movements of sternum; movements of chorea; athetosis, senile tremor; movements of limbs due to pulsation.

Dr. THOMAS BARLOW showed a case of Osteitis Deformans in a woman.

The Society then adjourned.

THE ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, MAY 7.

JOSEPH WALKER, M.D., President, in the Chair.

AMONG the casual communications were two cases brought forward by Mr. F. CANTON and one by Mr. ACKERY, in which a horizontally directed wisdom tooth had caused partial absorption of the roots of the second molar in front of it. In none of the cases had this condition of things given rise to pain; the discovery being made accidentally.

The paper of the evening was read by Dr. DYCE DUCKWORTH on the "Characters of the Teeth in Persons of the Arthritic Diathesis." Dr. Duckworth began by saying that although it was the fashion of the present day to disbelieve in diatheses, he was himself a firm believer in their existence. He believed that there existed an "arthritic" habit of body, or diathesis, and that this comprised at least two branches—the rheumatic, and the gouty. These were essentially distinct; one would not produce the other, though they might be mixed. The rheumatic diathesis was more widely spread than the gouty, but the latter was most common in the South of England, and especially in London. The result of a somewhat extended series of observations, made with no other view than to record exact facts with reference to this disease, had convinced him that the teeth of the gouty were, as a rule, remarkably strong, well enamelled, and enduring, and also remarkably free from decay. On this point he differed entirely from the opinions expressed by Dr. A. Carpenter in a paper recently read before the Society. Dr. Carpenter's statement that gouty people were specially prone to caries might be true of those who lived carelessly and intemperately, but he held it to be an undoubted fact that persons who inherited gout, but were themselves temperate—of whom there were many—had generally strong and sound teeth. Dr. Duckworth then referred to the tendency which existed in persons of gouty inheritance for the teeth to be worn down, so as sometimes even to open the pulp cavity; he had never heard this satisfactorily explained. Another peculiarity of such people was the tendency to shed perfectly sound teeth, the loss being due to a process of alveolar absorption. Gouty people were, no doubt, liable to attacks of alveolar periostitis, but he knew of no careful observations confirming Dr. Carpenter's statement that it was due to a deposit of lithate of soda in the circumdental membrane. The characters of the teeth in persons of the rheumatic habit of body were certainly less distinctive than those which could be noted in the gouty, but, as a rule, such persons had strong, well-enamelled teeth; the modifying influence of a mixed diathesis, especially the existence of a strumous taint, would account for most of the exceptions to this rule. Attention had been called to a remarkable exception to the rule that the teeth of persons of the arthritic diathesis were large and regular. This was a tendency for one or more of the lower incisors to be pushed forward—an irregularity to which Dr. Laycock, of Edinburgh, had given the name of "buck teeth." It might not appear till middle life. He was quite at a loss to suggest any explanation for it, and could only call attention to it as a well-observed fact. In conclusion, Dr. Duckworth complimented the dental profession on the progress it had made in its endeavours to repair the ills consequent on habits of luxury. It was a great thing that the study of the pathology of the teeth was now founded on a thorough knowledge of their anatomy and physiology; it would be a further important step when the great doctrines of diathetic predisposition and of scientific physiognomy were carefully worked out and applied to practice. He hoped that his communication might have contributed something to this end, or might at least enlist the interest of dental surgeons in the subject.

An interesting discussion followed.

OBITUARY.

BENJAMIN BELL, F.R.C.S. EDIN.

BY the death of Mr. Benjamin Bell, Edinburgh has lost one who was greatly esteemed by the profession, and who was beloved by a large circle of friends. Though his health had been manifestly failing since his wife's death about a year ago, nothing serious was apprehended till some few weeks before his death, which happened on the 13th inst. Born in Edinburgh in 1810, he was the son and grandson of distinguished surgeons. He became a Licentiate of the Royal College of Surgeons of Edinburgh in 1834, was elected a Fellow in 1835, and President in 1864. He was also a Member of the Royal College of Surgeons of England. Although engaged in general practice, his liking was always for the surgical branch of his profession. Jointly with Mr. Robert Hamilton he established in 1834 the Edinburgh Eye Infirmary, and, as Surgeon to the institution, he always took an active interest in its welfare. He was also Surgeon to George Watson's Hospital, and to the Asylum for the Blind. Mr. Bell was also one of the founders of the Edinburgh Medical Missionary Society, and interested himself warmly in its affairs all his life. Besides contributing largely to the *Edinburgh Medical Journal*, he published "The Life, Character, and Writings of Surgeon Benjamin Bell" (his grandfather), "The Life of Robert Paul, Banker," and a memoir of his relative, Lieutenant Irving, who perished in the Franklin Expedition, and whose remains were lately recovered and interred in the Dean Cemetery.

A member of the Free Church of Scotland, he took a leading part in many of the debates at its annual assemblies. In the well-known Robertson Smith controversy he showed that he possessed the courage which proceeds from conviction, and in supporting the Professor he did all he could to further every inquiry after truth. He was beloved by all who came in contact with him, for although his enthusiasm led him to take a prominent part on one or other side of the many questions in which he interested himself, his gentle and upright nature and his sympathy with his fellow man completely shielded him from making enemies. He leaves a large family of sons and daughters.

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MEDICAL NEWS.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 14:—

Gardiner, Thomas Frederick, Watford, Herts.
Hill, Hugh Gardiner, Coton Hill, Stafford.
Spencer, Herbert Ritchie, Atherstone, Warwickshire.
Wigmore, Frederic Henry, Eccleston-street, Chester-square.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

BURNET, ROBERT WILLIAM, M.D., C.M.—Pathologist to the Chelsea Hospital for Women.

FENTON-JONES, WILLIAM HUGH, M.D.—Anæsthetist to the Chelsea Hospital for Women.

HARPER, JAMES, M.B. Lond.—Resident Medical Officer to the Chelsea Hospital for Women.

HORROCKS, PETER, M.D. Lond., B.Sc.—Assistant-Physician to the Chelsea Hospital for Women.

ISAMBARD OWEN, M.D. Cantab.—Assistant-Physician to St. George's Hospital, *vice* H. Watney, M.D., resigned.

MACKERN, JOHN, B.A., M.B. Cantab.—Assistant-Physician to the Chelsea Hospital for Women.

TRAVERS, WILLIAM, M.D.—Assistant-Physician to the Chelsea Hospital for Women.

VINCENT-DICKINSON, THOMAS, M.D. Lond.—Assistant-Physician to the Chelsea Hospital for Women.

WALLER, AUGUSTUS, M.D.—Lecturer on Physiology at the London School of Medicine for Women, *vice* E. A. Schäfer, F.R.S., Jodrell Professor of Physiology, resigned.

DEATHS.

BELL, BENJAMIN, F.R.C.S., at 18, Coates-crescent, Edinburgh, on June 13.

BENNETT, WILLIAM ROBERT, M.D., Fleet Surgeon Royal Navy, at 31, Springfield-road, St. John's-wood, on June 14, aged 47.

BROOKS, D'OYLEY, M.R.C.S., at Henley-on-Thames, on June 19.

GUNNING, JOHN EDMUND, M.R.C.S., at 4, Wendover-villas, Tooting, on June 13, aged 48.

NELSON, THOMAS, M.D., R.N., Inspector-General of Hospitals and Fleets, at 12, The Circus, Greenwich, on June 14, aged 66.

PICTON, JOHN, M.D., of Isoced, Carmarthenshire, at 36, Carlyle-square, S.W., on June 19.

SHARPE, ALEXANDER BARCLAY, M.D., M.R.C.S., L.S.A., at Knight's Hill, Lower Norwood, on June 19, aged 58.

SHORTHOUSE, JOSEPH HENRY, M.D., LL.D., at Croydon, on June 13.

SULLIVAN, JOHN L., M.D., M.R.C.P., at 10, Elsham-road, Holland Park, Kensington, W., on June 9.

WHITELEY, GEORGE B., M.D., at Aix-les-Bains, on June 14, aged 75.

WOODFORD, C. T. O., M.D., F.R.C.S., at Coonoor, India, on June 19, aged 60.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ALVERSTOKE MEDICAL BENEFIT SOCIETY.—Medical Practitioner. Salary £300 per annum, open to increase. Candidates must be duly qualified. Private practice allowed. Applications, with copies of testimonials, to be sent to the Secretary, Mr. John Ellicott, 10, Shaftesbury-terrace, Gosport, not later than June 23.

LONDON LOCK HOSPITAL, MALE AND OUT-PATIENT DEPARTMENT, 91, DEAN-STREET, SOHO, W.—House-Surgeon. Salary £50 per annum. Applications, with testimonials, to be sent in on or before June 23.

ROYAL HANTS COUNTY HOSPITAL, WINCHESTER.—House-Surgeon. Salary £100 per annum, with board and lodging. Candidates must possess a diploma from the Royal College of Surgeons in England, or the surgical diploma of a Royal College or a University in England, Scotland, or Ireland, and also a degree in medicine from one of the said universities, or a licence from the Society of Apothecaries; they will not be eligible without unexceptionable testimonials as to moral character. Applications, with testimonials, to be sent to the Secretary, at the Hospital, on or before July 4.

ST. PANCRAS AND NORTHERN DISPENSARY.—Physician. (*For particulars see Advertisement.*)

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon (non-resident). Salary £200 per annum. Candidates must be doubly qualified. Applications, in writing, stating age, with recent testimonials (or copies), to be sent to the Secretary, not later than July 14.

WESTERN DISPENSARY, ROCHESTER-ROW, WESTMINSTER, S.W.—Consulting Accoucheur. Candidates must be either Doctors of Medicine of a British University, or Members of the Royal College of Physicians. Applications, addressed to the Secretary, from whom all information can be obtained, will be received up to June 30.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, WOLVERHAMPTON.—House-Physician. Salary £100 a year, with board, lodging, and washing. Candidates must be graduates of a British university, or be possessed of such medical qualifications as are satisfactory to the Medical Committee and the Weekly Board. Testimonials, sealed, and addressed to the Chairman of the Medical Committee, must be received on or before June 25.

UNION AND PAROCHIAL MEDICAL SERVICE.

APPOINTMENTS.

Axbridge Union.—Frederick St. John Kemm, L.R.C.P. Edin., L.R.C.S. Edin., L.S.A., to the Second District.

Birmingham Parish.—Walter T. Williams, M.R.C.S. Eng., L.S.A., as Assistant Medical Officer at the Workhouse.

Brentford Union.—James M. Ferguson, B.M. and M.C. Edin., to the Eighth District.

Cannock Union.—Wm. M. Drummond, L.R.C.P. and L.R.C.S. Edin., to the Hednesford District.

Crickhowell Union.—George H. Browne, L.R.C.P. Edin., L.F.P.&S. Glasg., L.A.H. Ire., to the Hill District.

Sheffield Union.—Charles F. Coombe, M.R.C.S. Eng., L.R.C.P. Edin., as Assistant Medical Officer at the Workhouse.

Wandsworth and Clapham Union.—Samuel E. Bligh, M.B., C.M. Edin., to the Tooting Graveney District.

Witney Union.—Charles D. Batt, M.B. Lond., M.R.C.S. Eng., L.S.A., to the Witney District and the Workhouse.

SCIENCE OF HYGIENE.—The Council of the Ascham Society have received a letter from the Science and Art Department, stating that the Lords of the Committee of Council in Education having had under consideration the resolution of the Ascham Society, urging the addition of hygiene to the list of sciences in which grants are made by the Department, have sanctioned the addition of this subject, and that a syllabus will shortly be issued to science schools and classes.

LONDON SANITARY PROTECTION ASSOCIATION.—At a meeting of the Council of this Association, held at 1, Adam-street, His Grace the Duke of Argyll was unanimously elected President, in place of Professor Huxley, who resigns the office of President, but retains his seat at the Board; and the Hon. and Rev. C. Carr Glynn, Vicar of Kensington, was unanimously elected a member of the Council. We are informed that the Association now numbers close on 700 members.

APPOINTMENTS FOR THE WEEK.

June 23. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

25. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Prof. Jonathan Hutchinson, "On certain Diseases of the Tongue."

26. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

ANTHROPOLOGICAL INSTITUTE (4, St. Martin's-place, W.C.), 8 p.m. Mr. R. B. White, "Notes upon the Aboriginal Races of the North-Western Provinces of South America." J. Park Harrison, M.A., "On the Relative Length of the First Three Toes of the Human Foot." Worthington G. Smith, F.L.S., "On Palæolithic Implements from Leyton and Walthamstow, London."

27. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON, 4 p.m. Dr. J. Kingston Fowler, "On Murmurs not due to Valvular Disease of the Heart."

28. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

PARKES MUSEUM OF HYGIENE, 8 p.m. Mr. R. C. Robins, F.S.A., F.R.I.B.A., "On Hospital Construction."

29. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, June 16, 1883.

BIRTHS.

Births of Boys, 1275; Girls, 1202; Total, 2477.
Corrected weekly average in the 10 years 1873-82, 2547·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	658	621	1279
Weekly average of the ten years 1873-82, corrected to increased population ...	734·1	680·8	1404·9
Deaths of people aged 80 and upwards ...	...	...	29

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	6	1	2	3	...	1	...	4
North ...	905947	...	10	5	1	4	...	5	...	4
Central ...	282238	...	7	1	3	2	...	...	...	1
East	692738	...	13	9	1	3	...	...	...	5
South	1265927	3	23	11	8	10	1	5	...	11
Total	3816483	3	59	27	15	22	1	11	...	25

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·924 in.
Mean temperature	59·1°
Highest point of thermometer	77·a°
Lowest point of thermometer	41·5°
Mean dew-point temperature	50·a°
General direction of wind	Variable.
Whole amount of rain in the week	0·17 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 16, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending June 16.	Deaths Registered during the week ending June 16.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2477	1279	16·9	77·2	41·5	58·1	14·5	0·17	0·43
Brighton	111262	60	40	18·8	74·0	43·3	57·0	13·9	0·00	0·00
Portsmouth ...	131478	84	47	18·7	...	...	...	...	...	...
Norwich	89612	61	21	12·2	...	...	...	...	...	...
Plymouth	74977	43	33	23·0	73·3	44·0	58·0	14·4	0·18	0·46
Bristol	212779	132	73	17·9	71·5	43·2	55·4	13·0	1·16	2·95
Wolverhampton	77557	66	32	21·5	69·9	40·7	54·3	12·3	1·18	3·00
Birmingham ...	414946	242	131	16·5	...	...	...	...	...	...
Leicester	129483	103	37	14·9	...	...	...	...	...	...
Nottingham ...	199349	175	77	20·2	76·8	43·4	56·8	13·78	1·56	3·96
Derby	85574	55	31	18·9	...	...	...	...	...	...
Birkenhead ...	88700	64	35	20·6	...	...	...	...	...	...
Liverpool	566753	413	255	23·5	64·0	46·2	53·3	11·84	0·34	0·81
Bolton	107862	60	34	16·4	69·5	41·1	53·0	11·67	0·83	2·08
Manchester ...	339252	247	169	26·0	...	...	...	...	...	...
Salford	190465	140	69	18·9	...	...	...	...	...	...
Oldham	119071	85	37	16·2	...	...	...	...	...	...
Blackburn	108460	91	48	23·1	...	...	...	...	...	...
Preston	98564	67	49	25·9	...	...	...	...	...	...
Huddersfield ...	84701	39	34	20·9	...	...	...	...	...	...
Halifax	75591	49	18	12·4	...	...	...	...	...	...
Bradford	204807	118	61	15·5	70·8	45·4	54·8	12·56	0·40	1·02
Leeds	321611	200	124	20·1	72·0	48·0	55·7	13·17	0·29	0·74
Sheffield	295497	214	114	20·1	72·0	46·5	54·2	12·33	0·83	2·11
Hull	176296	125	64	18·9	78·0	45·0	63·0	17·22	0·50	1·27
Sunderland ...	121117	105	61	26·3	69·0	45·0	53·2	11·78	0·55	1·40
Newcastle	149464	98	76	26·5	...	...	...	...	...	...
Cardiff	90033	64	34	19·7	...	...	...	...	...	...
For 28 towns ...	8692975	5677	3083	18·7	78·0	40·7	55·9	13·28	0·61	1·55
Edinburgh	235946	134	76	16·8	61·9	41·4	53·6	12·01	0·07	0·18
Glasgow	515589	387	302	30·6	65·0	40·0	53·7	12·06	0·20	0·51
Dublin	349·85	228	157	23·4	68·0	41·9	55·2	12·89	0·17	0·43

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·92 in. The highest reading was 30·22 in. on Wednesday morning, and the lowest 29·59 in. on Friday evening.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Cheops.—Consult Pettigrew's work on the subject. The embalming of our Henry the First at Rouen, preparatory to being sent to England, was a very barbarous affair: "the body was sliced, and powdered with much salt, and then wrapped in a bull's hide."

A Medical Practice: Alleged Misrepresentation of its Value.—In the Queen's Bench Division, the action Weaver *v.* Simpson was to recover damages in consequence of the plaintiff having been induced to buy a medical practice by a misrepresentation of its value. Both parties to the suit were medical men. The plaintiff down to 1882 had practised in the country, and the defendant for nineteen or twenty years had carried on a practice in the Hackney-road. In 1882, in consequence of the state of his wife's health, he placed his business in the hands of a medical agent for sale. The plaintiff purchased it for £1500, of which £300 was for the lease of the house. His case was that he made the purchase upon a representation that the "takings" for the previous year were £1250, and the average for the three years £1300 a year, but that subsequent investigation showed the average "takings" for the three years were only £982. The defence was that previous to this transaction a Dr. Selous thought of buying the business, and employed an accountant and medical valuer to examine the books—who reported as the result, "I am of opinion that the 'takings' may be fairly taken at £1250 per annum." This was the only representation that was made to the plaintiff. It was stated that the difference between the figures arose from the plaintiff's accountant having seen only a portion of the books. In the cross-examination of Dr. Selous's agent, it transpired that his conclusion was founded not only upon the books, but partly upon information that he had received from Dr. Simpson. During the progress of the defence his lordship made a suggestion which led to his seeing the counsel in his private room, and to a settlement of the case. A verdict was taken for the plaintiff for £400, and any imputation which had been cast upon the defendant was withdrawn.

Birmingham Hospital Saturday Fund.—The collection this year amounted to £5376, leaving, after deducting £276 for expenditure, £5100 to be distributed amongst the medical charities of the town.

Street House Cleaning and Painting, Paris.—A brisk correspondence has been carried on in the *Figaro* upon the street house cleaning and painting; the former being required by law in every fifth year, and the latter in every tenth. The doctors, it appears, are to the fore with scientific objections:—"Such frequent cleaning sets loose the 'germs' which have become safely encrusted in the walls, while the white glare produces 'irradiation' and ruins many an eyesight." The "doctors'" side of the controversy is worthy of *Punch*.

Dr. Thompson, Penzance.—Yes; the Medical Inspector of Passenger Ships is appointed by the Emigration Officer at the port of clearance. He must be duly registered.

New Sick Children's Hospital, Bristol.—This building is in course of erection at an estimated cost of over £11,500, exclusive of the cost of the site (£2500), which is fronting St. Michael's Hill. At present the Hospital for Sick Children stands on ground held under an unrenewable lease from the Corporation, to whom the property must revert in a few years.

Thames Sewage Pollution.—The Staines Urban Sanitary Authority has been fined £20 and ten guineas costs, on a prosecution by the Thames Conservancy, at the Staines Petty Sessions. The prosecutors complained that since the Conservators had secured a conviction against the Local Authority a year ago they had set them at defiance. They suffered sewage, which the Conservators' analyst described as concentrated sewage as bad as would be found in a cesspool, to flow into a water-course communicating with the Thames just above the "intakes" of the London water companies. The defence was, that active steps had been taken for the last year in order to ascertain the best means of disposing of the sewage.

Association of Inspectors of Nuisances.—A meeting of inspectors of nuisances has been held at the Sanitary Institute of Great Britain, Conduit-street, to consider the desirability of forming an association of those holding such appointments. Most of the metropolitan and some of the provincial districts were represented. Resolutions were passed forming the Association of Public Sanitary Inspectors, to consist of inspectors of nuisances appointed as such, and of those not appointed but holding the certificate of the Sanitary Institute of Great Britain.

An Elector.—Fellows elected on the Council pay a fee of twenty guineas. Formerly, members of the College, on their admission as such, had to leave with the secretary their "note of hand," in the following terms:—"I promise to pay to the Royal College of Surgeons in London the sum of fifteen pounds and fifteen shillings, in case I shall at any time hereafter practise surgery or profess to practise surgery within the cities of London and Westminster, or either of them, or within the distance of seven miles of the said city of London. As witness my hand this 3rd day of March, 1809—John Bishop. Witness—Orby Belfour, Sec."

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Dr. Jenner.—You will find an interesting and valuable paper "On Vaccination Tested by the Experience of Half a Century," by the late Dr. George Gregory, Physician to the Small-pox Hospital, in the *Medical Times and Gazette* for June 26, 1852, page 632.

The Construction of Hospitals.—Mr. P. Gordon Smith, of the Institute of British Architects, and architect to the Local Government Board, has been appointed by the Government to visit Berlin for the purpose of reporting on the system of construction adopted in some of the municipal hospitals. Mr. Smith has furnished valuable reports to the Government on other continental hospitals.

The Municipal Authority Neglecting to take Necessary Precautions.—In the Chancery Division, last week, in the action of Foster *v.* The Mayor and Corporation of Bristol, the Court was moved to discharge an interim injunction which had been granted, restraining the latter in forming a new road through the Tabernacle burial-ground, without making such arrangements as would prevent the repetition of the flagrant desecration of human remains which had already taken place, according to the case made out by the trustees of the ground in question. The Corporation endeavoured to get the injunction dissolved by declaring that all needful precautions had been taken at the outset. The Court refused the application, holding that the municipal authorities had not taken such precautions as were necessary to prevent improper exposure of the graves.

Convalescent Home, Swanley, Kent.—The foundation-stone of this home was laid a few days since. The building is intended as an adjunct to St. Bartholomew's Hospital, London, and is the gift of Mr. Charles T. Kettlewell, a governor of the Hospital. The house is close to the London, Chatham, and Dover railway-station, and is eligibly situated. The land, which consists of fifteen acres, was an anonymous gift. The estimated cost of the building is about £18,000.

Ambulance Class, Royal Naval School, New Cross.—Lady Brassey has generously forwarded to this class, in a portable case, a complete set of surgical appliances for practical use.

"Jerry" Building.—A builder, of Napier-road, West Ham, has been fined £3 and costs in two cases for using "bats" (broken bricks) and inferior mortar in the construction of houses in Vicarage-lane, West Ham, contrary to the bye-laws of the West Ham Local Board. It was intimated to the defendant that he would receive a notice under the 55th bye-law of the Board, calling upon him to amend the walls of the houses in question, and if he continued to build after that he would do so at his own risk, for the Board would not have the buildings, and would pull them down.

Dishonest Employés.—Two young men in the employment of a firm of wholesale druggists, Liverpool, have been remanded on a charge of extensive thefts of quinine and patent medicines from their employers. The prisoners advertised the stolen goods in the *Exchange and Mart*, and sold quantities to chemists and others in various parts of the country.

Badly Ventilated City Churches.—The *City Press* states that "illness of a rather severe nature is attributed by more than one member of the Lord Mayor's party who have attended City churches on Sundays, to the circumstance of the edifices being damp and ill-ventilated. It is suggested that if the churches were open on week-days a double purpose would be served: there would be time for devotion, and the buildings would have light and air let into them. Worshippers on Sundays might then go to them without risk."

Closing of a Burial-Ground.—An Order in Council has been issued, prohibiting, with certain exceptions, any new burial-ground being opened in the parish of Hove without the sanction of the Home Secretary.

A Sanitary Provision, Paris: Prevention of Disease.—The Municipality has decided to erect in each of the public cemeteries a mortuary house for the immediate reception of the bodies of persons dying in houses where there is not sufficient room for them to be kept during the term which must legally elapse between the death and burial. The northern, eastern, and southern cemeteries will be provided first with these houses, at an estimated cost of 240,000 fr.

The Use of "Spirits" in a Workhouse and Infirmary.—A guardian having called the attention of the St. Olave's Guardians to what he considered an extravagance in the use of stimulants in the workhouse, and especially in the Rotherhithe Infirmary, the clerk, after some discussion, was instructed to intimate to the medical officers the expediency of reducing as much as possible the amount of alcoholic drinks consumed.

Pecuniary Aid from Working Men.—The *employés* of a firm of shipbuilders, Elliot-street, Glasgow, have subscribed £16 14s. in aid of the funds of the St. Andrew's Ambulance Association.

Declined.—A letter from Dr. George Danford Thomas, coroner, to the St. Pancras Vestry, requesting the use of the board-room in the Vestry Hall for the holding of inquests, which was accompanied by a copy of a resolution passed by the jury, at the conclusion of an inquest lately held, in support of the application, was considered at the last meeting of the Vestry, when it was decided to inform the coroner that the Vestry were not able to comply with his request, as the board-room was required for parish purposes.

Oxoniensis.—You are greatly mistaken. Water-closets were invented so far back as the year 1596, and Sir John Harington, of Kelston, near Bath, was the inventor.

Anticipating Dismissal by Resignation.—The Infirmary Committee of the Chelsea Board of Guardians has suggested that for the future, in the event of any charge being made against an officer, that such charge be investigated before any resignation be accepted. The object is, that an official should not anticipate dismissal by resignation if a charge is made against him or her. A suggestion which the Board has adopted.

The Value of Vaccination.—With regard to small-pox, the annual report of the Registrar-General of Births, Deaths, and Marriages in Scotland for 1862 shows that the steps taken by the medical authorities have been unusually successful. In the course of the year only two deaths from small-pox were registered in the principal towns, and but one in the selected districts. In 1872 there were more than two thousand deaths from the disease. Under ten years, by vaccination, a rigorous system of isolating cases as they occurred, and other precautionary measures, the disease has been reduced to a normal figure.

Health of Ramsgate and Margate.—The Medical Officer of Health, in his returns, shows that the towns are in a very healthy state. In the past month the death-rate has been, respectively, 11 and 13 per thousand. Neither Ramsgate nor Margate, it is stated, had a case of zymotic disease in the hospital.

Tourists, Switzerland.—An evening contemporary states that the Imperial Stadtholder of Innsbruck has officially announced that the recent disastrous floods in certain districts of the Tyrol will cause no interruption of tourists' traffic. The railways mostly frequented by travellers have, it is stated, only partially suffered by the floods, which destroyed chiefly the less accessible and unfavourably situated parts of the Alpine regions. The regular railway communication has been re-established in every direction. The roads and paths are restored, and the approaches and passes through the side valleys are again free. The state of health of the population and the sanitary conditions of the country are said to be in every respect satisfactory.

Douglas F.—The existing regulations as to the cleansing of the metropolitan footways are of a very capricious character. In some districts the vestries cleanse them; in others it is considered the duty of the occupiers of premises; and in St. George's, Hanover-square, it has been recently decided not to sweep the footways.

Old Mortality.—In Hendon Churchyard you will find a monument to Thomas Crossfield, Esq., M.D., with these lines—

> "Beneath this stone Tom Crossfield lies,
> Who cares not now who laughs or cries;
> He laughed when sober, but when mellow
> Was a harum-scarum fellow.
> He introduced the use of savin,
> In those diseases like to spavin;
> He gave to none designed offence,
> So 'Honi soit qui mal y pense.'"

COMMUNICATIONS have been received from—

Sir W. Mac Cormac, London; The Secretary of the Chelsea Hospital for Women, London; The Registrar of the Apothecaries' Hall, London; The Director of the Anthropological Institute, London; Mr. George Brown, London; Dr. J. C. Thorowgood, London; Messrs. Jeffrey and Co., London; Messrs. Kingsbury and Co., London; Mr. William Collingridge, London; Dr. Paul F. Mundé, New York; Messrs. Jackson and Graham, London; Mr. R. W. Peregrine Brick, London; Dr. B. G. Morison, London; Dr. Norman Chevers, London; Dr. Cullingworth, Manchester; Mr. J. Chatto, London; Mr. Max H. Judge, London; The Secretary of Charing-cross Hospital Medical School, London; The Secretary of the Ascham Society, London; Dr. Sedgwick, London; The Secretary of the London Sanitary Protection Association, London; Dr. A. T. Thomson, Glasgow; Dr. Sutherland, London; The Registrar-General for Queensland, Brisbane; Dr. J. W. Moore, Dublin; The Registrar-General for Scotland, Edinburgh; The Honorary Secretary of the Medical Society of London, London; The Dean of the London School of Medicine for Women, London; Mr. F. C. Banks, London. Dr. Braidwood, Birkenhead.

BOOKS, ETC., RECEIVED—

The Medical Act Amendment Bill, 1883, by John Broom—Our Domestic Poisons, by Henry Carr, M.Inst.C.E.—Homœopathy and Gynæcology by Thomas Skinner, M.D.—Hints to Househunters and Householders by Ernest Turner—The Transvaal and Bechuanaland, by G. B. Clark, M.D., F.R.C.S.—Dr. A. Jacobelli's Pneumatic Inhalating Atomizer—Bermuda, Past and Present—Traité de la Vaccine, par le Docteur L. Warlomont—Babies: How to Rear Them, by F. A. Fawkes, F.R.H.S.—Report of the Middlesex Hospital for 1880—Handbook of Medical Electricity, by A. M. Rosebrugh, M.D.—Ontario Medical Association: Report of the Committee on Ophthalmology, 1882—Annual Report of the London Temperance Hospital.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Revue—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—Le Progrès Médical—Chemist and Druggist—Journal of the Vigilance Association—Glasgow Herald—Gardeners' Magazine—Therapeutic Gazette—North Carolina Medical Journal—Journal of the British Dental Association—Nordisk Medicinskt Arkiv—Australian Medical Journal, December, January, February, and March—American Journal of Obstetrics—Dublin Journal of Medical Science—New York Medical Journal—Revue de Médecine—Revue de Chirurgie.

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ORIGINAL LECTURES.

THE LUMLEIAN LECTURES ON URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

By ALFRED B. GARROD, M.D., F.R.C.P., F.R.S., etc.,
Consulting Physician to King's College Hospital.

LECTURE III., PART II.

Influence of Hippuric and Benzoic Acids.—Before proceeding further with the treatment of gravel and calculus, I must redeem my promise to explain certain difficulties in the physiology of uric acid which had to be passed over in my first lecture; the discussion of these will, I hope, prove useful from a therapeutic point of view. How is it that the urine of the sucking calf contains a notable quantity of uric acid, seeing that the same animal, when it grows up and takes its ordinary food, excretes an urine which is devoid of this principle? Why should the simple alteration of food cause such a result if uric acid is formed in the kidneys themselves? Is not this fact completely opposed to the second view? Before endeavouring to explain these difficulties, I thought it desirable to prove the fact, and examined first the urine of two sucking-calves. In both I found distinct evidence of the presence of uric acid. At the same time, I discovered another previously unknown fact, viz., that the cow's urine, also under certain circumstances, contains uric acid, as when taking turnips, mangold, brewers' grains, and such like food, with little hay or grass, and that, with such a diet, there is little hippuric acid in it. In the horse's urine, which was rich in hippuric acid, I found no uric acid.

At first sight it would appear to follow from these various facts, that the seat of origin of uric acid is further back than the kidneys, and that these organs merely eliminate it from the circulating fluid; in other words, that what we have called the first view is the correct one; but I have already shown, in my first lecture, that the kidneys will not act as filterers of uric acid, even when that principle is known to exist in the blood. Still, difficulties remain against those who advocate the second view, and, until these be cleared away, I cannot feel that this latter has been placed on a satisfactory basis.

Some little time ago, in thinking over the subject of gravel and calculus, I arrived at the idea that, if the urine of man could be maintained in a condition resembling that of the herbivorous mammal, there would be no such things as uric concretions, uric gravel and calculus would be unknown.

Alkaline remedies, useful though they are, do not effect all that could be desired. They do, indeed, as we have seen, hold the uric acid in solution, but in no degree do they remove it, for analysis has shown that the amount eliminated under the influence of alkalies is not at all decreased. While following up my idea of assimilating the urine of man to that of the herbivorous mammal, I made several experiments, to which I will now allude.

I took a specimen of healthy human urine, of full specific gravity, and sufficiently rich in urates to give a free deposit of uric acid crystals when acidulated. With this I filled two tubes to about one-fourth of their capacity. To the first of these I added the urine of a horse, so as almost to fill the tube; to the second I added the same quantity of distilled water, in order that the amount of dilution of the human urine should be the same in each tube. After the tubes had been kept for some two or three hours at about 100° Fahr., their contents were examined. A few drops of hydrochloric acid added to the second tube—where water had been used as the diluent—caused a slow crystallisation of uric acid, but the acidification of the first, in which the urine had been diluted with that of the horse, failed to exhibit any precipitation; nor, when it was evaporated to a small bulk, could uric acid be detected either by the murexide or any other test. The experiment was repeated with the substitution of the urine of the lion for that of the horse. This failed to cause the disappearance of the uric acid.

If these observations are correct, we have arrived at a remarkable conclusion, for we have found not only that the horse's urine is itself free from uric acid, but that it possesses the power of destroying, at least to some extent, the uric acid contained in the urine of man. It struck me that this conclusion was one which might be fraught with weighty consequences, and deserved, or rather demanded, much further and stricter investigation to corroborate it. Such proof, you will find, is not wanting.

I next took eight very small uric acid calculi, none of them larger than a pin's head, and, by the aid of a solution of carbonate of lithium, dissolved them in a little water. To this solution I added about eight ounces of the urine of the horse. After the mixed fluids had been kept some few hours at the temperature of the body, no uric acid could be detected.

This experiment shows that uric acid, in the form of calculi, when first dissolved in an alkaline solution, is destroyed by the influence of some ingredient which is present in the urine of the horse. After reflecting upon these phenomena, I endeavoured to find out what was the principle contained in these urines of the herbivora which imparted to them this peculiar power; and, seeing that they are rich in hippuric acid—a substance absent from the urine of the carnivora—I instituted a very numerous set of experiments upon the action of this acid on uric acid.

First, a strong solution of hippurate of potassium was mixed in equal quantities with a cold solution of the urate of the same metal, and kept for some few hours at the temperature of the body. On subsequent examination for uric acid by the microscopic test, none could be found, nor could any be detected by the murexide test. Another recorded observation is as follows. A cold concentrated solution of urate of ammonia was mixed with a strong solution of hippurate of sodium, made slightly alkaline with the carbonate; after being kept for a few hours at 100° Fahr., no uric acid could be found.

As it might be urged that the uric acid, though existing, was masked by the presence of other matters, the following observations were made, and have been frequently repeated. A cold solution of urate of ammonium was added to one of hippurate of sodium, and the solution made slightly alkaline with the carbonate, so as to imitate as nearly as possible the conditions which exist in the urine of the herbivora. On immediately placing a drop on a microscopic slide, and acidulating it with hydrochloric acid, numerous long crystals of hippuric acid were soon formed, and afterwards rhombic crystals of uric acid were seen, these latter being readily distinguished by their characteristic shape, and by their intense polarising power for light. After about half an hour, the solution having been previously warmed up to the temperature of the body, a second drop was examined, and the uric acid crystals were found to be much less numerous, and in another hour or so they were not to be detected at all. The solution was afterwards evaporated, and no evidence of uric acid could be discovered either by the microscope or the murexide test. (The appearances are shown in Figs. 1 and 2.) By this observation, the fact that a change slowly takes place in the solution of the mixed salts is demonstrated; and it is also proved that the uric acid is not simply masked by the presence of other salts, for it is readily exhibited when the solutions are first mixed, and only slowly disappears under the influence of time and warmth.

In the earlier experiments which I made, which were qualitative only, it was found essential that the hippuric acid should be in large excess, in order that the results should be conclusive; but I was soon led to make quantitative experiments, so numerous that their enumeration would be tedious. I shall, therefore, only give you the results obtained, and leave the details to be studied elsewhere, if desired.

In these observations I have used the urates of ammonium, sodium, potassium, and lithium, and acted upon them with the hippurates of the same bases, and I have uniformly found that when hippurates and urates are together in solution a change ensues, the urate becoming gradually destroyed, and probably a part of the hippurate also. It has

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required, under the conditions which have been present in most of the experiments, nearly fifty times as much hippurate as urate for the complete destruction of the urate; but, when the dilution was much increased, the quantity of hippurate required seemed to be lessened, as little as twenty-five parts of hippurate being sufficient. Possibly in the animal body the action takes place more rapidly than in the flasks of the laboratory.

Although my experiments have been numerous, and have occupied a very long time, still I feel that more are required in order that we may arrive at definite conclusions as to the relative power of the different hippurates and urates over each other, and the quantity of dilution which gives rise to the maximum amount of action; besides which, the nature of the change which ensues requires to be thoroughly investigated. The details of my experiments on the subject are contained in the appendix to a paper recently read to the Royal Society.

Having established the fact that hippuric acid reacts upon uric acid, we can, I think, at once make use of it to explain a difficulty which we left unsolved in our first lecture in relation to the urine of the sucking-calf. We have only to take our original assumption that there are cells in the kidneys of all herbivorous mammals capable of forming uric acid—then, this principle would be always present in the urine unless it was subsequently removed; and having now shown that hippuric acid has a destructive power over uric acid, it follows that, when the urine of a herbivorous mammal contains but little hippuric acid, then uric acid is present. This is the case in the sucking-calf. When, however, the young animal ceases to take milk, and lives on a diet of grass, clover, and the like, then the urine becomes rich in hippuric acid, and the uric acid disappears, being removed by the destructive influence of the hippuric acid.

The explanation I consider to be satisfactory, though it is one which I could not, till recently, have imagined to be correct. It is generally supposed that hippuric acid replaces uric acid, that is, is formed in its stead in the system. It does indeed replace it, though not, as is usually thought, by being formed, under certain circumstances, instead of it, but on account of its possessing the power of removing the uric acid after it has been produced in the renal cells. The explanation holds good equally with reference to the occasional presence of uric acid in the urine of the adult herbivorous mammal. Under their ordinary diet a certain amount of uric acid is always formed. Hippuric acid is also present in large quantities, sometimes as much as 1—1·5 per cent., in which case no uric acid can be discovered in the urine; but, when these animals are made to eat food which fails to yield hippuric acid, the uric acid remains intact, and hence it is that, from time to time, we hear of the presence of this principle in the urine of herbivorous mammals.

Now it follows necessarily that what happens in the case of these lower animals, applies also to man. If the quantity of hippuric acid becomes increased, the uric acid becomes diminished, and we are in a position to explain an observation made by Heller, who, in conjunction with a friend, first ascertained the quantity of uric acid which each excreted daily when under an ordinary diet; they then changed the character of their food—Heller living for a week on wheaten and rye bread, his friend on rye bread only, water being the sole drink of both. The uric acid soon began to diminish and to be replaced by hippuric acid, and at the end of the week a mere trace of uric acid was found in Heller's urine—none in that of his friend. During the next week, on an ordinary diet, the hippuric acid gradually diminished and the uric acid reappeared in the former quantities. Doubtless the character of the food, in these experiments, had a direct influence on the formation as well as on the destruction of the uric acid, for the amount of the nitrogenised elements of the food must have been small.

We know that glycine or glycocol (gelatine sugar), which enters into the composition of the bile of many animals, is closely connected with hippuric acid, that this latter can be broken up into benzoic acid and glycine when boiled with caustic alkali, and, in fact, benzoic acid, when absorbed from the stomach, takes up glycine and becomes converted in the system into hippuric acid, and is thus thrown out in the urine. Such being the case, I thought it most desirable to try the influence of this body upon uric acid, and to find out whether it plays any part in the change of the uric acid. I made numerous experiments, using glycine in place of hippuric acid, the other conditions remaining the same, and in no instance did I observe any change in the uric acid—even when days or weeks had elapsed. I then had to look to benzoic acid, and ascertain whether the change in the uric acid was due to its influence, and for this purpose I completed a set of observations corresponding to those previously made with hippuric acid. The results were as follows:—

I found that benzoic acid, in the form of a benzoate, when in contact with an urate in an alkaline solution, caused the same slow change in the uric acid which ensued when a hippurate was employed. This change, however, cannot be well observed under the microscope because the crystallisation of the benzoic acid is so rapid that the presence of uric acid is obscured; but, when the solution is evaporated and the benzoic acid removed by alcohol, the murexide test can be readily employed. In the appendix to my recent communication to the Royal Society, I have detailed the various observations on this point, which appear to show that about the same amount of a benzoate as of a hippurate is required in order fully to effect the change in the uric acid.

To us, as physicians, several questions naturally suggest themselves. Can we make any practical use of the facts before us? Will the administration of hippurates or benzoates prove of any practical value in the treatment of the different forms of diseases connected with the uric acid diathesis? Can a diet be devised which will assimilate to some extent the urine of man to that of the herbivorous mammal? These are questions of no little importance to us and to humanity at large.

Let us see how far they may be answered. In January, 1842, when a young student, I read a paper before the Chemical Society, which was published in their *Transactions* and in the *Philosophical Magazine* for that year. It was entitled "On the Conversion of Benzoic Acid into Hippuric Acid in the Animal Economy." In it, I fully confirmed Wöhler's then recent discovery of the conversion of the one acid into the other, but I proved that this change could not be effected by the benzoic acid uniting with the uric acid, as has been suggested—first, because the quantity of the latter was not sufficient; secondly, because the uric acid found in the urine excreted three or four hours after the taking of benzoic acid was not very appreciably diminished.

I also suggested in the paper the probable future synthesis of hippuric acid, and that, if benzoic acid be administered beyond a certain amount, the excess will pass into the urine in an unchanged condition. Both these suggestions have since then been realised.

Within the last few years I have returned to the consideration of the subject, and have obtained a large amount of clinical experience.

If hippuric and benzoic acids in an alkaline solution possess the power of changing and removing uric acid, it is natural to suppose that, when the blood is in an abnormal state from its presence, the administration of the salts of these acids should prove valuable; for there is no doubt that if hippurate of sodium be added to a blood-serum which shows the presence of an urate, the latter is soon removed from it. Clinically, I have derived great advantage from the administration of these salts, which I have used very largely in cases of gout; and patients have asked to be allowed to continue taking them, so much did they think they were benefited by them. To us at the present time, it is important to ascertain whether they are of value in cases where uric acid is liable to be deposited in any portion of the urinary tract. This I shall endeavour to do.

In the first place, these salts act advantageously on the mucous membrane of the bladder and its appendages; and, in cases where there is a disposition in the urine to become ammoniacal from decomposition, they are most useful in checking such tendency. You will, perhaps, remember that in my first lecture I said that I had found the urine of the horse much less liable to decomposition than that of man, a circumstance possibly due, in part, to its containing hippuric acid. This action on the membrane may influence much the secretion of the colloid matter, and thus prove valuable in cases of gravel and calculus, which are so intimately associated with its urine; and lastly, it may have an effect upon the excretion of uric acid—a point which I must now endeavour to ascertain.

I have said that the usual absence of uric acid from the urine of the herbivorous mammal is due, not to its non-formation, in small quantities, in their kidneys, but to the

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presence of considerable quantities of hippuric acid in the urine; and that, provided that we remove this latter principle by an alteration in the food, assimilating it to that of the young sucking animal which takes milk only; or by giving vegetables which do not yield hippuric acid; that then uric acid appears in their urine. Ought we not, therefore, to conclude that the administration of benzoic or hippuric acid would influence the excretion of uric acid? Is this the case? In the herbivora, the urine is always alkaline in reaction; in man, it is acid. In my experiments on the destructive influence of hippuric or benzoic acid upon uric acid, I found it important to use solutions made alkaline with a carbonate, thus imitating, as nearly as possible, the condition of herbivorous urines. We do not get this in the case of man. Let us see the facts. In 1842, when, in a very limited number of experiments, I gave benzoic acid in the free state, I found but little alteration in the excreted uric acid, still it was lessened.

Kerner, who appears to have made a careful set of experiments, came to the conclusion that neither the nitrogenised nor the other principles of the urine were influenced by benzoic acid.

I have recently made some observations on the action of benzoic acid on the urine, with the results which I will give you in a minute. I may tell you that great care must be taken not to form conclusions from one or two experiments, as the excretion of uric acid is always fitful, little circumstances causing it to be greatly diminished for a few hours, and then suddenly increased. If the uric acid is directly formed in the renal cells, it is natural to suppose that much of it would escape the action of the hippurates contained in the fluid portion of the urine, and especially if that fluid is in an acid condition; and experiments seem to confirm this idea.

I will here give you the results which I have obtained.

First Set.

The average of four days' urine passed at 12 noon; breakfast at 9 a.m.; specific gravity 1015; diet normal:

5 fluid ounces gave of uric acid 0·63 grain.

After benzoate had been taken 34 hours, and 95 grains taken in repeated doses:

5 fluid ounces gave of uric acid 0·126 grain.

After omitting benzoate 76 hours:

5 fluid ounces gave of uric acid 0·665 grain.

So that, in these experiments, the uric acid appeared to be much diminished by the influence of the benzoate.

Second Set.

Urine at 11 p.m.; dinner at 7 p.m; no drug taken:

5 fluid ounces gave of uric acid 0·34 grain.

Urine at 11 p.m., after 55 grains of benzoate administered in divided doses:

5 fluid ounces gave of uric acid 0·03 grain.

So that, as far as these experiments go, the uric acid was reduced to one-tenth of its original amount by the action of the benzoate.

Third Set.

Benzoate of soda in 30-grain doses, three times a day. Urine from 11 a.m. to 11 p.m., after having taken benzoate for 12 hours:

Total quantity = 39 fluid ounces.

Uric acid in the 12 hours = 3·90 grains.

Urine before taking benzoate, from 11 a.m. to 11 p.m.:

Quantity = 31 fluid ounces. Uric acid = 4·96 grains.

So that the quantity of uric acid was much diminished by the benzoate.

Fourth Set.

Benzoate of soda given in 20-grain doses three times a day. Urine passed from 11 a.m. to 2 p.m., after 60 grains had been taken. Quantity = 5½ fluid ounces; specific gravity 1020; evaporated to 5 fluid ounces:

Total uric acid = 0·17 grain.

Urine passed from 11 a.m. to 2 p.m., after 120 grains of benzoate had been taken. Quantity = 9½ fluid ounces; specific gravity 1016; evaporated to 5 fluid ounces:

Total uric acid = 0·57 grain.

When no benzoate had been taken for 27 hours. Urine from 11 a.m. to 2 p.m. Quantity = 8 fluid ounces; specific gravity 1018; evaporated to 5 fluid ounces:

Total uric acid = 1·00 grain.

When no benzoate had been taken for 51 hours. Urine from 11 a.m. to 2 p.m. Quantity = 12 fluid ounces; evaporated to 5 fluid ounces:

Total uric acid = 1·25 grains.

When no benzoate had been taken for 75 hours. Urine from 11 a.m. to 2 p.m. Quantity = 10 fluid ounces; evaporated to 5 fluid ounces:

Total uric acid = 1 grain.

In this last set of experiments, during the administration of the benzoate, the uric acid was diminished in a remarkable degree.

The results of the preceding observations made with the alkaline benzoates differ from those obtained by myself in 1842, and also from those of Kerner, in 1858, on which occasions benzoic acid itself was employed. Nor is it difficult to explain the discrepancy, for we know that benzoic acid, given by itself, increases the acidity of the urine, as is well shown when it is administered in cases of phosphatic urine; and, under these circumstances, it can possess little or no power of changing any urate it may meet with in the renal cells or other parts of the urinary tract. I am still engaged in clinically investigating the value of the benzoates and hippurates, both in cases of gout and of gravel and calculus; and I hope ere long to bring the further results before the profession. I can confidently affirm that I have already obtained great advantage in the treatment of these diseases from their employment.

I frequently give the benzoic acid in the form of benzoate of sodium; but, if I wish at the same time to increase the quantity of the urinary excretion, then I give the benzoate of potassium or of lithium; and, if there be an abnormal acidity of the urine, some alkaline citrate.

Seeing that herbivorous animals excrete hippuric acid in a greater or lesser quantity according to the character of the food upon which they are fed, I cannot help thinking that some article of diet might be devised for those who suffer from the diseases above mentioned, which might, at least to a great extent, keep in check the tendency to form and deposit uric acid.

A Short Funis.—Prof. Depaul, lecturing on a case (*Gaz. des Hop.*, June 12) in which the funis only measured twenty-seven centimetres, while delivery took place without anything remarkable occurring, observed that this could scarcely be so if the funis were inserted into the fundus. As a general rule, a length of thirty-nine to forty centimetres is requisite unless the labour is very rapid. He has met with many cases in which a short funis has led to very serious accidents, or at the least to very painful phenomena. The uterine contractions give rise to tractions on the cord, which, reacting on the uterus, give rise to special pains quite different to the proper laborious pains. This shortness of the funis also may modify the uterine contractions themselves, rendering the labour slow and painful. At other times it causes small wounds whence hæmorrhage may proceed. On other occasions the child is born dead, and if the placenta is examined, coagula are found on its fœtal surface, the result of detachments caused by the traction of the cord. Prof. Depaul referred to a case in which the labour seemed to be going on very well, when he found, on making an examination, that his finger and the patient's thighs were covered with blood. On applying the stethoscope to the fœtal heart, its beats were found to be feeble and infrequent, and the labour was therefore completed by the forceps. The infant was stillborn, and only revived with great difficulty. The funis was considerably shorter than in its normal state.

Death from Swallowing a Coin.—In the *Boston Medical Journal*, May 31, the case is related of a young man who, trying to catch a silver half-dollar in his mouth, which he had thrown upwards, lost it, as he thought. However, for a few days he had some difficulty in swallowing, which then disappeared, and a probang was passed twice without difficulty. Eventually he became pale and thin, and having had several attacks of hæmatemesis, he died twenty-two days after losing the coin. This at the autopsy was found posterior to the commencement of the descending aorta, into which it had caused two small perforations. The stomach and small intestines were filled with black grumous blood. The silver coin presented its flat side towards the back and front, and allowed of swallowing without much difficulty.

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THE DIAGNOSIS OF DISEASES OF THE SKIN

By DR. McCALL ANDERSON,

Professor of Clinical Medicine in the University of Glasgow; Physician to the Western Infirmary, and to the Special Wards for Diseases of the Skin.

LECTURE XVIII.

B.—ORGANIC AFFECTIONS.

I.—THOSE DEFINED BY UNIFORM CAUSES.

3. *Strumous Affections of the Skin.*

iv. *Scrofuloderma.*

THIS term is usually applied to diseases of the skin, which present the general character of strumous affections, as already indicated (see page 744 of last volume), but which cannot with propriety be included under the head of Lupus or Lichen Scrofulosorum, although the word, in its literal sense, is of course applicable to every skin disease of scrofulous parentage.

It would be out of place to describe minutely the variations which these eruptions present; but, apart from the formation of strumous abscesses and sinuses, perhaps the commonest form is that which commences with the formation of dull-red or violet tubercles, about the size of a bean, or larger, and unaccompanied by pain or itching; they are very chronic, but not unfrequently suppurate, leaving ulcers having the characters previously described (see page 744 of last volume); they may be isolated, or occur in groups, or become confluent, forming patches of varying size, the edges of which usually assume the form of circles or segments of circles. Any part of the body may be attacked, but the extremities and the gluteal regions are its most common seats. Allied to this is that variety of strumous affections described by me a good many years ago(a) under the name of Scrofuloderma Verrucosum. In it the strumous patches, in part or in whole, become the seat of wart-like excrescences. This warty formation can be readily picked off without any, or at all events without much, pain; but a new excrescence gradually grows in place of that which is removed. The patches beneath are not ulcerated as might be expected, but the papillæ are greatly hypertrophied, project in the form of filaments, which may even exceed a couple of lines in length, and bleed on the removal of the warty mass. The latter is marked on its under surface by depressions corresponding to the elongated papillæ just referred to.

This eruption runs a very slow course, and when left to itself may last for years: as the general health improves, however, either from natural causes or under the influence of treatment, the warty excrescences fall off, and are no longer reproduced, the elevation of the patches diminishes, the colour fades, and at last a cicatrix is left in the site of the previous affection. It is met with in the great majority of instances amongst the poor, and particularly amongst the half-starved and neglected children of the very lowest dregs of the population. I presume that it may attack any part of the body, but I have noticed it oftenest on the hips and on the extremities, especially on and in the neighbourhood of the hands and feet, and I have lately seen a case in which a patch existed immediately behind the roots of several of the finger-nails, and was accompanied by defective growth of these parts. I have been led to understand that similar appearances to the above have not uncommonly been observed in Paris on the hands of medical students, and that, from a supposed connexion between the eruptions and the poison emanating from the dead bodies in the dissecting-room, the term "Tuberculum anatomicum" has been applied to it.

The following cases are good illustrations of this disease:—

Mary M., aged eleven years, was admitted under my care on May 5, 1865. She was a delicate, strumous girl, very thin, and with a tendency to glandular enlargements. About four years previous, two patches of eruption made their appearance, one on the left heel, which gradually subsided, leaving a slightly cicatricial appearance of the skin; the other above the left knee, which was in a typical state at her first visit, and corresponded exactly with the previous disease on the heel, to which, therefore, no further reference need be made.

The patch above the knee, when first detected, was a livid tubercle about the size of a bean. It gradually enlarged, and in about a year became covered with a warty-looking mass, which fell off about twelve months thereafter, and a new one gradually grew in its place, which still remained at the time of visit. The patch was then about an inch and a half in length, and one inch in breadth; was considerably elevated, of a vinous colour, and covered with a dark, warty-looking mass, which was readily detached without pain. On its removal, the papillæ were seen to be much elongated, and the summits of some of them torn and bleeding slightly. There was no pain in the part unless it was pressed upon, no itching whatever, and there had never been either ulceration or discharge.

Cod-liver oil was ordered, but the patient could not take it, so that on May 20 syrup of the iodide of iron was substituted (in half-drachm doses thrice daily), while unguentum hydrargyri oxidi rubri was rubbed into the patch twice daily after the removal of the warty excrescence.

The improvement was very rapid at first, and the warty appearance never returned. By the month of September the disease had entirely disappeared, leaving the skin slightly congested and cicatrised. The steel was recommended to be continued to prevent the return of the disease; and in November, when she was last seen, she remained quite well.

Patrick B., aged thirteen, was brought to me on June 5, 1865. He appeared to be in tolerable health, though he laboured under a bronchitic cough; but he was in a state of the most abject poverty. He had a patch of eruption upon the left buttock, which, according to his mother's statement, was noticed at birth as a small red spot "even with the skin," and which gradually extended till it attained the size that it exhibited when he first came under observation. It was then irregularly triangular in shape, each side of the triangle being about two inches and a half long. It was evidently composed of a number of tubercles, which had become confluent, and was considerably elevated above the level of the skin. The colour of the patch was a very dusky red, and it was covered with a dark warty mass, on picking off which the papillæ were seen to be much elongated, and some of their torn summits bled freely. The warty structure was examined with the microscope, and found to be composed exclusively of epithelial cells. The patient complained of no itching, nor of pain, even when he sat upon the part.

Cod-liver oil and syrup of the iodide of iron were prescribed, the former in doses of from one drachm to half an ounce, according to how it agreed, and the latter in doses of half a drachm thrice daily. No local measures whatever were employed, so that the effects of the constitutional treatment were fairly tested.

On July 1 the report was that the patch was getting smaller and less elevated, and on November 1 it had all but disappeared, leaving a cicatricial appearance of the surface.

The distinguishing features of the only disease likely to be mistaken for Scrofuloderma are indicated in the following table:—

Scrofuloderma.	*Tubercular Syphilitic Eruption.*
1. Most common on the extremities or gluteal region.	1. Most common on the face or back, especially about the shoulders.
2. Of a dull-red or violet tint, and consistence soft.	2. In the chronic stage, tint brownish or coppery, and consistence firmer.
3. Surface sometimes warty.	3. Little tendency to warty formation.
4. If ulceration, the ulcers worm-eaten, with undermined edges, and throwing out profuse granulations.	4. If ulcerations, edges of ulcers rounded and perpendicular, and base ash-grey.
5. Very chronic, often continuing for years.	5. Chronic, but not nearly so much so.
6. Often other manifestations of the strumous diathesis.	6. Often other manifestations of late syphilis.
7. Removed by means of caustics and anti-strumous remedies.	7. Removed by mercurial applications, and by mercury or iodine internally.

(a) *Journal of Cutaneous Medicine.* Edited by Erasmus Wilson, F.R.S. Vol. i., page 26. London: John Churchill and Sons. 1868.

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ORIGINAL COMMUNICATIONS.

THE ORATION OF THE HUNTERIAN SOCIETY.

By E. G. GILBERT, M.R.C.S. Eng.

(*Concluded from page 695.*)

HUNTER derived his knowledge mainly from observation assisted by experiments, and not so much by hearing or reading of the results of others' labours. I have tried to show how I think it might be made easier for us to follow in his footsteps, at however humble a distance; but our increased opportunities would be useless unless we had some of Hunter's care and skill in making observations, in drawing deductions from them, and in eliminating sources of error; and these are powers which, I suspect, a man may still pass through his curriculum of medical study, and the examinations at the end of it, without obtaining in a high degree. Indeed, I am rather afraid we meet, in books and elsewhere, with little pieces of teaching occasionally, which I think must be rather damaging than otherwise to the learner's power of accurate thought. One of these I remember to have been that plethora and anæmia were both causes of headache—the former through the vessels of the head being too full, the latter through their being too empty,—and consequently that headaches arising from either of these causes might be cured by correcting the fulness or the emptiness, as the case might be. Possibly this may be true, and may lead to correct practice; but if it be, it must be but a partial expression of the truth, and involves a *suppressio veri* which greatly detracts from the interest of the facts, and seems to me calculated to foster in the mind of a hearer (especially if uncritical) a tendency to accept facts without reflection and without seeking any connexion between them. Even in the absence of further knowledge this result would be avoided by a reminder, that in order to explain the apparent occurrence of the same symptom as a result of opposite conditions, there must be some intermediate link in the chain of causation. Indeed, would it not be correct to assert that every simple or single condition (by which I mean the direct effect of any proximate cause acting under the same circumstances) is invariably the *result* of the *same* cause, and not at one time the result of one cause, and at another of another cause? To apply this to plethoric and anæmic headaches. Would it not be more logical, if not more correct, to say that as headache seems to be caused both by plethora and anæmia, there must be some condition of the head, which in some way either plethora or anæmia can contribute to bring about, and which causes headache; and that observation of an immense number of different circumstances under which headache may occur, and of others which relieve or aggravate it, leads us to infer that the proximate cause of headache is always congestion of the vessels of the head, or of some part of it; and that this is the result usually, if not always, of the cessation of the influence of the vaso-motor nerves, due, in its turn, in the case of plethora, not to there being too much blood, but to its containing abnormal ingredients which have a paralysing influence on those nerves, and, in the case of anæmia, to a deficiency of normal ones? Take again giddiness. We find giddiness collocated with headache in the enumeration of the symptoms of various diseases in such a way as to lead one to infer that giddiness and headache may co-exist as expressions of the same condition of the brain. But is this really so? We know that when the supply of blood to the brain is failing quickly, giddiness comes on, and if we investigate the various circumstances under which giddiness occurs, do we not find reason to suppose that such a failure is the connecting link between them all, so far as this symptom is concerned? If so, the proximate cause of giddiness is the reverse of that of headache, and they would not occur at the same time unless one portion of the encephalon was suffering from an excessive supply of blood, and another from a deficiency. This conclusion is borne out by my experience, so far as it goes; but the existence or not of giddiness in any given case at any particular time is not so easy to assure oneself of as is that of headache, on account of the greater vagueness in the ideas of patients as to what is and what is not giddiness; and there is no doubt there are instances in which the cerebellum, the probable seat of giddiness, is anæmic, while the fore part of the brain is hyperæmic. Again, cough used a short time ago, if it is not now, to be set down as one of the leading symptoms of pleurisy, in such a way as to form an impression on the mind of the learner that cough is the direct result of inflammation of the pleura. But is not this a physiological impossibility? and is not the usual occurrence of cough with pleurisy simply due to the fact that with pleurisy there is usually catarrh or some irritative condition of the air-tubes? We were even told that the cough of pleurisy is short, in contradistinction to the longer one of other diseases—bronchitis, for instance,—and yet is it not the fact that in most cases of pleurisy it is the accompanying bronchitis which causes the cough, although the difficulty of inspiration causes it to be short? Another curious instance of the kind of teaching to which I refer seems to me to be afforded by that which we find about sulphuric acid. Sulphuric acid is said to be an astringent, and, as such, to be a useful remedy for diarrhœa. Is not this said with an inner consciousness that it is generally—almost always, in fact—combined with opium, and that the part the sulphuric acid plays in the mixture is undetermined, and therefore uncertain; but that if the learner will but continue to walk in the safe footsteps of his predecessors, and combine it with opium, he too will achieve, with his sulphuric acid, successes equal to theirs? The following is the way in which this subject is treated of in one of the most approved works on therapeutics of the present day:—"There can be no doubt that sulphuric acid is highly useful in checking summer and choleraic diarrhœa, although, as it is generally administered with opium and warm carminatives, it is difficult to distribute to each remedy its exact share of merit." May not a delicate regard for human omniscience have prevented its saying—impossible to tell which does the good? It afterwards adds that sulphuric acid increases the action of purgatives, and especially of aloes. In order to ascertain whether sulphuric acid has any power as an astringent to cure diarrhœa, I think it must be necessary to administer it in cases in which the tendency to diarrhœa has proved to be continuous for some time, and the absence of a tendency to its early spontaneous cessation has become evident; and, secondly, to administer it, if not alone, without combining it with another remedy which has the power of checking diarrhœa. These conditions have been afforded me in a sufficient number of instances to convince me that the acid has no such effect, but that, if the bowels are irritable, as evidenced by continuous slight looseness, or by repeated attacks of diarrhœa upon very slight provocation, it will excite or aggravate the irritation, even in five-minim doses. This was illustrated by the following case which came under my notice the summer before last. A lady, who had been under my care for several weeks for frequently recurrent diarrhœa, became dissatisfied with my want of success in effecting a permanent cure, and consulted an eminent physician whose loss we had to lament not long ago. He prescribed for her sulphuric acid, opium, and tincture of cinchona, which again stopped her diarrhœa. A little time after this she came to me, complaining merely of debility, and showed me the prescription. I gave her the same medicine, but without the opium. Her bowels immediately became irritated and relaxed. To make sure that this was the effect of the medicine, I begged her to resume it when the symptoms of intestinal irritation had subsided. She did so several times, till it became perfectly clear that the medicine was the cause, and consequently that, when administered with the opium, the latter cured her despite the acid, instead of by its aid. I by no means presume to say that sulphuric acid may not be a useful remedy in some forms of diarrhœa, especially in acute ones, where there is a strong natural tendency for the disorder to subside and the bowels to regain their normal condition, but only that it seems clear to me that it does not act as an astringent to an irritable mucous membrane, but as an irritant.

The necessity for exactitude in observation, in order that it may be of value, is generally recognised; but the necessity for it in the relation of facts or in drawing of inferences is perhaps not so universally thought of, although it would be always admitted.

I took notes for nine years of all my cases. They were necessarily brief, but were carefully made; and I have been much disappointed that they have not afforded me many useful inductions, or enabled me to feel that I stand upon firmer ground, in more points than they have, in the investi-

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gation or treatment of disease. This, I take it, is the result of, and affords an example of, those obstacles to a scientific use of his practice which the general practitioner meets with, and the magnitude of which seems to me so great. In order to make the notes, however, no doubt I observed the symptoms and course of my cases, and the results of the treatment I adopted, more carefully and accurately than I should otherwise have done, and one result of this has been to make me sceptical as to the value of some little of the treatment ordinarily in vogue, and of some of the theories upon which that treatment is based. Perhaps I cannot better occupy the remainder of my time on the present occasion than by relating some of the conclusions or inferences, more or less certain, which I have drawn from my observation and notes of these cases, and from my subsequent experience, and thus make a feeble attempt at following the example of Hunter. In doing this I shall confine myself as much as possible to matters of widespread interest in the field of ordinary daily practice; and I hope it will not be thought that in relating any impression made on my mind, in the way to which I have alluded, I am desirous of having it taken for anything more than it is worth—an idea of my own, founded upon evidence furnished in the course of my practice; an idea which may be mistaken, either because formed from evidence after all insufficient, or because the evidence has been misapprehended. All I hope or wish for is, that having exercised all my care in framing conclusions, or even in forming suspicions, these conclusions or suspicions may be received as suggestions, which, when contrary to preconceived ideas, may raise a doubt in the minds of some who hear them, whether some prevalent notion is not unfounded in fact, and may lead them to inquire for themselves, very likely with greater success than I have done for myself, whether that be so or not.

One thing which has struck me (or I fancy has struck me) about diseases in general is their uniformity under similar circumstances. While the circumstances under which they occur—first as regards the previous condition of the individual attacked, secondly as regards the surroundings among which he is placed, and thirdly as regards the strength or feebleness of the cause of illness and its concomitants—vary infinitely, so that two cases can hardly be exactly alike (except perhaps among children at the same time in the same house), yet when the sum of all these diversities is but little, or when they are capable of being so appreciated that they can, as it were, be balanced mentally against the diversities in other cases of the same disease, the symptoms and course of diseases, especially acute diseases, have seemed to me to present a greater uniformity than they are generally credited with, and I have been led to suspect that their undoubtedly very great variability has been made to appear still greater than it is by confusing the effects of complications and sequelæ with those of the primary disease in some instances, and in others by failing to distinguish between really different diseases. Take enteric fever, for instance—one of the most variable of acute diseases, I suppose, and one of the commonest where I practised the first ten years: there were certain features about its symptoms which, I believe, after a little experience, enabled me to recognise it quickly in cases of the most varying severity, and I was led to suspect that the frequency with which its duration is prolonged over twenty-one days, and with which relapses occur, has been over-estimated from the similarity of the symptoms caused by the continuance of ulceration or of catarrh of the intestine. Twenty-one days seemed to be the duration of nearly all the cases I had, so far as the primary fever was concerned; and it was no less in those very mild cases in which the patient could hardly be persuaded to keep in bed during any part of the time.

Puerperal fever again is, I suppose, one of the most variable acute diseases, and of that I saw very many more or less mild examples; and everyone in large midwifery practice will recognise the uniform character of its onset and first symptoms—the rigor at the beginning of the third day after parturition, followed by other rigors, the rise of temperature, the quick soft pulse, the sweating skin, the sub-delirium, the offensive lochia (having always the same smell), and, if the disorder do not soon subside, the diarrhœa and tympanites. I often wonder why puerperal fever is so commonly thought of as necessarily a most formidable complaint (as the severe form of it is), when such cases as I have referred to, ending in recovery in a few days or weeks, are so common.

In connexion with the uniformity of diseases, I may remind you of the singular tendency to uniformity which you have doubtless observed in the effects of any epidemic—how in one epidemic of catarrh, *e.g.*, the Schneiderian membrane will be the portion of the respiratory mucous tract almost always most affected, in another the conjunctivæ, in another the fauces, the bronchi, or even the meatus aurium.

Another impression made upon my mind by watching the effects of remedies is the preponderance of the usefulness of treatment of a soothing character—that the soothing element in treatment, in which are included measures for the avoidance of irritation, is, on the whole, more frequently useful than any other. This is, I suppose, simply because so many diseases are either the result of an irritative lesion, or the cause of one. In some instances we may be in doubt whether soothing or stimulating treatment is required—in a case of dyspepsia, for instance. In such cases it seems to me prudent to try the soothing plan first, because then no harm can accrue, beyond a little loss of time to the patient, if it prove wrong; whereas stimulation, if wrong, might make him worse. In this way we may obey the injunction of our teachers to make it one of the first principles of treatment to take care to do no harm—a principle which those who have not tried might think it very easy to carry out, but one in regard to which I think you will all sympathise with me if I confess that I have occasionally been unable to avoid infringing it.

One of the scepticisms into which I have fallen is as to the existence of a pure medicinal tonic—any medicine, I mean, which, when a person is simply weak from some cause of exhaustion, will strengthen him, independently of removing the cause. Tonics are spoken of commonly by the public (and they derive the idea from us) as if, whenever a man is weak, no matter from what cause, a medicinal tonic will strengthen him, irrespectively of the cause of his weakness. This does not appear to me to be the case. Of course, when the cause of weakness can be removed or lessened by administering a drug, as anæmia by iron, atony of the stomach and want of appetite by strychnia or other bitters, or malarial influence by quinine, the patient will be proportionately strengthened; but when the cause of weakness cannot be reached by medicine, as in those numerous cases we meet with of chronic fatigue in which continued over-exertion cannot be avoided, or in convalescence from an acute illness, when the appetite is good, and no sequela is left, tonics have seemed to me quite useless—in the former case entirely inert, and in the latter quite superfluous. The fatigued patient will not be relieved till he can obtain rest, if his ill feelings proceed from nothing but fatigue, as they often do; and when he does obtain it, he will, I think, recover as quickly without a medicinal tonic as if he had one. Those convalescents, on the other hand, who are left without tonics have appeared to me to gain strength as fast as those who have taken them. A fallacy is apt to arise and mislead us in this way after prescribing a tonic. In the absence of careful inquiry the cause of the weakness may have disappeared without our noticing either its disappearance or its previous existence.

Another prevalent theory affecting the daily practice of the general practitioner, and an idea with which I started well imbued, I have had to relinquish as the result of the most careful observation in innumerable instances, and hence cannot but suggest that it may be a fallacy despite its wide-spread acceptance. Mistaken ideas do sometimes gain general acceptance when they emanate from a quarter in which mistakes are but seldom made, and tally to a certain extent with our previous experience. I refer now to the suffering and disorders which are supposed to arise from cutting the first set of teeth, and more particularly to convulsions said to occur from teething. I believe that when Dr. Marshall Hall had made his famous discovery of the reflex action of the nervous system, he thought this was the commonest and most striking pathological example of it, and that that belief has continued to the present time. I still always have my gum-lancet about me, but I very rarely find any child's gums red or swollen, even ever so little, over an advancing tooth; and when I do, it is always in association with some more widely diffused stomatitis; while I still more rarely fail to find distinct, though sometimes slight, evidence of gastro-intestinal irritation. In order to make at all sure of this latter point, it

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is often necessary to cross-examine the mother carefully, and to examine the evacuations personally, while, as to the former, positive evidence on her part is equally unreliable. The statements of women, that their children have convulsions, or diarrhœa, or what not, every time they cut a tooth, are utterly fallacious. Most of them think their babies have some tooth about to come through until the last has made its appearance. Infants subject to diarrhœa, or cough, or convulsions, have seemed to me to have attacks of these disorders as often in the intervals of dentition as when a tooth was about to emerge. I have often, too, made the experiment of lancing the gum over prominent teeth, to see if such disorders would be influenced thereby, and with a negative result. I never had a child brought to me from pain or irritation in cutting one of the second set of teeth. Is there any reason why this should be painless, if cutting the first is so painful?

No observant practitioner can, I should think, be engaged long and actively in general practice without gathering from it, in the kind of way I have tried to exemplify, new ideas, some of which may be subversive of some of his previous ones. Some will relate to wide fields of practice, such as those I have mentioned; many more to narrower fields, or to single diseases, or single points of treatment; but the unfortunate feature about them all is that they are usually more or less vague and undefined and uncertain. The more practice is done, the more surely these impressions multiply, and the less opportunity the practitioner has for converting them into sure knowledge on the one hand, or disabusing his mind of them on the other, for the reasons to which I have previously referred, and because his practice—that which must be done to carry it on—exhausts his whole time and energy.

One of my predecessors on this annual occasion—Mr. Jackson, in 1864—well said "that the larger the experience of some, the less precise is their knowledge, because the facts which pass under their notice are so numerous that by their very multiplicity they tend to confuse and bewilder the mind." This multiplicity of facts is, of course, greater and more diverse, the wider the sphere of observation; and if to those personally observed we add those brought to our notice by the writings of others, we can hardly wonder that the general practitioner is occasionally lost in the midst of such an ocean. Is it not desirable that we should try to make the business of our lives such that it may be still more that which was John Hunter's great delight—a field for the observation and investigation of the phenomena of the living body as affected by disease, and still less that which was his abomination—a dull routine in which those faculties can seldom find scope for their accurate exercise? If anything that I have said to-night may, however feebly or distantly, have contributed to that end, your patience in listening to so much which I feel must have sounded impracticable, Utopian, and incorrect, will not have been wasted.

Opium-Smoking in New York.—A vigorous crusade has lately been made against the Chinese opium dens in Mott-street, which are frequented by many New York women and young girls, and are represented as the abode of all sorts of vice. The habit of opium-smoking is said to be rapidly on the increase, and Mr. Allen Williams, who has just completed a work on the subject, states that there are now nearly half a million persons in the United States who indulge in the practice. The opium dens are not all confined to the Chinese quarter in New York, as is shown by the recently published confessions of a woman who kept a fashionable smoking parlour up town, from which it appears that ladies, apparently of good social position, were her regular customers. Her place was given up only because one of the victims told the secret, and ladies were afterwards ashamed to be seen entering the "millinery establishment." The habit seems to have been steadily on the increase of late in New York and other Eastern cities, as well as in the West; and the records of the National Bureau of Statistics show that while the Chinese population in the United States has remained nearly stationary since 1876, the amount of opium imported increased from 189,354 lbs. of gum-opium and 49,375 lbs. of the prepared drug in 1872, to 243,211 lbs. of gum and 77,196 lbs. of prepared opium in 1880.—*Boston Med. Journal*, May 31.

ON DOSES.

By JOHN C. THOROWGOOD, M.D., F.R.C.P.,
Lecturer on Materia Medica at the Middlesex Hospital; Physician to the Hospital for Diseases of the Chest, Victoria-park.

A short time back there appeared in the *Medical Times and Gazette* a report of some very instructive remarks on doses of medicine, by Dr. A. A. Smith, of Bellevue Hospital. The experience gathered by an observant physician among actual patients of the effect of large and small doses of various medicines cannot fail to be of great practical interest.

From such experience as has fallen to my own lot, I have come to the conviction that the doses of many medicines as set forth in books are often needlessly large, when we seek, not an eliminant or evacuant effect, but a gradual alterative or specific action from the remedy. There is probably no medicine regarding the definite action of which physicians agree better than iron; but is it necessary for the cure of facial neuralgia to give an insoluble powder like the hydrated oxide of iron in a dose ranging from thirty grains up to three or four drachms? The subnitrate of bismuth, another insoluble powder, has been given for the relief of gastric pain in such large doses that, after death, large, hard, black masses of concrete subnitrate and sulphide of bismuth have been found blocking the intestinal canal. The gentleman who made the post-mortem said the masses he removed looked like lumps of metal. *Corpora non agunt nisi soluta*, say some. If this be accepted as a principle, what can be expected but painful intestinal obstruction as a result of perseverance in the administration of large doses of insoluble substances?

Calomel and other preparations of mercury have, given in repeated small doses, in my experience proved valuable in the treatment of peritonitis, pleurisy, and pericarditis, but I have never once salivated a patient. Some years ago I saw a lady lying with knees drawn up in bed, rapid small pulse, black tongue, and incessant vomiting. She had been confined about five days previously, and was taking repeated doses of opium. I advised in this case the withdrawal of the opium and the administration of one-third of a grain of calomel every two hours. Under this treatment the vomiting ceased and convalescence set in, though when the treatment was commenced her condition was so critical that an experienced man who was in attendance said to me: "Give what you please,—I do not think anything can save her."

The British Pharmacopœia gives the dose of tincture of aconite as from five to fifteen minims, but I am sure I have seen better results from a dose of one or two minims every two hours in commencing inflammation than I have seen from the larger doses. I have had house-physicians who have started at once by giving five-minim doses of tincture of aconite, and they have told me they had tried aconite in the case, but it did not suit, as faintness came on after a few doses. My advice has been, "Try next time with two minims instead of five."

I know of no drug so generally useful in the treatment of asthma as arsenic, and could give, from fifteen years' experience, a great many cases of spasmodic asthma that have seemed to me to get quite well under the influence of small doses of arsenic. I have never exceeded the dose of three minims of either Fowler's solution or of liquor sodæ arseniatis three times in the day, and have never seen any symptoms of arsenical poisoning, except in one case where a very susceptible gentleman finds that one minim of the liquor sodæ arseniatis taken twice daily for a week brings on inflammation of the eyes and pain in the stomach. Twice within this present year I have had brought to my notice examples of the sudden development of very unpleasant symptoms in the instances of persons who were taking five-minim doses of liquor arsenicalis three times daily.

I could give examples of the excellent results that may be obtained from a persevering use of very small doses (one-fiftieth of a grain) of strychnia in promoting the restoration of exhausted nerve-function, while larger doses do but add to irritation and eventually increase the exhaustion. Tincture of nux vomica, taken in doses of one to two minims, fasting, every morning, appears to me very useful in the cure of chronic constipation of the bowels, but I am pretty sure that five- or ten-minim doses three times daily act very much like quinine in checking the action of the liver and causing disturbance of system. Of some other drugs—for

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example, tartarated antimony, digitalis, and cantharides—I could say something, but would wish to get some more experience about them first.

61, Welbeck-street, W.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

CASES OF COCK'S OPERATION, FOLLOWED BY INCISION OR DILATATION OF THE STRICTURE AND RESTORATION OF THE NORMAL URINARY PASSAGE.

(Under the care of Mr. MORRIS.)

[From notes by the Dresser, Mr. THORNTON.]

Case 3.—Stricture of Urethra—Urinary Fistula.

CHARLES D., aged twenty-seven, a civil engineer, was admitted under the care of Mr. Morris, on October 2, 1882.

Previous History.—Thirteen years ago he had an attack of gonorrhœa while going over to America, for which he used astringent injections. A gleet remained for about three years, when he got a second gonorrhœa. After the acuter symptoms subsided the gleet continued. About this time an abscess formed in the perineum, and, healing, left a fistula. He had not observed any alteration in size or shape of the stream of water. Two years after this, after a drinking bout, he was suddenly seized with retention of urine, which lasted twenty-four hours. From this time he has always had to strain rather in passing water, and the stream has gradually lessened in size. He has frequently had temporary attacks of retention, lasting sometimes twenty-four hours. The perineal fistula closed for a time; another abscess then reappeared. Latterly more water has passed by the fistula than per urethram. He has never had syphilis. The urine lately has been thick and glairy.

On admission, he is found to have a very indurated condition of the perineum. Mr. Morris failed to pass anything but a filiform bougie. The stricture appears to extend for some distance along the urethra in the neighbourhood of the fistula. The man is intolerant of examination with a catheter, and the urethra is very irritable. He passed urine about every ten minutes last night; micturition was attended with some scalding, and contained a glairy mucus.

October 10.—Patient was taken to the theatre to-day, after he had had complete retention of urine for seven hours; relief by catheter impossible. Ether having been administered, Cock's operation was performed. A director was passed into the bladder, and then a catheter, by which about twenty-five ounces of very fœtid urine were drawn off. A small grooved staff was next passed down the penile part of the urethra towards the perineal opening, but Mr. Morris failed to get it through the stricture. He then cut through the stricture until it was completely divided. The catheter having been now passed through the penis, and so into the bladder, was fastened in. Patient was then put back to bed, and a little hot brandy-and-water administered. There were no subsequent rigors, but his temperature rose to 105° Fahr.

11th.—Urine passing freely. He complained of some pain in the back and abdomen, but there was no tenderness or tympanites. In the evening the catheter got plugged, and until this was removed he experienced some pain.

12th.—Is doing very well. Some urine still passing by the perineum. Bladder washed out twice daily.

The patient made a quick recovery, and after leaving the hospital he continued for many months to report himself. He was taught to pass a full-sized catheter, which he has regularly done since, except during an attack of acute gonorrhœa which he acquired some time after leaving the hospital. Fortunately this has got well and left no untoward traces behind.

Remarks.—The three cases reported are samples of a practice which Mr. Morris has now adopted in several instances. Having given temporary relief to the retention or extravasation, or both, by Cock's method, instead of leaving the stricture undivided, a subsequent operation is performed (if a catheter cannot be passed through the penis) whereby the urethra is externally incised, and a catheter of full size is then passed the entire length of the urethra into the bladder, where it is retained for a few days until repair has commenced to close in the wound. These three cases have been selected specially on account of another very striking feature, calculated to disturb the equanimity of the operator unless practised in the operation or familiar with the cause of the phenomenon. After the usual incision of Cock's method, a probe was, as recommended, passed along the blade into the urethra, and so on into the bladder, and then, after the withdrawal of the knife, a catheter was conducted to the bladder by the side of the probe. In all these cases, but especially in 2 and 3, the bladder contents were so thick and ropy that nothing for a time flowed through the catheter. This was the more striking in Case 3, because the operation was done primarily for retention. However, feeling sure of the whereabouts of the catheter, a little warm water was first injected through it, and then pressure was made on the bladder with one finger in the rectum, and by the fingers of an assistant above the pubis. After some few seconds a quantity of tenacious, stringy, yellowish, and stinking fluid escaped through the catheter, and then the urine came with a rush. This occurrence is worth bearing in mind. The presence of this ropy mucus in the bladder when cystitis exists is doubtless often the cause of the blocking of the catheter when passed per urethram; it need not disturb the surgeon when performing Cock's operation, if only the operator has taken care to make his incision boldly but cautiously.

LIVERPOOL ROYAL INFIRMARY.

SERIES OF BONE AND JOINT CASES.

(Under the care of Mr. RUSHTON PARKER.)

Case 1.—Caries of the Patella, suppurating and resembling Bursitis—Crucial Incision of Knee-joint—Entire Healing and Recovery of all Movements, but without Bony Patella—Caries and Curvature of Spine, supported by a Dorsal Splint.

ELIZA ANNE G., aged five, first attended at the Royal Infirmary on February 25, 1878. She had for three or four weeks previously been under Mr. Parker's care at the Stanley Hospital, as an out-patient, on account of a subcutaneous pre-patellar suppuration, of six months' duration, at the left knee, which had been promptly incised to its full length in the middle line, and a Thomas's knee-splint applied: the same time to keep the joint straight. A dorsal curve of the spine had existed two years, and for this she had been supplied at the Children's Hospital, with Thomas's "back-saddle," the continuance of which was advised, and safe-guarded from time to time. But her parents very much neglected her back, and repeatedly removed the support, which is a more efficient dorsal splint of leather, strengthened by iron rods, and suitably padded. The result was that the curvature was allowed to very much increase before consolidation eventually occurred.

On February 25, at the Infirmary, the incision having healed except a small central aperture, Mr. Parker happened to probe the sinus, which now exuded a drop or two of pus, to judge how far a reopening might appear necessary. The probe passing evidently deep into the knee-joint, through the patella, a free crucial incision (under ether) was made into the articulation with a blunt-pointed knife, in order to see what mischief had already occurred, and to prevent its spread. The joint was found to be perfectly healthy, except at the margins of the original patellar aperture, which were covered with pale granulations. The incisions exposed the entire front of the articulation, and the angles of the four skin-flaps thus formed were tipped internally by a quarter of the cartilaginous patella, of which the bony centre had disappeared. It was evident that caries had had to do with caries resulting in suppression of the ossific centre of that bone. The position of the limb was unaffected by this procedure, being maintained immovably straight in the Thomas's splint. The knee and its wound were wrapped up in a rag dipped in plain water, and kept out afresh from time to time by the mother, who managed the patient at home throughout. For about three days she was ill and very irritable, screaming when touched; but her mother said that at other times there was no evidence of

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much pain. Morphia was given four times daily (one thirty-second of a grain) for a little while until this irritability ceased. The edges of the incisions in the skin and capsule became covered with granulations, which spread over the other exposed articular surfaces, until, after two weeks, all were hidden except one of the fragments of patellar cartilage. At the end of two months the sore was greatly contracted, the joint having been painless almost throughout, and continuing so, while the child was evidently thriving. In the fourth month a little pus could be squeezed from a central point, which alone remained unhealed. This the mother was directed to keep open with a piece of tapered slate-pencil several times a day, pressing the pus carefully each time from the upper outer corner of the joint where it was found to lodge. In the beginning of the fifth month the cicatrix bulged a little at this quarter of the joint, so it was reopened, and in two days the pus stopped from both apertures. The sore was totally and soundly healed shortly before the expiration of six months, the joint itself having been closed in during the first month. A patten was now put upon the boot of the sound foot to make the limb equal in length to the splint that projected with its terminal patten beyond the pointed toe of the diseased member. By October, 1878, the child began to get about on foot, and the knee shrank, from disappearance of the puffiness that had remained during the reparative process. The splint was kept on, and rigid linear immobility enforced, until May, 1879, fifteen months after incision of the joint. In June, 1879, the knee could be flexed and extended at the will of the patient, who walked about on it supported by a few turns of flannel bandage. The shape of the joint only differed from that of the other in the crucial scar, and in the absence of all sign of bone at the patella, which now felt like a mere fibro-cartilaginous condensation of the extensor tendon. For all purposes the mechanical efficiency of the articulation has continued sound and equal to that of the other ever since. But its capacity for resisting external pressure or violence has naturally not been tested beyond the movements made in acts of careful necessity, short of violence and rough vigour; for the child has been crippled by the spinal curvature on account of several remissions in the use of the dorsal support. In September, 1880, she had scarlatina mildly, a few weeks after which she was brought to Mr. Parker having puffy eyelids. A hot wet blanket pack was advised twice daily for this. After a few days her mother reported her to be dying, when she was told to call in her neighbour, Dr. Ryder, under whose care the child recovered, early in 1881. On June 27 of that year her mother called on Mr. Parker, and told him that the child had for two or three weeks lost the use of her lower limbs. Up to that time she had been walking about. A neighbour reported her as "well" in May, 1883, but what that exactly meant was not clear.

Remarks.—The device known as "passive movement" was not practised.

STRYCHNIA IN ALCOHOLISM.—In his *thèse* on this subject, M. Lecuyé, who is a pupil of Dr. Luton, is desirous of proving that strychnia is to alcoholism what mercury and the iodide of potassium are to syphilis. It cures delirium tremens, diminishes the gravity of wounds and inflammations occurring in drunkards, and wards off epilepsy and alcoholic insanity. Alcoholism should not be treated symptomatically by various remedies, but as a general disease; and the agent for so treating it is strychnia, which will remedy all, nervous or cardiac, cerebral or gastric disturbances. M. Lecuyé prefers the sulphate, and administers this by subcutaneous injection on account of the usual indocility of these patients and the necessity of acting upon them rapidly. He dissolves thirty centigrammes in thirty grammes of water; and, according to the gravity of the case, injects the whole or one-half of a Pravaz syringe-full. Not more than a centigramme should be injected at once, and this may be repeated, under watchful guidance, every two hours. In some cases one centigramme per diem suffices, while in others seven may be injected in fifteen hours without inducing symptoms of strychnism.—*Journal de Thérapeutique*, April 25.

THE Library of the Royal College of Surgeons of England will be closed on Friday, the 29th inst., for the purposes of the examinations; and on Thursday, July 5, for the election of members of Council.

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THE MEDICAL TIMES AND GAZETTE *is published on Friday morning: Advertisements must therefore reach the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, JUNE 30, 1883.

LORD MORLEY'S COMMITTEE: OFFICERS' HOSPITALS.

IN the summary of the principal recommendations made by Lord Morley's Committee we note with approval "No. 20," which says, "In base hospitals a separate establishment to be provided for officers. Civilian cooks may be hired to superintend cooking." This ought surely to tend to stop grumbling among the combatant officers when they chance to be hit by bullet or struck down with fever. There can be no doubt that in Egypt the combatant officers did grumble out of all proportion when they had to share "hospital diet" with their men in the field hospitals. On this point the evidence given by an officer of rank is conclusive. He is asked (Q. 2553), "You say that you heard of considerable complaints from officers as to the diet in the hospital, and you say that there was some misconception with regard to the nature of the hospital as regards diet; do you think that applied specially to officers?" and the reply is, "Yes, I think that an officer who had never before been brought face to face with the realities of a soldier's ration, would either think it insufficient or that it was of a nature unfitted for him as a patient; and I think such an impression would be aggravated by his illness or by the natural petulance produced by illness." Again, the question (2554) is put, "He would not realise the fact that when he was at a field hospital he would be fed as all the other patients were?" And the answer is very plain, "I think he would be slow to realise it. I think that if an officer in health were suddenly put upon a soldier's fare he would find cause to grumble, and I think that he would feel he had greater cause to grumble if he were sick." There is more evidence to the same effect given by an officer of high standing. When asked (4797), "Did the men ever complain of the cooking?" he answers, "No"; and when the query, "Only the officers?" is put, his answer is, "It was a very rough sort of cooking. I certainly think, on another occasion of that sort, that some better arrangement might

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be made for those who are in the habit of having better food." The witness also says, very truly, "You may be in a lodging-house or hotel, even in London, and complain about the food if you are not well." It is very true, "Infirmity doth still neglect all office, whereto our health is bound"; but still a high sense of duty can control infirmity, and in many a tale of shipwreck, where suffering and privation has been the common lot, we do not find the high-born or delicately nurtured setting a bad example to the rougher crew. It would almost seem that with some of the rising generation there is no sense of duty connected with hospitals. The recommendation "No. 23" could hardly have been called for otherwise: "General officers and commandants to realise their responsibility as to the proper working of the hospital system. Hospitals to be inspected, and facilities afforded for officers' visits." Nor would the Committee have deemed it necessary to express their opinion on this matter as they do in par. 171: "The hospital service, being an integral part of the military system, should be subject to regular and systematic inspection by military officers. It is the duty of a general officer commanding a district, and of the senior officer commanding troops, to satisfy himself that proper arrangements are made for the treatment of the sick, and, wherever hospitals are established, to cause them to be systematically visited, and their condition reported upon. At present the responsibilities of the military officers in this respect appear to be insufficiently realised, and their inspection of the hospitals seems to be performed in too perfunctory a manner." Various causes have been assigned for the want of interest taken by combatant officers in general hospitals. It has been attributed (5079) to delicacy of feeling, and a dread of being supposed to wish "to interfere with medical officers." It cannot be said, however, that the combatant officer who made that statement exhibited any of that delicacy of feeling when giving evidence against the hospital management of the campaign! It may be that short service has loosened the ties which formerly bound together the officer and the private soldier, just as the abolition of the regimental system has dissolved the brotherhood which once existed between the doctor and his combatant messmates. At any rate, military officers have not of late taken much interest in hospitals, and have hardly qualified themselves for the command over the doctors and all belonging to them which H.R.H. the Duke, "*laudator temporis acti*," would so gladly see restored to them. To some of the young combatant officers the idea of "the hospital service being an integral part of the military system" will come as a wondrous revelation! There are at least a few who do not even know what a hospital means—young men who never imagine that they must be subject to control if they enter the wards as patients! Some gallant youths indeed would deny the right of doctors to interfere with their diet, and consider themselves the only judges of what is good for them. It would be difficult to imagine anything more absurd and indefensible than the conduct and opinions of one young officer in this respect, who (see page 243 of the evidence) walked in and out of hospital according to his own sweet will, quite indifferent to medical authority. He went to report himself sick at 4 p.m., suffering from dysentery, and although he was aware of the doctor's opinion that he ought not to go to Sir Garnet Wolseley's to dine, he much preferred his own view of his case; and, as he no doubt accurately defines the process, "fed" at the General's house. He obligingly returned to sleep at the hospital, and found the bedding most uncomfortable, so to refresh himself he went to Sir Garnet's quarters again to breakfast, and got "some stuff there." Later in the day, it appears, he walked away altogether, and remained on board ship with his cousin the Admiral. It seems that the young gentleman at first went on board the *Helicon* and reported himself sick, and the doctors on board had the impertinence to try and prevent him from going off to the Admiral, who saw his cousin by chance on board the *Helicon*. As might have been expected, the naval officer had some idea of discipline, and took the unnecessary step of asking leave for his cousin—we say unnecessary, because the young subaltern was evidently of opinion that all politeness towards doctors is a mere waste of good manners. When asked "Where did you go?" (on leaving the hospital), he answers very frankly, "I went to the *Helicon*, and then I had rather a difficulty to get away, because when the Admiral came and asked leave they were very civil and said, 'Oh certainly, sir, most happy to oblige you'; but the moment he went round the corner, they said, 'You cannot go—we cannot let you go, we have sent in our morning state.' And so I said, 'That is all nonsense; you told the Admiral that I might go, and I am off.'" When subalterns of this type develope into full-blown colonels, they will be eminently qualified to become the military heads of general hospitals. Indeed, it is uncertain whether this gallant subaltern is not already qualified, for we learn (par. 13,457) that the very highest Army authority is of opinion that "No general hospital of any sort or kind ought to be without a military head, whether he is a colonel, or a major, or a captain, or even a lieutenant." We must acknowledge that the conduct of the subaltern who defied medical authority shines favourably in comparison with that of another young combatant who would prevent doctors from exercising any control in matters of diet even. This gentleman, who has apparently a fine taste in cookery, was asked some searching questions by an astounded member of the Committee, and it must be acknowledged that he answered them with amiable frankness and touching simplicity. He is asked (936), "You think that a sick officer ought to be allowed to eat when and what he likes?" The answer is plain enough, "When he comes down from the front with very little the matter with him, perhaps weak and half-starved, and wanting feeding up, it is very hard lines for him to be put on very rough rations, when he sees delicacies under his nose which he knows would do him a great deal of good. I think it affords rather a temptation to grumble." Again, when asked (938), "Who do you think should be the judge in the case, the doctor or the patient?" the answer is again very decided: "I do not think either the one or the other ought to be the judge. I should think the authorities ought to lay down the rule in the matter." We are not told who ought to be authorities; but perhaps a committee formed from the *chefs* of the leading London clubs might easily settle the point. It may seem strange that an officer with very little the matter with him should be restricted in his diet; but is it even more strange that an officer so slightly afflicted should want to go into hospital at all? We cannot help thinking that the question of French cookery in the case of officers being wounded or sick will have to be settled. It is bad to hear complaints of starvation, although we discover after a long search that starvation by no means implies that there was a want of food. Look at question 9352: Officers "went to the doctor and said they were suffering from starvation. That, in your opinion, was not an accurate description of the state of things?"—"I should not describe that as starvation." Question 9353 throws a little more light on the subject. "Will you state what the Colonel's diet was?" The answer is—"On the 28th, the first day of his admission into the *Carthage*, he had twelve ounces of bread, two ounces of butter, three pints of tea, one mutton chop, one bottle of soda-water, and half a bottle of claret. On the second day he was on

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milk diet, and he had in addition two ounces of butter, three pints of tea, two mutton chops, two tomatoes, two bottles of soda-water, and one bottle of claret." This is not *starvation* in the common sense of the word, certainly; but very likely the articles supplied were not prepared and dished up as they might have been at a London club, and so the Colonel conceived he had a right to use strong language. We almost fear that the concession of an officers' "establishment" at a base hospital will not stop grumbling after all! The War Office will never consent that any hospital should be kept up as an hotel, where officers can order what they like and leave the taxpayers to pay the bill! The duties of combatant officers do not cease at the termination of the battle. Privation has to be faced as well as shot or shell; and there is no reason why officers should not set as good an example to their men in the sick-wards as they undoubtedly do when death stares them in the face in the field.

THE INTERNAL USE OF ANTISEPTICS.

One of the most formidable objections to the internal use of antiseptics certainly seems to be the notion that agents which might be capable of destroying germs could only act at the cost of unwarrantable injury to the tissues of the affected animal. This notion has been prominently brought before the profession in Germany by Hans Buchner, and stated as the logical outcome of Koch's teachings; and to the refutation of this doctrine Professor Binz, of Bonn, addressed himself in the *Centralblatt für Klinische Medisin*, No. 18. Many arguments are adduced by Binz in support of the practice of the internal administration of antiseptics for the purpose of checking the course of micro-parasitic diseases. The treatment of syphilis and ague would seem to be two striking illustrations in support of the use of antiseptic measures, since it might be alleged with great probability that mercury and quinine exercise their beneficent influence by virtue of their antiseptic qualities. Alleged cures of a great number of infectious diseases, which it would serve no purpose to enumerate, by the employment of various antiseptics, are quoted by Binz, but there is an obvious objection of much weight to the teaching that the resulting benefit was due to the antiseptics. Indeed, it is simply a truism to say that nearly every infectious disease may spontaneously, or apparently so, take a favourable turn; and hence the reputed benefit may be of the nature of a mere coincidence. Experiments with drugs on human beings, at all events, are always open to this objection. In animals, too, the fallacious argument, *post hoc ergo propter hoc*, is of common application, and for reasons which are not difficult to understand. We often hear even reputed scientific persons claim that experiments as clear and demonstrative as those performed in the chemical can be similarly carried out in the physiological laboratory. Now, such conceptions represent almost anything but the truth, and for one excellent reason. The animal body cannot, from a point of view of physiological investigations, be regarded as a known substance of fixed quantity. Were it so, physiological chemistry would have no special right for existence, or, at all events, its existence would become merged into that of well-known elementary chemistry. No two specimens of animal protoplasm are ever exactly the same, and so mistakes may arise even when a so-called control animal is kept: that is, an animal of the same species and weight as the one operated upon is placed in precisely similar external circumstances, with the exception of the one fixed and known condition. That the time may come when we shall be able to exactly gauge the chemical and physical capacities of animals used for experiment, is a thing which can only be hoped for,—we are yet far from it; and whilst such is the state of knowledge, we can certainly do no more than regard the results of experiments as more or less strong probabilities. But there unquestionably are many effects which follow the use of drugs with such perfect regularity that we fully admit the undeniable claims of the remedies to be considered as specifics. The question then arises, How do these drugs act? In infectious diseases, the idea that the medicines employed are directly destructive of the virulence of the poison has long been held to be the true explanation of their action; but the doctrines of the comparative indestructibility of many disease-germs would, indeed, seem to be opposed to such a conception, seeing how diluted the remedies must be, by their admixture with the fluid constituents of the animal body. In the light of the discoveries of Pasteur, Chauveau, and others, regarding the attenuation of charbon virus, the complete destruction of germs would appear not to be in the least necessary to explain the facts. If it could be proved experimentally that certain antiseptics had the power of attenuating the virus of infectious diseases, much light might be thrown on the action of many reputed antiseptic remedies when administered internally. There can be no doubt that any such drugs must be very largely diluted; and so, from the point of view of mere strength, would be utterly incapable of destroying the action of poisonous germs, unless they possessed some sort of selective action which gave them the property of altering the bacteria, whilst they left undamaged the tissues of the animal organism. The line of argument adopted by Binz is of this nature. We are, however, only yet on the threshold of all that concerns the department of pathology known as bacterial, and whilst we are in so much ignorance of the actual working or dependence of the diseases themselves on bacteria, there is good excuse for the paucity of our information concerning the mode of action of the remedial agents.

THE REPORTED OUTBREAK OF CHOLERA IN EGYPT.

The rumour a few days ago that cholera had made its appearance at Damietta was likely to create general alarm, not to say consternation, throughout almost the whole of Europe, and the telegrams that have been received since the first news have been of anything but a reassuring character. On the receipt of the intelligence in Cairo, a committee of medical men was appointed to make immediate inquiries, and the result of their investigations was the conclusion that the disease was genuine Asiatic cholera. So few details have come to hand as to the nature of the symptoms or their duration in the fatal cases, that we are not in a position to form an opinion for ourselves as to the reality of the disease being cholera or otherwise. The diagnosis of the Cairo doctors, however, certainly receives confirmation from the latest information at our disposal, which is to the effect that in three days there have occurred in Damietta—a town whose population is about 34,000—114 deaths, of which eighty are attributed to cholera. This is not only an exceedingly high death-rate, but it would seem to be increasing very rapidly, judging from the deaths reported in previous telegrams. There seems, too, every reason to fear that the disease is spreading, for whereas on Wednesday two doubtful cases were reported as having occurred at Mansourah, on Thursday this number had increased to seven, and included two fatal cases; and two doubtful cases were reported from Port Said. The correspondent of a contemporary, very anxious to take a hopeful view of the nature of the outbreak, points out that there is no evidence of the importation of cholera into

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Damietta, a town so situated as to render such importation improbable, and further observes that cholera has never been known to originate spontaneously in Egypt hitherto; but we cannot help feeling that these arguments are not well founded. To decide that cholera has not been imported into Damietta would require a much more searching scrutiny than there has as yet been time for; but at any rate his report has done good service in calling attention to the pollution of the lakes surrounding Damietta by the bodies of dead cattle being thrown into them—a practice which is indirectly, but strongly, encouraged by the Egyptian Government. Even supposing that the disease referred to be the true Asiatic cholera, it does not follow that it will spread to Europe. We are glad, however, to note that the Ottoman Board of Health are issuing strict injunctions as to the placing under quarantine, without exception, of all ships that come from Egypt. The Italian Minister of Commerce and the Board of Health of Marseilles have also made known their intention of establishing a strict quarantine upon all ships coming from Egypt. These precautions, however, which are perfectly proper and amply justified by the circumstances, will not in the least degree absolve the Egyptian Government from their duty in the matter. It is for them to spare no effort to prevent the spread of the disease, and to use every means in their power to reduce the death-rate; and in the attainment of these objects they will find ample work to do, for cities such as Cairo, which set almost every sanitary law at defiance, would afford a more than congenial *habitat* for cholera. In the performance of these duties we feel sure that the Egyptian Government will receive willing and able co-operation from the English authorities on the spot, who we believe and sincerely trust are fully alive to the paramount necessity of protecting those of our troops who are still in the country from so terrible a disease.

Whilst there is at present no reason to fear that the cholera (always premising that it is Asiatic cholera) which has made its appearance in Egypt will reach our shores, still we cannot deny that we might be better prepared here in London to face it than we are, and that increased zeal on the part of our sanitary inspectors would put us in a better position to meet it if it come; and if, as we trust, it never does reach us, we should reap the benefits of such sanitary improvements in a hundred other ways.

THE WEEK.

TOPICS OF THE DAY.

Mr. Busk, F.R.S., the inspector appointed to control the experiments performed on living animals in England and Scotland, has recently issued his report for the year 1882. Of the forty-two persons who held licences, only twenty-six would appear to have performed any experiments, the number of these latter being returned as about 400. The report further explains the nature of the experiments undertaken under each of the different heads; in the third column it states, twenty-three of these consisted in the hypodermic injection of various medicaments or poisonous substances, or in their introduction into a vein by an incision through the skin; in none of these experiments was any appreciable pain inflicted. In only twelve of the experiments were the proceedings of a more important character, but these were performed under the influence of anæsthetics, the only suffering, if any, being that subsequently experienced in the course of the healing of a healthy wound in the few animals that survived the operation. "In conclusion," Mr. Busk says, "I would remark that, so far as I have any means of judging, the amount of direct pain or suffering inflicted in the prosecution of physiological, pathological, and therapeutical researches during the past year was altogether trifling, and limited to between twenty and thirty animals—mostly frogs."

In the Court of Appeal of the Supreme Court of Judicature, before the Master of the Rolls and Lords Justices Bowen and Fry, the cases of Abrath *v.* The North-Eastern Railway Company, and M'Mann *v.* the same, came forward for decision on the 22nd inst. It will be remembered that the Company charged Dr. Abrath and a man named M'Mann with conspiracy, for falsely representing the latter to have suffered severe injuries in an accident on their line; and the grand jury found a true bill against them, but they were ultimately acquitted. On this they brought their action against the Company for malicious prosecution, and at the trial, which took place before Mr. Justice Cave at the Durham Assizes, the jury found there was reasonable and probable cause for instituting the prosecution, on which finding judgment was entered for the defendants. The plaintiffs then applied to the Divisional Court for a new trial on the ground of misdirection. After hearing evidence, Justices Grove and Lopes made the rule absolute for a new trial on the ground that the defendants had not taken reasonable care in instituting criminal proceedings; and from this decision the Company now appealed. In giving judgment, the Master of the Rolls said that, with regard to the employment of a medical gentleman engaged by the railway company to visit M'Mann in order to determine the extent of his injuries, and in reference to the fact that this gentleman had been described as a "medical detective," he wished to give it as his emphatic opinion that in any case in which a medical man was engaged, either by an injured person or a railway company, he should strictly confine himself to the condition of the patient, and not be a party to the getting up of cases which might form the subject of legal proceedings on one side or the other. He was of opinion—and the other judges concurred—that the direction of the judge at the trial was right, and that the decision of the Court below must be reversed. The appeal was accordingly allowed, with costs.

At the last meeting of the City Commission of Sewers, Mr. Altman moved that the Commission on the Burial Board of the City of London do forthwith put in decent order all disused burial-grounds situated within the City, and charge the costs and expenses to the overseers of the respective parishes, subject to the 18th section of the Burial Act, 1855. He urged that everyone who saw the disgraceful condition of the old burial-grounds must feel that they were a scandal to the City, and that something must be done to remedy the existing state of things. If the overseers whose duty it was to keep them in order did not do so, the Commission should intervene. Mr. Felton seconded the resolution, which was carried unanimously as a reference to the Finance and Improvement Committee. The Medical Officer of Health, Dr. Sedgwick Saunders, again complained of the sale of diseased meat in Charterhouse-street, outside the Central Meat Market, and beyond the jurisdiction of the market, or of the City authorities, and he recommended a searching inquiry as to the consignors and the consignees, which the Commission agreed to. He also drew attention to an unregistered lodging-house in Fetter-lane, where 215 beds were let nightly at from 4d. to 6d. each; and to the serving of notices in regard to the smoke nuisance at the City Carlton Club and the Gresham Club, and other places in the City.

The thirty-ninth annual meeting of the Metropolitan Association for Improving the Dwellings of the Industrial Classes was held last week at the offices, Finsbury-square, the chairman of the Board of Directors, Lord Claud Hamilton, presiding. The report stated that the profits of the year

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had amounted to £8942, so that, after providing for a dividend of 5 per cent., there remained a balance of £529 to be carried to the guarantee fund, which was thus raised to upwards of £15,000, the maximum provided by the charter. The population on the entire property had averaged during the year 5984, out of which number there had been 103 deaths (60 of which were children under ten years of age, 24 of them being less than twelve months old). The rate of mortality was, therefore, 17·2 per 1000, while in the whole metropolis it was 21·4. The births had been 221, and as regarded the infant mortality, the deaths under one year were at the rate of 104 per 1000. The Chairman, in moving the adoption of the report, congratulated the meeting on its satisfactory character, and the Hon. D. T. Fortescue having seconded it, it was unanimously agreed to.

The man Easterbrook, described as an engraver, of New Cross-road, was again brought up at the Lambeth Police-court, charged with endeavouring to obtain by false pretences, from the Vicar of St. Jude's, Peckham, money belonging to the Hospital Sunday Fund. Mr. Wontner, who appeared to prosecute, said he had further evidence to call with regard to another case against the prisoner, in which he had attempted to obtain money on the ground that he was authorised to collect for the Hospital Sunday Fund. After the second case had been gone into, the prisoner said the entire matter had been carried out by himself. He had written the several letters alleged to be signed by the Secretary of the Fund, as well as those signed "Rev. H. Lawson." Mr. Chance committed the accused to take his trial at the Central Criminal Court on charges of forgery and attempting to obtain money under false pretences.

On Saturday last the Duke of Connaught, President of St. Thomas's Hospital, distributed the prizes gained by the students during the summer session. His Royal Highness was accompanied by the Duchess of Connaught. Dr. W. M. Ord, the Dean, addressed their Royal Highnesses, briefly pointing out that the Medical School was at present attended by about 300 pupils, at least eighty of whom were employed week after week in carrying on the administrative work of the Hospital. The Duke, in reply, expressed the satisfaction he felt that his first official visit to the Hospital, as President, should be on such an auspicious occasion. He congratulated those gentlemen who had been fortunate enough to obtain prizes, and predicted that they would rise in the profession they had chosen, whether as civil practitioners, or as practitioners in the Army or Navy. Their Royal Highnesses were subsequently conducted round the wards by the governors and the medical staff.

Serious uneasiness has been caused by the statement that cholera has suddenly broken out at Damietta, in Egypt. On the 24th inst. eleven deaths were reported to have occurred from this cause; and on the following day, out of forty-eight deaths, twenty-eight were attributed to cholera. The Sanitary Commission has adopted active measures to meet the emergency: a sanitary cordon has been established round Damietta, and the circulation of trains is prohibited. Two hundred soldiers have been sent from Alexandria to assist in carrying out the orders of the Sanitary Council, and every effort is being made to isolate Damietta from the rest of Egypt. There would appear to be some grounds for hoping that the epidemic may, after all, not be really cholera, since one report describes it as a form of gastro-enteric fever; and it has to be remembered that, up to the present time, whenever cholera has appeared in Egypt it has always been traceable to the Gangetic delta. If, therefore, this should eventually prove to be genuine cholera, the germs must either have come into spontaneous existence, or have travelled in some abnormal manner without leaving a trace by the way. More trustworthy accounts will be anxiously looked for, since it must not be forgotten that our army of occupation will be exposed to additional risk if the epidemic should prove to be really cholera, and the means for localising it should eventually prove ineffectual.

THE HARVEIAN ORATION.

The Harveian Oration was delivered at the Royal College of Physicians on Wednesday afternoon, by Dr. S. O. Habershon. The lecturer showed that the great truths in physiological science have been unfolded by a process of gradual evolution, and none more so than the discovery of the circulation of the blood by Harvey. Direct experiments had led to the establishment of scientific facts, but mere reasoning on hypothetical data had been the greatest hindrance to the progress of science. Attention was drawn to Galen as a philosopher whose statements were often the result of his fertile imagination, but whose observations from direct experiment still remain as the earlier links in the chain of scientific truth. Vesalius and Servetus were mentioned as having prepared the way for the discovery of Harvey. After giving some account of the life of Harvey, the Orator pointed out that the advances made by Harvey were obtained by direct experiment. Attention was then drawn to Darwin as a great philosopher of our own day, and the Orator argued that the deductions Darwin made from his observations were not proven; that more than mere natural selection and the forces inherent in structures themselves had been in operation, and that a Divine Power had controlled and guided all things. The value of experimental researches, especially on living animals, was then dwelt on. The Orator insisted that the medical profession was unselfish in its character, but that the good it could effect must necessarily be lessened unless there be liberty to work in its own way, and by its own free agents. In conclusion, he referred to the unexampled medical success of the recent campaign in Egypt.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The time has expired for candidates for seats on the Council of the Royal College of Surgeons to send in their nomination papers, and no name has been added to the list which we published a fortnight ago as giving the names of probable candidates. There are three vacancies in the Council, caused by the resignation of Messrs. Birkett and Prescott Hewett, and the retirement in the prescribed order of Mr. Cooper Forster, who offers himself for re-election. The following candidates, taking them in seniority of fellowship, will also present themselves:—1. Mr. Sydney Jones, of St. Thomas's Hospital, nominated by Messrs. Le G. Clark, J. Simon, F. Mason, R. Barwell, J. Langton, and G. Lawson. 2. Mr. George Lawson, of the Middlesex Hospital, nominated by Messrs. F. H. Marsh, H. Smith, J. Couper, H. Morris, J. J. Purnell, and W. M. Baker. 3. Mr. Arthur E. Durham, of Guy's Hospital, nominated by Messrs. E. Cock, H. G. Howse, Sir W. Mac Cormac, W. M. Baker, T. P. Teale, and T. P. Pick. 4. Mr. Robert B. Carter, of St. George's Hospital, nominated by Messrs. P. Hewett, W. Bowman, J. Rouse, W. Haward, W. A. Frost, and T. Bond. 5. Mr. Reginald Harrison, of the Royal Infirmary, Liverpool, nominated by Messrs. W. Alexander, E. R. Bickersteth, W. M. Banks, W. McCheane, R. Parker, and F. T. Paul. 6. Sir William Mac Cormac, of St. Thomas's Hospital, nominated by Messrs. Le G. Clark, J. Simon, A. E. Durham, W. M. Baker, R. Harrison, and T. P. Teale. 7. Mr. Nottidge Charles Macnamara, of the Westminster Hospital, nominated by Messrs. W. Bowman, Sir J. Fayrer,

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C. G. Wheelhouse, T. Longmore, A. Willett, and G. Cowell. 8. Mr. Oliver Pemberton, of the Birmingham General Hospital, nominated by Messrs. C. G. Wheelhouse, A. Prichard, T. W. Crosse, D. W. Crompton, A. Baker, and F. Jordan. The election will take place on Thursday, the 5th prox., at two o'clock.

THE RECENT HOSPITAL SUNDAY COLLECTION.

The various sums collected on the 10th inst. at the metropolitan places of worship continue to be paid in at the Mansion House. The following are some of the most prominent amounts received:—St. Peter's, Crawley-gardens, £212; St. Margaret's, Westminster, £176; St. Marylebone Parish Church, £112; Brompton Church, £282; Grosvenor Chapel, South Audley-street, £127; St. Barnabas, Kensington, £102; St. Matthew's, Bayswater, £144; St. Mark's, Hamilton-terrace, £182; St. James's, Kidbrook, £144; Metropolitan Tabernacle, £213; Holy Trinity, Sydenham, £113; St. Stephen's, Westbourne-park, £151; St. Paul's, Onslow-square, £358; Christ Church, Hampstead, £93; Messrs. Reid and Co., £200; D. C., a further sum of £100; Trinity Church, West Hampstead, £100; St. Andrew's, Wells-street, £159; Portman Chapel, £144; St. John the Evangelist, Penge, £95; Christ Church, Lancaster-gate, £582; Holy Trinity, Paddington, £190; Regent-square Presbyterian Church, £112; Lewisham Congregational Church, £60. Up to the middle of the present week the total amount acknowledged to have been received at the Mansion House on account of the Fund was £29,300.

THE METROPOLITAN ASYLUMS BOARD.

At the recent fortnightly meeting of the Managers of the Metropolitan Asylums Board, the returns of small-pox for the period ended the 22nd inst. showed that the total number of patients in the several hospitals belonging to the Board was sixty-six, as compared with seventy-one for the preceding fortnight. The fever patients under treatment numbered 284, as compared with 265 during the previous period. A letter was read from the Clerk of the Vestry of St. Pancras, which stated that, on the recommendation of a committee of the Vestry, they protested against any further expenditure by the Metropolitan Asylums Board in litigation in the Hampstead Hospital Case, as there could be no doubt that Hampstead Heath had been very much damaged by the determination of the Board to resist the pressure put upon them to come to some arrangement for the transfer of the Hospital to some more suitable site. The letter was ordered to be acknowledged.

THE PARIS WEEKLY RETURN.

The number of deaths for the twenty-fourth week of 1883, terminating June 13, was 1081 (586 males and 495 females), and of these there were from typhoid fever 45, small-pox 8, measles 31, scarlatina 3, pertussis 21, diphtheria and croup 34, erysipelas 10, and puerperal infections 1. There were also 44 deaths from acute and tubercular meningitis, 205 from phthisis, 30 from acute bronchitis, 77 from pneumonia, 108 from infantile athrepsia (36 of the infants having been wholly or partially suckled), and 38 violent deaths (32 males and 6 females). The number of deaths registered this week is the lowest of the year. With the exception of measles (from which 31 deaths occurred in place of the 20 of the preceding week) the epidemic diseases have diminished in frequency. As is usually the case, athrepsia in its progress follows the movements of the thermometer. Some diseases have diminished remarkably, as meningitis, the deaths from which have decreased from 72 to 51, while there have been only 8 deaths from small-pox. The births for the week amounted to 1189, viz., 605 males (451 legitimate and 154 illegitimate) and 584 females (421 legitimate and 163 illegitimate): 101 infants were either born dead or died within twenty-four hours, viz., 52 males (33 legitimate and 19 illegitimate) and 49 females (37 legitimate and 12 illegitimate).

THE INFECTIOUS DISEASES NOTIFICATION BILL.

On the afternoon of Wednesday, the 27th inst., in the House of Commons, Mr. Hastings moved the second reading of the Infectious Diseases Notification Bill. He stated that its object was to extend to small towns those powers of dealing with and notifying infectious diseases at present possessed by many large and populous towns under local Acts; and he hoped the House would assent to the second reading of the Bill, as it would be the means of saving thousands of valuable lives. Mr. Hopwood characterised the measure as one of those fads for interference with personal liberty which were aired at Social Science congresses. It was a first step towards compulsory isolation, and would have the effect of empowering the medical officer and inspector of a parish to enter a home and remove any sick member of the family without regard to the feelings or wishes of its other members. Moreover, it would fail to check the spread of disease, as the poor man, when sickness invaded his home, would often not call in the medical officer, but would have recourse to the services of the herbalist, who would not disclose the disease to the world, and thereby lead to the man's losing his employment. As the speaker was proceeding to develope his arguments against the Bill, the House was counted out; and the debate stood adjourned.

THE UNIVERSITY OF CAMBRIDGE.

The Professor of Surgery in the University of Cambridge, Dr. Humphry, has given notice that he will lecture on the Principles of Surgery during the Michaelmas Term; on Injuries and Diseases, considered with especial reference to the Anatomy of the parts concerned, in the Lent Term; and on Spinal Diseases in the summer months. During the Easter Term, and at other times, he will give clinical instruction at Addenbrooke's Hospital. The lectures will be open without fee to students entered to the practice of the Hospital.

HYGIENE IN TIME OF WAR.

Dr. De Chaumont, Professor of Military Hygiene in the Army Medical School at Netley, recently read a paper on the above subject at the Royal United Service Institution; Dr. Crawford, Director-General of the Army Medical Department, in the chair. The Professor referred to some of the recent operations undertaken by our troops, many of which had been fraught with instruction from a hygienic point of view. Those in which our troops had been engaged latterly were the Ashantee war, the wars in South Africa, in Zululand, and the Transvaal, the Afghan campaigns, and the recent operations in Egypt. With a certain amount of similarity in the circumstances, there were important differences which gave a peculiar character to each of these struggles. The first—the Ashantee war—was carried out in one of the most unhealthy of tropical regions, and the losses through death by disease were in consequence greatly in excess of the losses by the hand of the enemy, in spite of the rapidity with which the campaign was accomplished. The South African Wars, on the other hand, were carried on in a sub-tropical climate, where the normal conditions were healthy, but where the exigencies of war gave rise to considerable sickness. The Afghan wars were accomplished in a hill-climate in the neighbourhood of the tropics, but in

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circumstances of peculiarity and difficulty, aggravated by the invasion of tropical disease. Again, the Egyptian campaign was in a country not exactly tropical, but in close proximity to the hottest portion of the earth—a country, too, of which our troops had a grave experience in former times as regarded disease, and of which they retained down to recent times an unhappy reminiscence in the shape of ophthalmia. Dr. De Chaumont next referred to various groups of diseases, and called attention to the difficulties which hygiene has to encounter in times of war. Putting aside, he said, the necessary exposure to the vicissitudes of climate and weather, the want of food that might occur, or the insufficient character of the rations, and various other considerations, there was still one very serious difficulty—the great compression of population. The most open order of camps in war time gave a much smaller space per head than the most crowded conditions in civil life, whilst camps might be so compressed as to give only eight square yards, or less, per head. Although, he remarked, we are far from having solved all the questions of hygiene, or of the causation of disease, there are sufficient principles established to enable us to say that, if certain recognised rules were carried out, we should be able to cope successfully with preventable disease, even under the difficulties and impediments which are inseparable from active service in the field.

ELECTION OF PROFESSOR BALL.

Prof. Ball has just been elected into the Section of Medical Pathology of the Académie de Médecine to fill the vacancy caused by the death of Dr. Woillez. His chief competitor was Dr. Siredey, who was placed by the Section first on the list of candidates; but Prof. Ball obtained forty-four votes to thirty-four given for Dr. Siredey.

UNIVERSITY OF DUBLIN—SCHOOL OF PHYSIC IN IRELAND.

Mr. Alworth Wright, son of the Rev. Dr. C. H. Wright, of Belfast, has been recommended by the examiners for the Medical Travelling Prize of Trinity College. The prize, which is worth £100, and which is disposed of annually, is always an object of eager competition. Mr. Wright has just come out as third on the list of Bachelors of Medicine at the Trinity Term Examination, and last November he obtained his degree of Bachelor of Arts as first Senior Moderator and Gold Medallist in Modern Literature. The winner of the Medical Prize is required to spend six months in the medical schools and hospitals of Paris, Berlin, or Vienna, and to do this with proportionate advantage he must be conversant with the French and German languages.

THE LATE CHARGE OF LIBELLING A MONTHLY NURSE.

The case of Pearson *v.* Somervell, recently decided in the Queen's Bench Division of the High Court of Justice, is of such a remarkable character, and is so important, that we briefly publish the facts. The plaintiff was engaged as a monthly nurse to attend upon the wife of the defendant in her confinement, having been highly recommended by a friend. The labour was difficult, and instrumental aid was required. Shortly after the birth, hæmorrhage set in, and Dr. Stone, of Reigate, who was in attendance, gave special instructions to the nurse to keep the patient absolutely quiet, and not to change her linen. The evidence of several witnesses went to show that, for some reason, the plaintiff acted in direct violation of these orders, and that the hæmorrhage returned, partly, it was alleged, through her misconduct, and the patient's life was very gravely endangered. The nurse was said also to have shown violence of temper in Mrs. Somervell's room, and in other ways to have seriously misconducted herself. In these circumstances the defendant summarily dismissed her, and, acting upon the advice of Dr. Stone, procured another nurse, as his wife was in absolute fear of the plaintiff. So far, at least, the defendant only acted as every sensible man would have done; but, feeling it right that those who had recommended the nurse should be made aware of her conduct, he addressed a letter to the husband of the lady she had been attending before she came to Mrs. Somervell, and this letter contained the alleged libel upon which the present action was brought. It stated, amongst other things, that the plaintiff had behaved "like a fiend incarnate," and "with the utmost callousness." For the defendant a plea of justification was entered. The trial occupied the best part of two days, and, in the end, the jury, after considerable deliberation and several references to Mr. Justice Hawkins, who tried the case, stated that they considered that the first expression mentioned above was too strong, though undoubtedly there was some justification for it; and they added, that if the judge ruled that the verdict must be for the plaintiff, they assessed her damages at one farthing. Mr. Justice Hawkins thereupon ruled that the occasion was privileged, and gave the verdict and judgment for the defendant. The remarkable feature of the case was that the previous employers of Pearson spoke in the highest terms of her conduct, and it can only be surmised that some petty squabbles with Mr. Somervell's servants, evidence of which was given on the trial, led to her behaving, upon this occasion, in the manner described in the evidence. At any rate, the sympathy of the public will certainly be with Mr. and Mrs. Somervell, and the public may congratulate themselves on the fact that Mr. Somervell had the courage to make the nurse's behaviour known to those who had recommended her. If he used unnecessarily strong language in describing her conduct, the worry and expense attendant on defending himself at law, even though he has won, will have given him a costly lesson.

HÆMATOMA OF PANCREAS.

At the meeting of the German Medical Society in Prague, on March 9, Professor Gussenbauer showed a patient in whom he had punctured a blood-tumour of the pancreas (*Wiener Medicinische Wochen.*, No. 13). The man was forty years of age, and had in the previous year become the subject of an acute "gastricismus," said to be caused by a monster meal, of which sausages, beer, and spirits formed the staple portion. Since that time he had been the victim of gastric and intestinal disorder, and his complexion had changed to a yellowish-grey tint. When first examined by Gussenbauer, a fluctuating swelling was detected between the navel and the xiphoid cartilage, apparently retro-peritoneal, and of about the size of two fists. The diagnosis rested, therefore, between soft sarcoma, abscess, and cyst, including hæmatoma. The duration of the affection (about three months) was held to be against the possibility of sarcoma. The absence of pain and the fixation of the tumour were regarded as opposed to the diagnosis of abscess. The diagnosis, therefore, lay, according to Gussenbauer, between cyst and hæmatoma either of the pancreas or supra-renals. Why the idea of hæmatoma should have suggested itself to Gussenbauer does not appear. It is curious that he should have mentioned it in arriving at a diagnosis by the process of exclusion. The probability is that his knowledge of the subsequent course of the case coloured these preliminary remarks on differential diagnosis. A median incision was made through the abdominal wall directly over the tumour. The parietal lamina of the peritoneum was in process of being stitched to the anterior wall of the tumour, when an

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accidental puncture of the swelling permitted the escape of a dark-coloured fluid. By means of a trocar 1900 cubic centimetres of the fluid contents were drawn off. The wall of the cyst was in many places smooth; in others, especially beneath the transverse colon, rough and irregular. After the cavity of the cyst had been washed out, antiseptic dressings were applied. For the first days a sanguinolent fluid with some black lumps escaped. The fluid discharged was proved to contain blood. No fever followed the operation. After a few days an eczematous condition was observed about the wound, such as is met with in cases of gastric fistula. Some of the discharge was collected, and found by experiment to digest albumen (forming tyrosin and leucin), and to transform starch into sugar. Professor Gussenbauer said that the fistula had twice spontaneously ceased to discharge, but the appearance of fever necessitated the restoration of the fistula, after which the fever subsided. Examination still revealed, at the time the patient was shown, the presence of a cavity about an inch long and rather more than an inch wide, from which the pancreatic secretion yet flowed. The conclusion at which Gussenbauer arrived was that a cyst had formed in the pancreas as the result of obstruction in the duct. This was most probably produced by the presence of a stone, the existence of which might also explain the occurrence of hæmorrhage into the cyst. No mention is made of the actual detection of a calculus. The stools were not characterised by the presence of fat, and the patient presented no signs of disease beyond what have been mentioned. Professor Chiari, in the course of some remarks on the origin of cysts in the pancreas, mentioned a case in which, as a result of "peri-pancreatitis," the whole of the pancreas had necrosed, and had been passed per anum. There was no doubt about the sequestrum being pancreas. The man recovered, and the case was published in the *Wiener Med. Wochen.* for February, 1880 (see *Medical Times and Gazette*, vol. i. 1880, page 270). In the Pathological Museum at Vienna, Rokitansky has a similar preparation of a necrosed pancreas.

CONSUMPTION OF BEER IN THE PARIS HOSPITALS.

As some answer to the protests which have been made against his peremptory prohibition of beer for the patients of the hospitals, the Director of the Assistance Publique publishes some of the figures, which have justified, as he thinks, his too indiscriminate resolution. It seems that the quantity of beer consumed at the Hôtel-Dieu rose from 37 litres in 1875 to 13,516 in 1882; at the Pitié from 700 to 8,995; at the Charité from 1,876 to 13,473; and at the St. Antoine from 3,768 to 14,564. The whole of the hospital establishments consumed 28,695 litres in 1875, and 151,174 in 1882. The consumption of *vin ordinaire* (which has the reputation of being very good in the Paris hospitals) rose from 1,893,128 litres in 1875 to 2,646,728 in 1882; that of Banyuls wine rose from 56,881 litres to 128,584, and Bordeaux from 78,814 litres to 103,988. There were also 1,130,531 litres of milk consumed in 1875, and 2,675,699 in 1882. The increase in the consumption of beer, therefore, has not been caused by its substitution for wine or milk, the beer being an absolute addition. "But who drank all this beer?" asked one of the municipal councillors. "That I cannot tell," replied M. Quentin, "though it is certain that all these supplementary quantities did not profit the patients."

The late Mr. Nathaniel Montefiore has bequeathed by his will to the Royal Medical Benevolent College, Epsom, £1000, and to the London Hospital £500, besides generous bequests to Jewish benevolent institutions.

Dr. George Murray Humphry, F.R.S., was, on the 23rd inst., formally admitted to the Professorship of Surgery in the University of Cambridge. As the University authorities have thus fully recognised the necessity of creating a Chair of Surgery, it is to be expected that they will lose no time in properly endowing it.

The inaugural dinner of the Cambridge Graduates' Medical Club took place on Wednesday last at the Marlborough Rooms, Professor Paget occupying the chair, in the unavoidable absence of Sir George Burrows, Bart. Between sixty and seventy members were present, and the meeting generally may be considered to have been a great success.

The Duke of Westminster has given £50 to the British Hospice and Ophthalmic Dispensary at Jerusalem. The Secretary of the Order of St. John, Sir Edmund Lechmere, M.P., has heard, through the Foreign Office, that the question of the grant of a site for the Hospice has been brought to a satisfactory conclusion, the land granted being that which was selected by Sir E. Lechmere when he was at Jerusalem in March last.

MEDICAL MATTERS IN PARLIAMENT.

House of Commons—Thursday, June 21.

The Sanitary Condition of Somerset House.—Lord G. Hamilton asked the Chancellor of the Exchequer whether he would direct that the report of Mr. Rawlinson, made after his inspection of the office occupied by the Legacy Duty Department in 1880, be printed and laid upon the table; and whether he would undertake that this report, as well as the report from the Medical Officer to the Inland Revenue Office, would be referred to in connexion with any application to the Treasury on account of injury to health through being located in the basement offices at Somerset House.—In reply, Mr. Childers said: In December, 1879, Mr. Herries, then Chairman of the Board of Inland Revenue, believing that the sanitary arrangements of the Legacy Duty Department in Somerset House were unsatisfactory, applied to Mr. Sclater-Booth, asking him to recommend some high authority whose advice might be taken on the question. Mr. Sclater-Booth recommended Mr. Rawlinson, who deputed Mr. Griffith, a distinguished civil engineer, to examine the buildings. On January 13, 1880, Mr. Griffith made a preliminary report, which Mr. Rawlinson forwarded to Mr. Herries, with the statement that he himself felt "so convinced that injury to health must, and does, arise from the defective drainage and ventilation, that he considered the work necessary to health should be done at any cost"; and observing that the report was, as Mr. Griffith said, "a mere brief sketch." This was the only report made, and as it was only a brief sketch, and addressed to Mr. Rawlinson, it did not appear to be of a nature to be laid on the table. The day after he received the report Mr. Herries communicated with the Office of Works. That office at once obtained the sanction of the Treasury for the thorough examination of the sanitary arrangements of the whole of Somerset House. The work of revision was commenced in April, 1880, and was not finished till the autumn of 1881. No expense was spared; and the result was believed to be satisfactory. As to the last part of the question, all attendant circumstances were carefully considered whenever any application was made to the Treasury on account of injury to health.

House of Lords—Friday, June 22.

The Contagious Diseases Acts.—Lord Carnarvon presented, from the inhabitants of the neighbourhood of Aldershot, a petition in favour of the continuance of these Acts; and stated that the petitioners set forth the good results that had followed the enforcement of the Acts, and deprecated the course taken by Government. At Aldershot there had not been a single case of hardship caused by the application of the Acts since their introduction. His lordship observed

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that he feared the Bill for the Better Protection of Young Girls could hardly become law this session, and if it did not, the state of those towns which had formerly been, but were no longer, subject to the full operation of the Contagious Diseases Acts would be very deplorable.

HOUSE OF COMMONS—FRIDAY, JUNE 22.

The Sunderland Disaster.—Mr. Macfarlane asked the Secretary of State for the Home Department if, in consequence of the Sunderland calamity and others which occurred on the Continent, arising from insufficient means of exit from places of public amusement, he intended to bring in a Bill applicable to the whole kingdom, enforcing such regulations, before licences were given to such buildings, as would insure the safety of the public in case of fire or of panic from any cause.—Sir William Harcourt said he did not think it wise to anticipate the inquiry into the Sunderland calamity, but the information he had seen pointed to the fact that the exits in that case were not insufficient. As to the general question, he should be glad that the local authorities should have power over the buildings referred to. But the House had refused to give these powers in the case of Manchester. At all events, he could not undertake to bring in a Bill on the subject this session.

Peckham Rye and the Metropolitan Board of Works.—Sir R. Cross asked the Home Secretary if it was true that he had refused to receive a deputation of the principal inhabitants of Peckham Rye on the subject of the by-laws passed by the Metropolitan Board; and, if so, whether he would reconsider his determination.—Sir W. Harcourt said he had already received a deputation from Peckham Rye on the subject; and what with the very frequent sittings of committees and of the House, and the business of his department, he had not much time left for deputations. But if the right hon. gentleman would guarantee that the speakers should not be inordinately long, he had no objection to receive a further deputation on the subject.

MONDAY, JUNE 25.

Medical Comforts on Board the "Malabar."—Mr. Dawney asked the Secretary of State for War, with reference to Appendix No. 33 in the Army Hospital Services Inquiry Blue-book, whether the lists of medical comforts there given as received at Ismailia, and used on board Her Majesty's ship *Malabar* during the voyage to Portsmouth, represented the total amount consumed by the troops on board, and whether it could have been supplemented from the ship's stores?—The Marquis of Hartington replied that the return in the Appendix referred to was somewhat misleading. It did not represent the provision of medical comforts made at Ismailia for the voyage, but was the medical officer's account of the issues made to patients out of the medical comforts drawn by him from the saloon-mess of the *Malabar*. Such comforts could have been supplemented to any extent from the same source. The medical comforts shown in the Appendix were all that were consumed during the voyage; and the medical officer showed in his evidence (2, 10, 153, and 154) that they were sufficient for the invalids under his care, who were, for the most part, convalescents on fresh-meat rations.

The Contagious Diseases Acts.—Mr. Hopwood inquired whether there was any foundation for the statement, which had appeared in several newspapers, to the effect that a large transport had entered Portsmouth harbour with time-expired men from India, and that on the same day several diseased women left the Portsmouth Hospital, presumably with the intention of meeting the transport, and that there was no law to prevent their doing so.—Mr. Campbell-Bannerman replied, that, as soon as the statement appeared, the Visiting Surgeon under the Contagious Diseases Acts at Portsmouth wrote to the Admiralty, under which department he acts, saying there was no foundation whatever for the statement.

EXAMINATION OF LOCAL SURVEYORS AND INSPECTORS OF NUISANCES.—At an examination held at the Sanitary Institute of Great Britain, June 7 and 8, ten candidates presented themselves. The Institute's certificate of competency to discharge the duties of Local Surveyor was awarded to P. F. Comber and E. G. Mawbey; and the Institute's certificate of competency to discharge the duties of Inspector of Nuisances was awarded to W. Dent, S. Edmondson, W. Hearne, G. Johnson, A. W. Merril, and G. F. Wells.

WOMEN'S MEDICAL MISSION.

ON Monday, the 18th inst., a meeting was held at 24, Grosvenor-square, by the invitation and under the presidency of the Earl of Shaftesbury, in connexion with the Women's Missionary Institute, for the purpose of establishing a house of residence—in the neighbourhood of the London School of Medicine for Women and of the Royal Free Hospital—for the missionary medical students. The meeting was addressed by, among others, Mrs. Clark, late medical missionary in the Punjaub; Dr. E. Downes, medical missionary from Cashmere; Miss Beilby, late of the Medical Mission, Lucknow; R. B. Chapman, Esq.; and the Rev. W. Barlow, of the Church of England Missionary College.

Resolutions were agreed to, approving of the proposal to establish the desired house of residence for the missionary medical students; declaring the necessity of providing not less than £2000 to purchase and furnish the residence; and appointing a finance committee.

Lord Shaftesbury reiterated his own conviction that the project was a sound one, and that the public would readily subscribe the requisite, and by no means extravagant, amount asked for.

SPIRITS, WINE, AND MALT LIQUORS IN WORKHOUSES.

A PARLIAMENTARY return has just been issued, showing the quantity of "spirits, wine, and malt liquors consumed in each workhouse in England and Wales in the year ending December 31, 1881, together with the expenditure in each workhouse for each such intoxicating liquor for the same period; also stating the daily average number of inmates in each workhouse during the said term." This return will no doubt attract much attention from not only those engaged directly in the administration and government of workhouses—the guardians, and the professional gentlemen on whose recommendation it depends whether stimulants are, or are not, supplied to the inmates of these establishments,—but also from those persons, now so numerous, who take decided views as to the use of intoxicating liquors by any class or in any circumstances. We have not sufficient space at our disposal to examine the return in detail; the summary, however, shows that the spirits consumed amounted to 183,233 pints, costing £19,316; wine, 114,497 pints, costing £7148; and malt liquor, 817,641 gallons, costing £33,839—making a total expenditure of £60,303 for stimulants supplied to indoor paupers in a year. But it must be noted that the return does not refer to the ordinary workhouse only, but also to separate Poor-law infirmaries, and to the district asylums, etc., under the management of the Metropolitan Asylums District Board. The total expenditure seems large, but when a calculation is made on the daily average number of inmates—viz., 170,566—the rate per head is only about 7s. per annum. Moreover, in some cases it seems that the daily average does not include the ordinary inmates of the workhouse, where the use of stimulants is wholly restricted to the infirmary, otherwise the average cost per head would be much lower. In seventeen unions no spirits, wines, or malt liquors appear to have been consumed, no less than eight of these unions being in Wales; whilst in three other cases it is stated that they were all consumed in the infirmary, and none in the workhouse—two of these places being in the metropolis, namely, Shoreditch and Greenwich. The cost of the liquors consumed ranges from the very small sum of 6½d. at Tarvin, to the large amount of £2692 at the Leavesden Asylum.

THE SWEATS OF PHTHISIS.—Dr. Landouzy employs a powder consisting of ten parts, by weight, of salicylic acid to ninety of talc or starch. Those parts of the body which are habitually the most frequent seats of the sweating are powdered twice a day. Almost always it gives temporary relief; and sometimes the amelioration persists for some days after the application has been discontinued.—*Journal de Thérapeutique*, May 25.

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FROM ABROAD.

The Paris Hospital Mortality Returns.

Dr. Du Castel, in his report for the last quarter of 1882 (October-December), states (*Union Médicale*, March 10 and May 22) that the mean temperature of the quarter was 8·3° C., exceeding the normal mean (6·7°) by more than a degree and a half. The rain rose to 240 millimetres, while the mean of the quarter of the preceding years had not exceeded 156 millimetres. In December alone not less than 113 millimetres of water fell. The barometrical pressure and electrical tension were both weak. The *general mortality* of the hospitals would seem at first sight excessive, amounting to 4247 deaths, and sensibly exceeding the mean of the last ten years, which was 3146; but the increase loses much of its importance on account of the Assistance Publique having opened a considerable number of provisional services, and thus notably increasing the hospital population. The number of sick in the hospitals and hospices oscillated in 1879 between 16,000 and 17,000, while in this quarter it varied from 20,000 to 21,000.

1. *Affections of the Respiratory Organs.*—Pneumonia and pleurisy seem to have been less frequent and less severe than in the last quarter of 1881, while phthisis and bronchitis have sensibly increased. During this fourth quarter of 1882 there have been 1874 admissions for phthisis, with 908 deaths; 471 pneumonias, with 148 deaths; 995 bronchites, with 95 deaths; and 357 pleurisies, with 49 deaths.

2. *Diphtheria.*—The number of patients admitted for diphtheria (308) has differed but little from that of the same quarter in 1881 (308); but the mortality has been sensibly less, viz., 188 in place of 227. In Paris generally, also, there have been many fewer deaths from this cause in this quarter, viz., 432 in place of 605 for the same quarter of last year.

3. *Eruptive Fevers.*—The eruptive fevers, and especially scarlatina, have been of less frequency and fatality for the quarter than in 1881. For small-pox there were 220 admissions, with 43 deaths; for scarlatina, 60 admissions, with 3 deaths; for measles, 80 cases, with 17 deaths; and for erysipelas, 268 admissions, with 30 deaths. In entire Paris there were 104 deaths from small-pox and 14 from scarlatina.

4. *Typhoid Fever.*—After having presented its maximum of intensity in October (883 deaths in entire Paris, and 2068 admissions into hospital, with 365 deaths), typhoid fever underwent a marked remission during the months of November and December (386 and 308 deaths in Paris, and 1863 and 1123 admissions, with 151 and 127 deaths). Such remission of the intensity of the typhoid epidemic could be foretold, as it is comprised in the laws of seasonary evolution so clearly expounded by Dr. E. Besnier; but it is impossible to say to what point the diminution will continue, and whether the much lower figure of former years will be attained. The disease has retained the benignity which it manifested during the third quarter, the mean mortality of the hospitals having been 13 per cent. The most remarkable circumstance of the epidemic was the frequency of intestinal hæmorrhages during October and November, and, although these were generally mild, they led in some cases to a fatal termination. Intestinal perforations were also frequently observed during the same period. Dr. Millard met with intestinal hæmorrhage in 12 out of 109 cases of typhoid fever; and Dr. Moizard noted 5 instances of intestinal perforation in 120 cases. During the quarter there were admitted 5058 cases, 683 (or 13 per cent.) of which proved fatal.

5. *General Summary.*—"If we seek to establish what may be termed the sanitary balance of the past year, we find that most of the contagious epidemic diseases (small-pox, measles, scarlatina, and diphtheria) have been more rare and more mild than during some preceding years, and that typhoid fever has become our great epidemic. During the last six months of 1882 it has seized a great number of subjects, and, in spite of its relative benignity, it has played a great part in the mortality of the year. Its complications have varied with the time of the year, for while during the third quarter pharyngeal and pulmonary accidents imparted a special character to a number of cases, during this fourth quarter intestinal hæmorrhage and perforation have been of considerable frequency. The knowledge of these facts shows us once more how important it is to become acquainted exactly with the characteristics of an epidemic, in order to form a judgment on the different medical questions that may arise during its course. The benignity of the present epidemic, and the favourable issue of the immense majority of cases, render it very difficult to appreciate with exactness the curative value of the different medicinal agents now in use. The frequency of intestinal accidents during October and November might have led to the incrimination of some of the means employed, did we not know that these accidents have supervened whatever medicines have been employed, and are evidently under the influence of some other causes than the action of therapeutical agents."

The following is a tabular view of the mortality produced by the principal contagious epidemical diseases in entire Paris during the last quarter of the respective years:—

	1878.	1879.	1880.	1881.	1882.
Small-pox .	52	330	241	119	104
Scarlatina .	9	20	73	47	14
Measles . .	44	83	171	154	(?)
Typhoid fever.	259	319	413	404	1577
Diphtheria .	365	373	462	605	432

OSTEOMALACIA IN CHILDHOOD.

M. Parrot's address on the Osseous Lesions of Congenital Syphilis at the Pathological Society three years ago, among other results, has drawn prominent attention to the subject of bone disease in children. His argument that rickets is practically an almost worn-out syphilitic taint was not generally accepted by English pathologists. Nevertheless, it sufficed to set us to work on the subject, and led the way to many discussions, and to the exhibition of interesting specimens illustrating this still obscure chapter in pathological anatomy.

One of the later developments in the same direction is the assertion that well-marked osteomalacia may occur in children. Dr. Rehn, of Frankfort, at the International Medical Congress, in the Section for Diseases of Children (*vide Transactions*, vol. iv., page 59), exhibited the skeleton of a child between eighteen months and two years of age, which he believed to be the only then known case of this disease in a child; and the bones had been submitted to, and examined by, Professor von Recklinghausen, and pronounced by him to be true osteomalacia. The specimen was found preserved in the Frankfort Anatomical Museum, but there were no clinical details of the case. Since that time Dr. Rehn has met with another instance of the same kind, and this too has been examined by the same eminent pathologist, von Recklinghausen, and pronounced to be typical osteomalacia. We take the following particulars of this case from the *Jahrbuch für Kinderheilkunde*, vol. xix., page 2:—A female child, sixteen months old when first seen, was in a miserable, wasted condition. There was considerable craniotabes on the hinder portions of the parietal bones, the costo-chondral junctions were much thickened, and the body of the ribs bent inwards. The margins of both scapulæ were thin, the clavicle was bent, as also the radii and the ulnæ about their centres; and these bones were thin and yielding. The humeri also were soft, especially the right one; in a less degree also the femora and the right tibia; the left tibia was firm. The epiphyseal junctions were not markedly thickened. The spleen was not enlarged, and there was no fever. It appeared that the child had been bottle-fed, on ordinary milk, in a very poor dwelling. Under improved conditions of feeding and housing the child temporarily improved, but died of an attack of acute bronchitis when sixteen months old. The right tibia and radius were sent to Professor von Recklinghausen for examination and report, with a diagnosis that the disease was probably osteomalacia.

In his report the Professor states:—"The tibia is perfectly straight. Its extremities are somewhat enlarged, and it is rather flexible in its whole length. . . . There is present a considerable deposit of soft new bone both beneath the periosteum and in the axial spongy tissues. . . . At the extremities there are rachitic zones, measuring from 4 to 20 mm. . . . . The subperiosteal deposit in places measures as much as 2 mm. The radius is bent in the middle at an angle of 120°. No fracture is discernible

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at the point of yielding. The flexibility is here at its maximum, though well marked in other parts of the bone. The medullary cavity is quite absent at this point, and for 5 mm. from it the bone substance is uniform throughout, finely porous, consisting of trabeculæ of osteoid substance wherein traces of the original compact substance are just visible. On the side where the angle opens there is a special periosteal layer about 1·8 mm. thick. A rachitic zone exists at the lower end of the radius 6 mm. by 10 mm., and at the upper extremity 4 mm. by 6 mm. Microscopically, throughout the entire length of the bones, the conditions of true osteomalacia can be seen in detail and with great distinctness. The bone trabeculæ are almost entirely devoid of lime; in the compact substance alone are there any *tela ossea*, which contain lime. The rickety zones of the cartilages show the well-known columns of cartilage cells, but islands of osteoid substance may be seen among them. It must be admitted that the rickets of the epiphyses is only sparely developed; the most prominent point is the extreme softening of both bones—osteomalacia—that is to say, therefore, typical infantile osteomalacia."

Dr. Rehn gives four other cases; but, unfortunately, in the only one which was fatal, he could not obtain a post-mortem examination—one was lost sight of, and two recovered after long and careful treatment. His views, therefore, at present rest on two post-mortem examinations.

The cases may be summarised as follows:—The earliest symptoms could not be ascertained in a reliable way; gradual wasting, restlessness, sleeplessness, and special sensitiveness on being moved were among the symptoms given. The most characteristic points, however, were the actual softness, flexibility, and general slightness of the long bones, with or without a small degree of the rachitic enlargement of the epiphyses. The children evinced a great dread of being moved, so that a kind of pseudo-paralysis seemed to exist. In two of the cases there was softening (craniotabes) of the cranial bones. In consequence of this softening of the bones, "infractions" (acute bendings) were not infrequent in the ribs, clavicles, and the long bones. The bones of the forearms and of the legs were first affected, then the humeri, and lastly the femora. In none of the cases was diarrhœa a marked feature. In three of the cases enlargement of the spleen was observed. In all cases there was marked anæmia and wasting. Fever was not observed. Profuse sweatings occurred in some cases, and unusual thirst in one. The urine did not contain any excess of phosphates.

Such were the symptoms of this disease in Dr. Rehn's cases. As regards the differential diagnosis, he remarks on the necessity of not confounding these changes with those produced by congenital syphilis, and of not mixing up ordinary rickets with osteomalacia. The enlargement of the epiphyseal margins in rickets differentiates this disease from osteomalacia, while the absence of syphilitic history excludes syphilis. He further thinks that the slightness of the entire skeleton and the straightness of the bones of the lower extremities are very characteristic of osteomalacia. The latter he considers due to the sensitiveness which necessitated the recumbent position. Extreme tenderness, such as is found in osteomalacia, is not met with in rickets, according to this author. The predisposing cause, Dr. Rehn thinks, is the age of the patient; all the recorded cases began during the first year of life—the time of the most active bone-growth—and as yet all his cases were in female children, while the actual cause seems to depend on a diet which is deficient in phosphoric acid and in lime salts. No hereditary predisposition could be traced.

Dr. Rehn admits the scantiness of the clinical details, and points out very clearly the gaps which so obviously exist in these cases before we can unreservedly accept them as osteomalacia—that is, as osteomalacia is usually understood. In these, the only two cases which have at present been published, there is no clinical history in one case, and a very indifferent history in the second; while a chemical analysis was not made in either. For the present those cases which recovered must be excluded, as not scientifically satisfactory evidence. They are doubtless of the same class, and other observers could probably adduce similar cases by referring to their note-books. But nothing towards the solution of the difficulty will be gained by falling back on cases the exact nature of which was not proved.

Dr. Rehn seems anxious to separate this osteomalacia from rickets. Indeed, elsewhere he expresses the opinion that they are different diseases. It would be safer at present to give the verdict "not proven." The only point in which these cases differ from a severe case of what is usually understood as rickets, is the absence of enlargement of the epiphyses of the long bones, especially the radii. But surely this sign is neither conclusive nor constant. On the other hand, its presence is often the only sign which attracts attention; thus it would seem as if the disease may concentrate itself and lead to great enlargement of the growing bone at this point, or the dyscrasia may spread itself over a large portion of the bony skeleton, and, while of greater extent, be less obvious as a local manifestation. At the present time we have under observation a case: the patient is a boy, in whom the symptoms of osteomalacia (as given by Dr. Rehn) are well marked. On the other hand, the facies, the profuse sweating, and occasional diarrhœa, such as frequently occur in ordinary rickets, are present.

Does not the evidence seem on the whole rather to support the older view that the diseases are, to say the least, nearly allied, differing in degree rather than in kind? For this osteomalacia, so-called, occurs in the circumstances which lead to well-marked rickets, and just at the age too when ordinary rickets begins to manifest itself. Furthermore, would it not be well to enlarge rather than narrow down the meaning of the term rickets? Most students, if asked the question, would reply that rickets is a disease of the bones; while the visceral conditions, which are after all primary and the more important, would probably not be referred to. In this respect Dr. Rehn's cases seem to be deficient. The condition of the other organs and tissues was not sufficiently studied, microscopically or otherwise. A more thorough history of the infants' antecedents and surroundings would have added both interest and importance to the cases.

Authorities have long and widely differed in their views as to the relationship between rickets and osteomalacia. The cases of rickets referred to by Trousseau and Lasègue (*Union Médicale*, 1850) are not described with sufficient detail to allow us to judge whether they corresponded with the severe form reported by Dr. Rehn. Probably they were considerably less severe, and yet the authors, in a series of carefully worked out articles (*loc. cit.*), endeavoured to show that rickets and osteomalacia were identical. They traced the analogy of the symptoms during the onset of the disease, and pointed out how the same treatment brings about amelioration. Virchow held the opposite view—the view that they are distinct diseases. For him the only condition which can be compared to rickets is the remaining softness of certain callus-formations which are observed after fractures in cachectic subjects (*Archiv*, vol. v., part 4, 1853). Roloff somewhat later expressed the view of the identity of these diseases (*Virchow's Archiv*, vol. xxxvii.), and subsequently communicated a series of experiments, not only proving this identity of rickets and osteomalacia, but showing that the disease depended, in animals at least, on an insufficiency of lime in the food (*Archiv für Thierheilkunde*, vol. i., 1875).

These views deserve great attention; their very antagonism shows how difficult the subject is, and how little likelihood there seems to be of a speedy solution of the difficulty. On the one hand, rickets is a disease which can be seen at any hospital every day in the week in almost any stage of its development, while osteomalacia—in the narrower and more usual sense of the word—is exceedingly rare. Few amongst us can speak of cases from personal observation. Trousseau and Lasègue in their *mémoire*, already referred to, mentioned cases not associated with pregnancy, occurring in young as well as in middle-aged people, and not confined to females; more especially they referred to the earlier stages of the disease. It was such cases, in fact, which led these eminent clinicians to regard rickets and osteomalacia as not essentially different diseases; in many points resembling each other, while in none did they differ more widely than could be explained by the differences of age at which they are most commonly met with. It is, perhaps, therefore a little unwise to use the term osteomalacia at all. Why have two names for what is practically one pathological lesion? Infantile or adult rickets would express all that is required. Meanwhile the subject remains *sub judice*, and observers must guard against hasty conclusions, and against taking extreme cases for comparison. Safety and soundness of doctrine will more certainly be found in a medium course.

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REVIEWS.

A Treatise on Diseases of the Liver, with and without Jaundice; with the Special Application of Physiological Chemistry to their Diagnosis and Treatment. By Dr. George Harley, F.R.S., F.R.C.P. Lond.; Corresponding Member of the Academy of Sciences of Bavaria, etc.; formerly President of the Parisian Medical Society; Physician to University College Hospital, and Professor in University College, London. London: J. and A. Churchill. 1883. 8vo, pp. 1186.

Twenty years ago Dr. George Harley published a monograph on "Jaundice: its Pathology and Treatment, with the Special Application of Physiological Chemistry to the Detection and Treatment of Diseases of the Liver and Pancreas"—a work which attracted not a little notice, and made Dr. Harley widely known as a highly accomplished physician, and an able and original student and interpreter of the etiology, diagnosis, and treatment of the diseases upon which he then wrote. He now gives the profession the fruits of his twenty years' further and greatly enlarged experience in the diagnosis and management of diseases of the liver; and it cannot be questioned that the studies and experience of such a man must be of great interest and value. The book is a very portly one; but this is due in considerable measure to the large type in which it is printed, and the wide margins. It is, in fact, luxuriously and very perfectly got up. But though all this is very pleasing to the sense of sight, it has also the less happy effects of making the volume rather unpleasantly heavy to hold long in the hands, and of a size that may somewhat alarm the busy practitioner. The work is divided into twenty-seven chapters; the first of which consists of "Introductory General Remarks" on the study of diseases of the liver, and especially points out "the value of physiological chemistry in the diagnosis and treatment of hepatic diseases." Chapter ii. treats of the Chemistry, Physics, and Physiology of the Liver. Chapter iii. is on the Etiology of Jaundice. Chapters iv. and v. are devoted to "General Remarks" on the signs and symptoms, and on the treatment of Hepatic Diseases. Chapter vi. treats of "Biliousness." In the next four chapters, Intra-Uterine, Congenital, and Hereditary Jaundice; Jaundice as a Result of Enervation; Jaundice from Hepatic Congestion and Inflammation; and Jaundice caused by Disease-Germs, are described. Chapter xi. treats at great length of Biliary Concretions. Chapter xii. gives "Hints" on the Differential Diagnosis of Colics. Chapter xiii. is on Catarrhal Jaundice; chapter xiv. on Jaundice from Poisons; and chapter xv. on Jaundice from Permanent Obstruction. Chapter xvi. speaks at length of "The Chemistry of the Excretions" as an aid to diagnosis and treatment. Chapters xvii., xviii., xix., xx., and xxi. are on Abscesses of the Liver—tropical and temperate; Cancer; Syphilitic Disease; Hydatid Disease; and Cystic Disease of the Liver. In chapter xxii. Benign Degeneration, and in chapter xxiii. Traumatic Affections of the Liver, are described. Chapter xxiv. treats of Hepatic Ascites and Dropsy; chapter xxv. of Liver-Spots, Xanthoma, Xanthelasma, and Vitiligoidea; and chapter xxvi. of Affections of the Gall-Bladder; and chapter xxvii. is devoted to General Hints to Aid in the Diagnosis and Prognosis of Diseases of the Liver.

These headings of the chapters of the book show how extensive is the scope of it, though they are far from mentioning all the subjects dealt with. Nevertheless, it must not be supposed that the work is an exhaustive treatise on diseases of the liver, nor does it make any pretensions to be considered as such. It is essentially George Harley on Diseases of the Liver; and the author, in his preface, says—"As this treatise has not been penned either for the use of the tyro or the dilettante in medicine, but for that of my qualified brethren, I shall neither waste time by entering into detailed accounts of the literature, nor give tedious, and probably at the same time profitless, discussions of the theories of the mechanism of jaundice in hepatic derangements, but limit myself entirely to a brief exposition of my own views." Accordingly, Dr. Harley still insists that all cases of jaundice are to be divided into "the two great classes of jaundice from suppression, and jaundice from obstruction." In his monograph on Jaundice, published in 1863, he relied greatly on the presence or absence of the bile-acids in the urine in respect of the differential diagnosis of these two conditions, the presence of the acids being absolute proof that the jaundice was obstructive; but he now asks, "What is the use of talking of chemically detecting bile-acids in a treatise like this, which is intended for the use of practical medical men? not one in a thousand of whom has had the opportunity offered him of so much as even seeing bile-acids chemically detected in any organic mixture whatever, far less of having been taught how to find them in urine." Even scientific chemists in all countries and in all times, he says, have been most anxious to put in the hands of physicians a simple method of detecting bile-acids; "but as yet, like myself, with the supposed simple test I proposed for them in my first book on jaundice, all have failed." He believes most, at present, in Hilyer's method (*Chemical Society's Journal*, 1876, page 445); and refers to Strassburg's modification of Neukommen's test (*Pflüger's Archiv für Physiologie*, vol. iv., page 461), but does not trust it. He has, however, no doubt at all about the justice and truth of his classification of cases of jaundice. To his mind the matter is "as clear as noonday." He gives a typical case of jaundice from suppression, and one of jaundice from obstruction; and says, "the mere fact of the secretion pent up in the hepatic bile-ducts being dark bile in the one case and pale white mucus in the other, sets at once and for ever aside all possibility of reasonable discussion against the theory of jaundice from suppression, and raises the statement from the humble position of a mere theory—which it must be admitted, scientifically speaking, it has hitherto only occupied—to the dignity of an unassailable and imperishable clinical as well as pathological fact, deny it who can!" And if any reader of his new treatise should fail "to grasp the intrinsic value of the data upon which the theory of jaundice from suppression is founded," and his eyes should not be opened by the proofs Dr. Harley adduces, then he "can do nothing more for him, but leave his case to time and the developmental powers of nature." These extracts will give a fair idea of Dr. Harley's vigorous and graphic style. His opinions, formed after long and very careful study, and large experience, are clear and definite, and he expresses them, without hesitation or qualification, in admirable English. He lays great stress on the high value and importance of the part that physiological chemistry must play in the discovery of the etiology and treatment of disease; and as regards affections of the liver, he insists that physiological chemistry "is the only talisman which can unravel the tangled skein of secrets which involves the vast majority of hepatic disorders"; and he devotes some fifty pages to the chemistry of the excretions, as an aid to diagnosis and treatment of those maladies. We suspect that not a few among the chemists and the physiologists of the day will dissent from some of Dr. Harley's inferences and conclusions; but he won his spurs as a student and exponent of physiological chemistry years ago, and he has never ceased to study it: his utterances upon the subject now, as a ripe and practised clinician, cannot but be, therefore, of large practical value. We have not space at our command to allow of our speaking at all fully, or in any detail, of the contents of the book; but the number and variety of the subjects dealt with is marvellously great, and the treatment of each one shows some originality of view and handling. It is highly characteristic of the author, that though, out of consideration for his readers in general, and for foreigners in particular, he condescended to employ ordinary English orthography throughout the book, yet he is so profoundly convinced of the widespread woes and evils that spring from our system—if it can rightly be called a system—of spelling, that he gives "a prelude on medical aspects of spelling reform." That will not, however, surprise the readers of the *Medical Times and Gazette*, who will not have forgotten Dr. Harley's article, "National Spelling Reform, in its Relationship to the Medical Profession, with a Scheme for its Consideration," which appeared in our pages in January last year. The fifth chapter of the book, that giving "general remarks" on the treatment of hepatic disease, will perhaps be most frequently consulted by that oft-spoken-of member of the profession—"the busy practitioner." It is full of information about hepatic remedies, about the value of mineral waters in disease of the liver, their modes of action, their chemical constituents, etc.; on "baneful drugs"; and on the dietetics of liver affections—the last-named subject including some pertinent remarks on champagne. The whole work is, as we have already said, the scientific

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knowledge and clinical experience of Dr. George Harley on diseases of the liver; and it is a very full and eminently readable book. The manner in which the volume has been produced by the Messrs. Churchill, in respect of paper, typography, and illustrations, leaves nothing to be desired.

Nerve-Vibration and Excitation. By J. MORTIMER GRANVILLE, M.D. London: J. and A. Churchill. 1883. Pp. 128.

THE volume before us consists mainly of reprints of letters that have already appeared in the medical journals within the last two years, in a somewhat expanded form, and put forward with more confidence than was expressed in the original papers. The whole idea of the treatment is based upon certain propositions set forth in the introductory chapter to the following effect, viz.: the action of nervous tissue takes place by means of vibration of its constituent elements, which vibration may be regarded as purely mechanical, and therefore subject to the same laws of concord and discord as the vibrations of other bodies, whether organic or inorganic. It follows from this that it should be possible to modify or interrupt nervous vibrations due to natural causes by mechanical means. Dr. Granville does not deny the existence of those organic lesions of the nerve-centres which microscopical research has made known to us in the last few years, but, in his view, they are the effects, and not the cause, of the disease. "Sclerosis," he says, "is not less likely to be the consequence or concomitant of atrophy of the essential elements of nervous tissue than to be its cause." Such being the case, then, the object of treatment should be to preserve or restore the free mobility of the vibratile elements before any adventitious products have been formed and deposited in their midst, and this is to be brought about by mechanical vibration. It would be reasonable to suppose that this could have been effected most naturally by means of electricity, but such, however, is not Dr. Granville's opinion, his objections being that the current simply uses the nerve as a conductor, and passes along it without throwing it into vibration; it travels in the line of least resistance, taking the place of nervous energy, and producing the phenomena of muscular contraction instead of eliciting nerve-force from the centres. In order to produce mechanical vibration in a nerve, Dr. Granville has devised a "percuteur" or hammer so fixed to a graduated apparatus that almost any number of blows per minute can be delivered at a given spot. Care must always be taken that the blow be as light as possible, and of as short a duration as possible. In applying the "percuteur" for the relief of pain, it must not be forgotten that usually the first effect is that the pain is increased, but this soon passes off if the treatment be persevered with. Dr. Granville claims for this mode of treatment—(1) that he has rarely failed to bring the cerebro-spinal and sympathetic ganglia under control by the application of the "percuteur"; (2) that he has in no instance failed to produce activity of the bowels even in cases of previously obstinate constipation; (3) that he can propagate the vibrations produced along the trunks and into the branches of most of the principal nerves; and (4) that he can nearly always arouse torpid centres to action, and thus prepare the way for their restoration to states of normal activity.

We have endeavoured to place before our readers a brief epitome of the general principles of this line of treatment, for details of which they must go to the work itself. We ought to add that Dr. Granville has been careful to adopt this treatment in the case of men only. Locomotor ataxy comes in for a large share of attention, and Dr. Granville claims to have had some very good results in the earlier stages by his treatment.

Pestilentia in Nummis: Geschichte der grossen Volkskrankheiten in numismatischen Documenten. Ein Beitrag zur Geschichte der Medicin und der Cultur. Von Dr. L. PFEIFFER und C. RULAND. Mit Zwei Tafeln Abbildungen in Lichtdruck. Tübingen, 1882. Verlag der H. Laupp'schen Buchhandlung. S. 180.

Pestilence in Coins, etc. With two Photographic Plates.

INASMUCH as history has, until very recently, omitted all description of the ordinary manner of life of private individuals of the times recorded, and as some knowledge of this is requisite for those who wish to trace the progress and variations of disease, the authors of this book suggest that the study of coins and medals may aid in supplying the requisite information. For they think that these medals, etc., not merely commemorate the events to which they refer, but also, by the emblems and inscriptions stamped upon them, give some clue to the prevalent opinions and manners of the times when they were devised. This may be true for the experienced numismatist, but for the general reader, whether lay or medical, we think that the descriptions of the coins and medals given in this work will be chiefly useful in serving as texts for the very interesting and instructive comments of the authors.

The medals, etc., selected for description are grouped according to the subjects to which they refer. The first group comprises those which have reference to famines and the measures adopted for obviating them, and to concomitant phenomena, such as comets, locusts, floods, and drought. They date from 1505 to 1854. In the earlier part of this period famines were frequent, not because bad harvests occurred oftener than now, but because means of communication between different countries, or different parts of the same country, were very imperfect; so that a bad harvest in any locality led to results which would be impossible at the present time, when steam and telegraphy have so closely united all civilised nations for food purposes. In the inscriptions on the earlier Italian famine medals the word "Annona" frequently occurs. This has reference to the custom in the middle ages of State regulation of the trade in grain. Not merely was exportation prohibited, but even for home trade a licence was requisite. The farmers were compelled to register their stores of food, and to sell them at a price fixed by the government. State magazines of corn were also stored in the chief towns, partly as a precaution against dearth or siege, and possibly for the storage of tithes paid in kind. Similar institutions existed in Bohemia and Germany. These magazines led to very unexpected results; for in times of dearth the country people naturally migrated to the towns where food could be procured, and the consequent overcrowding, with bad ventilation, and neglect of hygienic precautions, resulted in fearful outbursts of typhus fever. Any intervention between the producer and consumer was forbidden, as tending to enhance the price of food, and the *Kornjudenmedaillen* testify to the popular feeling about infractions of this law. These medals, dated 1694-95, have on the reverse in German the text, "He that withholdeth corn, the people shall curse him; but blessing shall be upon the head of him that selleth it" (Prov. xi. 26): and on the obverse, the Jewish speculator with a bag of grain on his back, and the devil scattering the grain from the bag, and underneath, "Theure Zeit" ("Dear Time"); or the Jew hanging on a tree, with the devil perched on a bough above him, and the inscription, "Wolfeile Zeit" ("Cheap Time"). Bakers also were controlled by laws, and in time of dearth were prohibited from selling bread until twenty-four or forty-eight hours after it had been baked. These regulations were gradually modified, but the Prussian Land Code contained, until the year 1810, a clause by which forestalling the market was constituted a criminal offence, and in Saxony during the famine of 1846-47 the sale of fresh bread was prohibited. Comets were formerly regarded with superstitious awe as harbingers of good or evil to mankind. Their meaning was interpreted according to the chief events of the time when they appeared. Thus we learn from a Holland medal that the comet of 1677 was considered to be the herald of the Peace of Nymwegen; while a German medal relative to the comet of 1680 has an inscription to the effect that in this year "the beautiful city of Strasburg was surrendered to France." Generally they were believed to cause excessive rain or drought, and so, famine and pestilence; but after Halley's discovery, in 1682, of their periodicity, these ideas were gradually abandoned. The researches of Littrow, extending over a period of two hundred years, tend to prove that comets have no connexion with the conditions of our atmosphere.

In the next section we have a description of the medals which refer to outbreaks of the plague and pestilential diseases. Some of these medals are merely commemorative, others are amulets which were worn as a protection against infection, and others relate to the beneficial effects of quarantine regulations.

The third section is perhaps the most interesting part of

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the work. It comprises the medals in reference to variolation and vaccination. The statistics given by the authors of the mortality from small-pox before and after the introduction of these protective measures merit careful study by the opponents of vaccination, and amply account for the grateful honours paid by the civilised world to Jenner and Sacco. Some of these medals are represented in the plates, and are very beautiful.

The remaining sections deal with the medals which refer to yellow fever, cholera, and efforts to diminish excessive mortality. Among these last is one very noteworthy medal which was coined in honour of Frederick the Great, because he, in the year 1777, prohibited intramural interment in Breslau; to quote the inscription, "Sapientissime ob avertendos morbos ac conservandos cives."

We cannot admit that the authors have fulfilled their implied promise of illustrating the private life of our forefathers by numismatic evidence, but they have succeeded in producing a most interesting and instructive book upon a subject which does not in itself seem very attractive. Generally this book tends to prove that famine and pestilence were in the middle ages Nature's stern correctives for over-population and neglect of hygiene and political economy. Steam and the abolition of restrictions in the trade in grain have practically abolished famine. Even in Ireland and India, dearth no longer results in the frightful mortality which formerly prevailed. Different habits of life, greater cleanliness, and improved medical skill have extinguished some forms of pestilence and ameliorated others. On the other hand, the mortality of children and infants is now enormously great, and is, in the opinion of the authors of this book, the result of an unduly high birth-rate. They suggest that discouragement of early marriage, and that mothers should suckle their children, would be the natural and most suitable means of correcting this.

Westminster Training School and Home for Nurses.—At the annual meeting of this institution, recently held in the Jerusalem Chamber, the report for 1882 was read. It announced that a very eligible site had been acquired at Queen Anne's-gate for the permanent building of the Home, which is now in course of erection, and which, it is confidently hoped, will be completed before the end of the year. The cost of this site, with all expenses of transfer, etc., amounted to £4939. The Committee have a balance of £6000 in hand towards the building, furnishing, and other expenses, leaving about £4000 yet to be provided. This amount they earnestly hope may be raised while the building is in progress, as it is calculated that the Home will then be self-supporting. Donations will be received by the Hon. Secretary, Mrs. John Thynne, The Cloisters, Westminster Abbey.

Malaria in Italy.—The Italian Government has just published, with the aid of the information derived from the Provincial Councils, a map of malaria, showing the extent and intensity of the evil. Of the sixty-nine provinces of Italy, there are scarcely six that are exempt from this scourge, which affects the inhabitants with miasmatic fevers and marsh cachexia. In twenty-one of these provinces it prevails in excessive force. It is calculated that in the army more than 40,000 men suffer more or less considerably from its infliction; and that certainly each year nearly six million francs are required from the budget on its account for hospital expenses for the soldiery and public agents. It is impossible to estimate the damage done to the public revenue through the hundreds of thousands of labourers who are attacked in the prime of life, causing a large extent of territory to remain unproductive. A fact worthy of notice is that malaria has increased in its ravages consequently on the construction of railways, owing to the great increase of stagnant waters caused by the excavations executed. On some lines of railways which traverse wild solitudes, even the most robust *employés* are found to be unable to resist the malarial fevers, and a line is referred to which loses annually 86 per 1000 of its *employés*. This malarial question has thus become one of the greatest urgency; but hundreds of millions would be required to destroy the germs of a disease which arrests the growth of population, diminishes the revenue, and compels a too great emigration. —*Union Méd.*, May 17, from *France Médicale*.

PROVINCIAL CORRESPONDENCE.

EDINBURGH.

June 27.

The Medical Acts Amendment Bill.

Within the last few weeks the feeling of disquiet and general uncertainty as to what was going to happen in connexion with the Medical Acts Amendment Bill has very much lessened: and whether this is the result of the knowledge that in Edinburgh all has been done by those interested which could be done in the matter, or of the idea that press of other work will prevent the Bill passing this year, it is very difficult to say. The present, however, seems an appropriate enough time for the consideration of the whole matter, inasmuch as, the period of excitement having passed over, we are able to contemplate matters in a more judicial frame of mind.

The question of medical reform, as contained in this Bill, has in Edinburgh a very wide interest. It affects directly the Universities, the Corporations, the large and increasing Extramural Schools, the profession, and the Town Council as representing the general public; and by all these bodies more or less action in the matter has been taken. By the Universities comparatively little has been done—at least publicly. It seems to be generally believed that this has been the result of the fact that though, on the whole, they were opposed to legislation, believing that it was not required in Scotland, yet they did not make any active opposition, because, with *eight* members out of *eleven* on the Board for Scotland, they had sufficient guarantee that their interests in medical teaching and examining would be fully considered. It was, indeed, stated at a meeting of the profession in Edinburgh, at which resolutions favourable to increased representation of the Corporations on the Board were unanimously passed, that the extraordinary difference in the numbers of University and Corporation representatives between Scotland on the one hand, and England and Ireland on the other, could only be explained by supposing that the active opposition of the Scottish Universities to the Bill had been avoided by giving them the complete control of the medical education in that part of the kingdom. Be this the case or not, the Universities did very little in the matter. Their only public appearance in Edinburgh was as a deputation to the Town Council, and this, they stated, they made in consequence of the Corporations and Extramural Lecturers having previously appeared before that body, and having made statements with which they could not coincide. At the large meeting of the profession, held in Edinburgh, to consider the whole matter, the University Professors were conspicuous by their absence.

It was quite otherwise, however, with the other bodies. By petitions, statements, and deputations, by letters in the newspapers, and by public and professional meetings, the Colleges of Physicians and Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, strove to arouse the public to a sense of the injustice which, they held, was about to be perpetrated, and with these joined the Extramural Lecturers. Briefly stated, the arguments which they brought forward were as follows:—That they (the Corporations) were amongst the oldest and most important licensing bodies in the kingdom; that in the past they had done much for the science and teaching of medicine; and that in the present they were performing their duties thoroughly and well. The importance of the Extramural Lecturers was specially stated, their influence for good on the Universities in the cases of inefficient professors, and their value as a training school for future professors, being very clearly pointed out. The injurious results of the Medical Bill on these bodies were then represented. It was argued, in the first place, that, if it passed, the examiners for the final examinations of the Board in Scotland would consist, as they do at present in the Universities, of the professors and their nominees; in the second place, that the efficiency of the teaching in the non-university schools would be questioned, and the sufficiency of the examinations of the Corporations challenged. The result of this would be that sooner or later the Corporations and Extramural Schools would be extinguished. It was also pointed out that the composition of the local Board would tell most unfavourably for the Cor-

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porations on the constitution of the Medical Council. In terms of the Bill, two members of the Council are to be elected by the Scottish Medical Board. As this Board is to consist of eight University and three Corporation representatives, it may be assumed that the members sent to the Council would be University nominees, and that consequently at this Council the Corporations would be absolutely unrepresented. A further point brought forward chiefly by the Extramural Lecturers was that all candidates for the examination of the Board should be required to pay the same fee, it being held that a distinction between University and other students, and favourable to the former, was made in the Bill.

To remedy all this, it was considered that the proportion of Corporation to University representatives should be increased. By the Extramural Lecturers it was held that they should have direct representation on the Board. The grounds for this were, that whilst they were competitors with the University Professors in teaching, to the latter alone would, if the Bill passed in its present form, be entrusted the examining of the students, and that consequently the system of open teaching, which, though capable of improvement, has done so much for the Edinburgh Medical Schools, would be seriously interfered with, if not entirely abolished. They also represented that at the final examinations of the Board no teacher should be allowed to examine a candidate who had been his own student. They disclaimed any idea of injuring or in any way curtailing the usefulness of the Universities, but they argued that a University monopoly of examining meant in time ruin to the entire medical teaching of Scotland.

Such then, in general terms, are the objections which have been brought forward against this Bill in Edinburgh, and, as evidence of the importance attached to them, it is to be mentioned that at a largely attended meeting of the profession of Edinburgh and the surrounding counties, held in the Physicians' Hall, Edinburgh, resolutions embodying these objections were unanimously passed. What the effects of the resolutions, petitions, deputations, etc., may be, no one, of course, can tell, but it is on all hands hoped that they may have succeeded in, at any rate, delaying legislation. The general opinion held here regarding this may, I think, be summed up as follows:—

1. That the present system of open teaching in Scotland is a good one, and might with advantage be extended.

2. That any Bill giving, as this does, a great preponderance to University influence would, inasmuch as it would favour a monopoly, prove disastrous alike to Universities, Corporations, and Extramural Schools.

3. That any changes in medical education in Scotland are of a kind which can be best devised and carried out by those at home and without extraneous aid.

A SUPPOSED DEATH FROM CHLOROFORM.—In the *Petersburg Med. Woch.* for June 9, an extract is given from a Russian journal, relating the case of a peasant woman, aged twenty-eight, who, being about to have a lupous growth removed from her lip, had chloroform administered to her. She had only inspired it twice when the respiration was arrested, the lower jaw sank, and she was dead. At the autopsy there was found fatty degeneration of the right ventricle, the left side being quite normal. The reporter attributes her death to great fear before the operation, and refers to several analogous cases, among which was one of Cazenave's, of Bordeaux, who, wishing to operate upon a very excitable patient without chloroform, in order to deceive him held to his mouth a bag containing only air. He inhaled four times and was dead. So, also, when Desault was about to operate for lithotomy, on his tracing out with his finger-nail the course the incision was to take, the patient screamed out and died. [We may also refer to a case reported in the *Philadelphia Med. Times*, May 19, 1883, viz., that of a man who had sustained injury to his hip in a colliery accident. In order to examine into the nature of the injury the doctors deemed it right to etherise him. To this he had the strongest objection, and became much excited, labouring for breath, calling for open windows, and manifesting all the signs of an approaching dissolution, which in a few minutes occurred. He had suffered no pain in the injured hip, and had taken no anæsthetic. It was believed by those present that he died from disease of the heart, as a murmur was heard, and that his death had been hastened by fear of the anæsthetic.]

REPORTS OF SOCIETIES.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MAY 18.

DR. TRIPE, President, in the Chair.

DR. TRIPE read a paper describing an outbreak of small-pox in the Hackney Union Infirmary and Workhouse, quickly suppressed by removal of the persons attacked and disinfection of their clothing and bedding, isolation of those exposed to infection, and revaccination of all the occupants of the affected wards. The history of the outbreak was this. A man was admitted on March 20, suffering from secondary syphilis, with sore-throat, loaded tongue, pains in his bones, and some fever. On March 23 or 24 a rash appeared, but with no marked increase of fever. On the 28th it was recognised as variolous, and he was removed to the small-pox hospital at Homerton. Up to this time his clothes had been sent to the common laundry, but then were ordered to be disinfected as well as the bedding. No. 2 had been admitted for some slight illness on March 26, but on March 30 returned to his home at Lea-bridge, where, on April 9, he showed an eruption of small-pox, and was sent to Homerton, his house being disinfected by the authorities. He was evidently infected on the day of No. 1's eruption, when he was in the same ward, for, besides the evidence from dates, there was no small-pox in the neighbourhood of his house. On the same days (April 8 and 9) three other cases appeared in the ward, and a woman occupying, of course, another ward, but employed in the laundry, was also attacked. Six days later two more of the females were attacked, one of them having also been at work in the laundry, and the other, though not so employed, sleeping in an adjacent bed. The clothes of each person attacked were collected, and, as well as their bedding, were disinfected and baked. The other inmates, first of the male ward, and, so soon as the disease appeared in the female ward, its occupants too, were revaccinated, and no new cases appeared after April 15. The history is unusually instructive. No. 1 must have been infected before he entered the infirmary. The four men who showed the eruption on April 8 and 9 were clearly infected by direct intercourse with him; and the question arises, Would they have escaped had they been revaccinated immediately after the disease was recognised in No. 1? According to Mr. Marson, vaccination performed within two days after exposure to small-pox neutralises the infection, since the artificial disease runs its course within the incubation period of the other. At any rate, none of those who were revaccinated were attacked. The first female was, it would appear, infected by washing the clothes of No. 1 that had been sent to the laundry before the nature of the disease was suspected, and her case seems to prove the infectious character of small-pox in the pre-eruptive stage. The way in which the other two women received the disease is not so clear. They could not have taken it from the first woman, for they followed her after no more than six days, nor could the one employed in the laundry have been infected, as the first woman was, by the clothes of the original case, for fifteen days had elapsed since these had been to the wash. Nor could the last woman have taken it from the others. Possibly their own clothes were infected by contact at the laundry with those of No. 1. Considering that there are 800 inmates in the building, the success of revaccination and of the measures adopted for isolating the two wards implicated (which Dr. Tripe described) was eminently satisfactory.

Mr. JACOB gave an account of a similar outbreak occurring at a workhouse in his district, in which, however, the links were not so clearly traceable. It began with a man sent in by the district surgeon as suffering from syphilis, with hoarseness, cough, and eruption. The master, suspecting small-pox, placed him in "the cottage" used for infectious cases, and the same surgeon on visiting the workhouse next day did not remove him, though still adhering to his diagnosis. The man died, and the death was certified as syphilis, but two men who had been in attendance on him sickened after ten days with small-pox, and it was found on

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inquiry that other cases which came in with small-pox had been at the same lodging-house as this one. All the children and some of the adults were revaccinated, but several cases of small-pox appeared—one a bedridden woman, who could not have been in direct contact with the men. Calf-lymph was used in some of the vaccinations, and human in others. One man vaccinated with calf-lymph in glycerine on January 12 was attacked with small-pox on February 7. He must therefore have taken the disease while the vesicles were in perfection. Another was infected two days before vaccination. The admission of infected vagrants into the casual ward was the means of frequent and irregular infections. Two men employed in a brewery adjacent, but who never entered the workhouse, were attacked. They were in the habit of ascending the ladder to the granary, six feet from the outlet of the ventilating shaft of the deadhouse, where the body of the first case lay. In the discussion on these papers, Mr. Jacob mentioned three cases of men being attacked by small-pox four to six days after release from a month's imprisonment; in neither case had there been any small-pox in the gaol. Several members gave instances of errors of diagnosis between syphilitic, variolous, and other eruptions.

Dr. Willoughby then called the attention of the Society to the statistical tables employed in Germany, which were, he said, marvels of comprehension and condensation. He passed round the annual reports of the municipality of Frankfort-on-the-Main for 1881 and 1882, the former of which was noticed in this journal on August 19, 1882. Into sixteen quarto pages the compilers had contrived, by means of well-conceived tables, to compress a vast amount of information, valuable alike to the medical and social statist. The register of marriages contained particulars rarely, if ever, exhibited in such records, and which have usually to be gathered by inquirers from the original entries, such, for example, as the respective ages, religions, and conditions of each party in every marriage; of the parents of illegitimate children, etc. These facts are of more interest to the statesman and social reformer, but to the ordinary classification of the causes of deaths additions of the highest sanitary value are made without involving any change in the forms universally employed. By simply carrying the lines on to the opposite page four tables are exhibited at one view, showing the age of the deceased, the month in which the death occurred, the registration district, and the social position or occupation of the individual. The other forms to which Dr. Willoughby called attention, and which he also laid on the table, were the annual summaries, or *Jahrestabellen*, of the cities of Berlin and Frankfort, according to one or other of which the births and deaths of all the chief towns in Germany are recapitulated in the Registrar-General's weekly returns (*Veröffentlichungen des Kaiserlichen Gesundheitsamte*) issued by the Imperial Board of Health. With slight differences they show for each month, and for the whole year, the live and still births, distinguishing them as male and female, legitimate and illegitimate, with the relative proportion of each to one another and to the population; the deaths in each month and at all ages in the usual groups, distinguishing in the Berlin tables the children as legitimate or illegitimate; the causes of deaths in each month, the principal infections prevalent, and violent causes, being specified, with percentages on the totals and on the population. Unfortunately, one point seemed to have escaped the notice of the German statisticians, the introduction of which would, however, not be difficult and would render the tables perfect, viz., the calculation of the deaths of infants and children on the number living at the ages in question, and not on the total deaths. The latter practice, though almost universal, teaches next to nothing in itself, and actually suggests erroneous conclusions, if two populations differing in the relative proportions of adults and children are compared. The number of infants living may be closely reached by taking the mean of the births in the same and the previous year, and that of children between one and five years by deducting the deaths of infants under four, three, two, and one years from the births of the four preceding years respectively. This, however, is but an approximate estimate, though better than none.

The President expressed the wish that Dr. Willoughby would put his remarks into pamphlet form, with translations of the tables of most practical utility.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, June 6.

Dr. Grenvis, President, in the Chair.

Sarcoma of Ovary.

Dr. Galabin (for Dr. Elder) showed a tumour of the right ovary having the microscopical characters of spindle-celled sarcoma, which had been removed from a woman aged fifty-five.

Anteflexion with Hypertrophy of Uterus.

Dr. Graily Hewitt (with Mr. A. Q. Silcock) exhibited a specimen of general and considerable congestive hypertrophy of the uterus, with acute anteflexion and an ovarian cyst. The patient was forty years of age, and sterile. The enlarged uterus nearly filled the pelvis; it was adherent on all sides, and acutely anteflexed. It weighed twenty ounces. There was a kind of dilatation of its cavity just above the angle of flexion. There was no evidence of separate fibroid formation, but it was a symmetrical hypertrophy of the whole uterus. No doubt the enlargement had existed for years, bringing about interference with the circulation in the uterus and pelvis generally. Dr. Graily Hewitt had seen cases analogous to this during life, but the large size of the uterus in this case rendered it almost unique.

Dr. Hewitt also showed an acutely anteflexed uterus from University College Museum. This uterus was in miniature very like the large specimen.

Dr. Robert Barnes had recognised cases of this kind clinically, and treated them successfully by the use for several months of iodine injections (one in eight). The iodine passed by osmosis through the body of the uterus, checking growth, promoting absorption of the hyperplastic tissue, and thus gradually reduced the uterus to the normal size, and effected a complete cure. He had in one case seen iodism produced, proving that the iodine went through the uterine wall.

The President asked where Dr. Hewitt drew the line between congestive hypertrophy and myo-fibromatous growth. The naked-eye appearances of the specimen closely resembled those of a fibroid.

Dr. Herman pointed out that in the second specimen slight dilatation of the uterine cavity was produced by the way in which the specimen was mounted.

Mr. Lawson Tait thought that if the case had come under his care he would have regarded it as an ordinary uterine myoma. The presence of ovarian cysts was important, for he thought that if they had been removed the uterine tumour would have been cured.

Dr. Henry Bennett could testify to the value of iodine in chronic inflammation, with hypertrophy of the cervix, extending or not to the body of the uterus. Iodine applied to the skin left no permanent marks. He applied iodine solutions freely to the cervical canal, but did not inject them into the uterine cavity. The cavity of the body was separated from that of the cervix by a sphincter, which was closed in health. The injection of fluids by a syringe, the nozzle of which passed beyond this sphincter, was not free from risk. He had had one case of fatal peritonitis, and had repeatedly seen serious symptoms follow, probably from the fluid passing through the fallopian tube into the abdominal cavity.

Dr. Murray did not think injecting the uterine cavity was free from risk. He had seen instant pain and subsequent inflammation follow it; and the late Dr. Tyler Smith had mentioned to him a similar case.

Adhesion of Polypus to Vaginal Wall.

Dr. Potter showed a polypus the size of a small hen's-egg, growing from the body of uterus by a short, thick pedicle, and inseparably fixed by adhesion to the vaginal wall.

Pyosalpinx.

Mr. Lawson Tait showed specimens of pyosalpinx removed from two patients. In one the cause was not known, and the symptoms had only lasted a few weeks. In the other the symptoms, which were constant pain, aggravated by menstruation and marital intercourse, followed confinement, and had lasted ten years. Both patients were recovering.

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Mr. KNOWSLEY THORNTON showed a large double pyosalpinx, one tube containing half a pint of pus, removed from a single woman, aged thirty. The ovaries were left. The patient was doing well.

MYXOMATOUS DEGENERATION OF UTERINE FIBROID.

Dr. GODSON exhibited a tumour removed from a patient aged sixty-one, the upper part of which, attached to the anterior uterine wall, presented the characters of an ordinary sloughing fibro-myoma, while the lower part was myxomatous. He thought this kind of degeneration of fibroids was very rare.

A CASE OF ACUTE GANGRENE OF THE VULVA IN AN ADULT; WITH REMARKS.

This paper, by Dr. HERMAN, was then read. The case related was one of acute gangrene of the skin of both labia, the perineum, and margin of anus, and the mucous membrane of the lower part of vagina and urethra, occurring in a patient, aged thirty-seven, without clearly discoverable cause; the gangrene being apparently the result of acute inflammation. The author had collected all the published cases that he could find of similar gangrene of the vulva in adults, occurring independently of venereal phagedæna. He found that they might be divided into four classes—(1) those occurring in patients suffering from acute diseases, viz., the specific fevers and cholera; (2) epidemic puerperal gangrene, which has occurred in hospitals only, beginning as isolated round or oval sloughs on the inner surface of the labia, the process usually stopping with the separation of the sloughs, though sometimes going on to extensive destruction of the parts; (3) acute gangrene occurring independently of contagion, and beginning with acute inflammation of the external genitals, more superficial than noma, and not spreading like erysipelas; and (4) spreading gangrenous cellulo-cutaneous erysipelas. The author did not think there were grounds for a positive conclusion as to whether the differences between these classes were essential differences in the morbid process, or merely minor differences due to the circumstances of origin, but he thought probably the latter was the case.

The PRESIDENT thanked Dr. Herman for his paper, and remarked on the rarity of the malady described.

Dr. CLEVELAND suggested that the gangrene in Dr. Herman's case might have been caused by a chill, occurring in a woman ill-clad and of broken-down constitution.

Dr. FENTON JONES suggested that the gangrene might have arisen from local septic inoculation, occurring through chafing and the use of a dirty napkin.

Dr. MATTHEWS DUNCAN referred to sloughing cellulitis of the scrotum in males, and analogous cases in the female. He had seen a fatal case of puerperal sloughing of the vulva, resembling hospital gangrene, with cystitis. Sloughing of the hymen and tags of lacerated tissue was often seen. He had seen a case of linear sagittal sloughing of the perineum after a difficult labour. He had seen both labia gangrenous from the pressure of a large protruded fibroid.

Dr. HICKINBOTHAM had seen two cases, one occurring in a woman lying in a room in which were cases of scarlet fever, the other in a woman whose husband was the subject of erysipelas of the scalp.

Dr. HERMAN said that in his case the skin seemed to be the seat of disease, rather than the cellular tissue. The puerperal gangrene occurring epidemically seemed to run a more acute course than ordinary hospital gangrene. The sloughing in it affected uninjured tissue, and was quite distinct from the common sloughing of tags of lacerated tissue.

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—At the Trinity Term Examination for the degree of Bachelor of Medicine (M.B.), held on Monday, June 11, and following days, the successful candidates were arranged in order of merit as follows:—

Alexander Ambrose, John Harrison Scott, Alworth E. Wright, Francis James Drury and Arthur F. Geoghegan (*equal*), Hugh Falconer Oldham, Monckton O'Dell Braddell, Frederic Conway Dwyer, Charles Thomas Poland, George M. Dobson, Henry McQuade, James Sullivan Green and Henry Neville Thompson (*equal*), Robert Edward Sproule, Hugh Nugent Kenny, Henry Edmund Blandford, George Cowen and William Fenton (*equal*), John J. Cochrane, Edmund F. Beveridge, Charles H. Blood, Cecil A. Digby.

At the Trinity Term Examination for the degree of Bachelor of Surgery (B.Ch.), held on Monday, June 18, and following days, the successful candidates passed in order of merit as follows:—

Alexander Ambrose, John Harrison Scott, Monckton O'Dell Braddell, Francis James Drury, Thomas W. Haughton, Hugh Falconer Oldham, Charles W. Hamilton, George Cowen, Charles Thomas Poland, Frederic Conway Dwyer and Henry Neville Thompson (*equal*), Alworth E. Wright, Cecil A. Digby, James S. C. Green, Edmund F. Beveridge, Chas. J. Fagan.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 21:—

Brown, Arthur Fresco Franklyn, High-street, Rochester.
Dudley, William, Blackwell-street, Kidderminster.
Irvin, Frederick David, Bolton-park, N.W.
Mason, Francis Gurney, Park-villas, West Ham.
Norris, Edwin John, Barnsdale-road, St. Peter's-park, W.
Pash, Wilson, Lawrie-park, Sydenham.
Taylor, Frank, Mile-end-road, E.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Fisher, Walter Mulrea, Galway Hospital.
Griffin, James Mold, Guy's Hospital.
Newton, Sidney Frederick, Charing-cross Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to all new Appointments that take place.

CAIGER, F. F., M.R.C.S., L.R.C.P. Lond.—Resident Accoucheur at St. Thomas's Hospital.

FELL, W., M.A., M.B. Oxon., M.R.C.S., L.R.C.P.—House-Physician to St. Thomas's Hospital.

GRANT, DAVID, M.A., M.B., C.M. Edin.—Resident Medical Officer to the Manchester Royal Infirmary.

HAIG-BROWN, C., M.B., C.M. Aberd., M.R.C.S., L.S.A.—House-Physician to St. Thomas's Hospital.

HOPE, E. W., M.D., B.Sc. Edin., L.R.C.P. Lond.—Assistant Medical Officer of Health to the City of Liverpool.

HULL, W., M.R.C.S., L.R.C.P., L.S.A.—Assistant House-Physician to St. Thomas's Hospital.

JONES, W. WANSBROUGH, M.A., M.B. Oxon., B.Sc. Lond., M.R.C.S.—Assistant House-Surgeon to St. Thomas's Hospital.

MARLOW, F. W., M.R.C.S., L.S.A.—Ophthalmic Assistant at St. Thomas's Hospital.

MILTON, H. M., M.R.C.S., L.S.A.—House-Surgeon to St. Thomas's Hospital.

SHEPPARD, W. I., M.B., M.S. Durh., M.R.C.S., L.R.C.P.—Non-Resident House-Physician to St. Thomas's Hospital.

STEAVENSON, W. E., M.B. Cantab., M.R.C.P.—Casualty Physician to St. Bartholomew's Hospital, *vice* H. H. Tooth, M.B., whose term of office has expired.

WELLS, A. E., M.B. Lond., M.R.C.S., L.R.C.P.—House-Surgeon to St. Thomas's Hospital.

DEATHS.

CHIAPPINI, ANTONIO LORENZO, M.D, M.R.C.S., at Cape Town, Cape of Good Hope, on May 20, aged 42.

JONES, ALFRED NICHOLAS, M.R.C.S., L.S.A., etc., at Saffron Walden, on June 25, in his 63rd year.

TAYNTER, JOSHUA, C.B., J.P., Inspector-General A.M.D., at The Croft, Tenby, South Wales, on June 19.

WILLIAMS, PATRICK ST. GEORGE, M.R.C.S., at 21, Compton-road, Canonbury-square, on June 22.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BOROUGH OF SHEFFIELD.—Resident Medical Officer. (*For particulars see Advertisement.*)

BOURNEMOUTH COTTAGE HOSPITAL AND DISPENSARY.—Resident Medical Officer and Secretary. Salary £120 per annum, with rooms, attendance, coals, and gas. Candidates must hold both a medical and surgical diploma. Applications, with testimonials, to be addressed to the Secretary (from whom further particulars may be obtained), on or before July 10.

HUDDERSFIELD INFIRMARY.—Senior House-Surgeon and a Junior House-Surgeon. Salaries £80 and £40 per annum respectively, with board, lodging, and washing. Candidates for the former must be doubly qualified, and for the latter they must possess one registered qualification. Applications and testimonials to be sent to Fredk. Eastwood, Hon. Sec., not later than July 6.

JOINT COUNTIES ASYLUM, CARMARTHEN.—Junior Assistant Medical Officer. Salary to begin at £100 per annum, with board and attendance. Applications, with testimonials, to be forwarded to Dr. Hearder, on or before July 7.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, QUEEN-SQUARE, BLOOMSBURY, W.—Assistant Physician. Candidates must have acquired the degree of Bachelor or Doctor of Medicine, and must be Fellows or Members of the Royal College of Physicians, London. Applications, with copies of recent testimonials, to be addressed to B. Burford Rawlings, Secretary (of whom particulars of the duties, etc., may be obtained), not later than July 4.

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ROYAL HANTS COUNTY HOSPITAL, WINCHESTER.—House-Surgeon. Salary £100 per annum, with board and lodging. Candidates must possess a diploma from the Royal College of Surgeons in England, or the surgical diploma of a Royal College or a University in England, Scotland, or Ireland, and also a degree in medicine from one of the said universities, or a licence from the Society of Apothecaries; they will not be eligible without unexceptionable testimonials as to moral character. Applications, with testimonials, to be sent to the Secretary, at the Hospital, on or before July 4.

ST. THOMAS'S HOSPITAL.—Assistant Dental Surgeon. (*For particulars see Advertisement.*)

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon (non-resident). Salary £200 per annum. Candidates must be doubly qualified. Applications, in writing, stating age, with recent testimonials (or copies), to be sent to the Secretary, not later than July 14.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1881.

RESIGNATIONS.

Henley Union.—The office of Medical Officer for the Greys District is vacant by the death of Mr. Arthur D'Oyley Brooks: area 9756; population 3218; salary £90 per annum.

Wilton Union.—Mr. Sidney Thomas Fairland has resigned the Fovant District: area 10,790; population 2133; salary £60 per annum.

APPOINTMENTS.

Stoke Damerel Parish.—Frederick E. Row, M.R.C.S. Eng., L.R.C.P. Edin., to the Workhouse.

Thorne Union.—Archibald A. Hamilton, L.R.C.P. Edin., L.R.C.S. Edin., to the Epworth District.

Tonbridge Union.—William Fear, M.R.C.S. Eng., to the Horsmonden District.

APPOINTMENTS FOR THE WEEK.

June 30. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

July 2. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Women, 2 p.m.

ROYAL INSTITUTION, 5 p.m. General Monthly Meeting.

3. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Egypt Exploration Fund: M. Naville on his Discovery of Pithom Succoth.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Dr. Garson, "On the Comparative Anatomy of the Integumentary, Respiratory, and Circulatory Systems of the Vertebrata."

4. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.; National Orthopædic, Great Portland-street, 10 a.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Surgeon-General Dr. J. M. Cuningham, "On the Sanitary Lessons of Indian Epidemics."

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. Barnes will show a specimen of Hæmatocele in the Broad Ligament; and other specimens will be shown. Dr. Champneys, "On the Obstetrics of the Kyphotic Pelvis." Mr. Lawson Tait, (1) "Note on Uterine Myoma"; (2) "On Three Cases of Pyosalpinx"; (3) "On a Case of Acute Gangrene of the Uterus."

5. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; London, 2 p.m.; North-West London, 2½ p.m.

PARKES MUSEUM OF HYGIENE, 8 p.m. Mr. Rogers Field, "A Description of the New Drainage carried out at the Museum, with Demmonstrations of Sanitary Appliances in Action."

6. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.; St. Thomas's (ophthalmic operations), 2 p.m.; King's College (by Mr. Lister), 2 p.m.

OPHTHALMOLOGICAL SOCIETY, 8½ p.m. Annual General Meeting for Election of Officers, &c. Mr. Snell, "On a Case of Recovery from Sympathetic Iritis." Mr. Swanzy, "On a Case of Hemiachromatopsia." Mr. J. E. Adams, (1) "On an Ophthalmoscope for Artists"; (2) "On a Case of a Foreign Body embedded close to the Yellow Spot, with Normal Vision." Mr. Story, "On an Anomalous Arrangement of Retinal Arteries." Living and Card Specimens at 8 p.m. Dr. Horrocks—Case of Facial, Conjunctival, and (probably) Retinal Nævus. Mr. Hulke—Drawing from a Case of (probably) Intraocular Cysticercus. Mr. Hodges—Melanotic Sarcoma of Iris (living specimen). Mr. Gunn—Case of Congenital Ptosis."

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 23, 1883.

BIRTHS.

Births of Boys, 1317; Girls, 1196; Total, 2513.
Corrected weekly average in the 10 years 1873-82, 2587·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	661	652	1313
Weekly average of the ten years 1873-82, corrected to increased population ...	764·8	670·8	1435·6
Deaths of people aged 80 and upwards ...	...	...	46

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Enumerated Population, 1881 (unrevised).	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	669633	...	5	2	1	3	...	...	...	4
North ...	905947	1	16	4	4	6	...	2	...	7
Central ...	232238	...	5	...	1	3	...	...	1	3
East	692788	...	19	14	...	5	1	1	1	28
South	1265937	1	20	11	3	11	...	2	...	13
Total	3816483	2	65	31	13	28	1	5	2	55

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·761 in.
Mean temperature	56·7°
Highest point of thermometer	74·4°
Lowest point of thermometer	40·4°
Mean dew-point temperature	50·0°
General direction of wind	Variable.
Whole amount of rain in the week	0·31 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 23, in the following large Towns:—

Cities and Boroughs.	Estimated Population to middle of the year 1883.	Births Registered during the week ending June 23.	Deaths Registered during the week ending June 23.	Annual Rate of Mortality per 1000 living, from all causes.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Daily Mean Values	Temp. of Air (Cent.) Weekly Mean of Daily Mean Values.	Rain Fall. In Inches.	In Centimetres.
London	3955814	2513	1333	17·6	74·4	40·4	56·2	13·44	0·31	0·79
Brighton	111262	57	30	14·1	71·1	42·6	55·8	13·23	0·28	0·72
Portsmouth ...	131478	78	37	14·7	...	...	...	...	...	—
Norwich ...	89612	61	24	14·0	...	...	...	...	...	—
Plymouth	74977	32	23	16·0	64·2	42·0	53·8	12·12	0·72	1·83
Bristol	212779	125	58	14·2	66·1	43·4	52·4	11·33	0·78	1·98
Wolverhampton ...	77557	65	23	15·5	62·4	37·4	48·9	9·39	0·56	1·42
Birmingham ...	414846	295	163	20·5	...	...	...	...	...	—
Leicester	129483	105	30	12·1	71·5	42·0	53·9	12·17	0·10	0·25
Nottingham ...	199349	165	63	16·5	70·8	39·0	52·7	11·50	0·03	0·00
Derby	85574	67	31	18·9	...	...	...	...	...	—
Birkenhead ...	88700	47	28	16·5	...	...	...	...	...	—
Liverpool	566753	397	273	25·1	68·5	47·5	53·1	11·73	0·44	1·12
Bolton	107882	57	30	14·5	69·5	41·7	49·8	9·89	0·25	0·63
Manchester ...	339252	241	152	23·4	...	...	...	...	...	—
Salford	190465	168	64	17·5	...	...	...	...	...	—
Oldham	119071	88	43	18·8	...	...	...	...	...	—
Blackburn	103460	85	49	23·6	...	...	...	...	...	—
Preston	98584	94	42	22·2	...	...	...	...	...	—
Huddersfield ...	84701	40	39	24·0	...	...	...	...	...	—
Halifax	75591	49	27	18·6	...	...	...	...	...	—
Bradford	204807	116	61	15·5	64·0	44·2	51·5	10·84	0·25	0·63
Leeds	321611	188	137	22·2	64·0	43·0	51·2	10·67	0·41	1·04
Sheffield	235497	197	124	21·9	71·0	43·0	52·0	11·11	0·31	0·79
Hull	176296	156	72	21·3	74·0	37·0	52·1	11·17	0·18	0·46
Sunderland ...	121117	83	48	20·7	75·0	45·0	54·4	12·44	0·03	0·15
Newcastle	149164	93	54	18·8	...	...	...	...	...	—
Cardiff	90033	61	28	16·2	...	...	...	...	...	—
For 28 towns ...	8620975	5731	3086	18·7	74·4	37·0	52·7	11·50	0·33	0·84
Edinburgh	235946	132	81	17·9	63·1	42·2	52·2	11·22	0·30	0·76
Glasgow	515589	407	293	29·7	65·5	39·0	52·1	11·17	0·47	1·19
Dublin	349 85	173	169	25·2	63·6	39·8	51·9	11·06	0·51	1·30

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·76 in. The lowest reading was 29·68 in. on Wednesday morning, and the highest 29·86 in. at noon on Friday.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

William Bagg, Wood Engraver.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can anyone give me a few biographical details about this artist, identified for so many years with our anatomical and surgical publications? I think he died about eight years ago, but I neglected at the time to make a note of the date. His father, Thomas, with whom he worked, has, I suppose, long since departed. I am, &c., J. D.

June 23.

Locum Tenens.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I would be very much obliged if you would state in your next issue, whether there is a medical agency in Ireland through which locum tenens, assistants, etc., could be secured. I am, &c., Medicus.

Joseph Adolphus, Esq., Surgeon, Black River, Jamaica.—Letter and enclosure received with thanks.

Dr. Guppy, Plymouth.—The chairman of the Fellows' Festival, to be held on the 5th prox., will be Mr. Luther Holden, late President of the College of Surgeons, who, from his well-known popularity, will no doubt be surrounded by a large number of friends.

Railway Accidents and Fatalities, 1882.—The returns of accidents and fatal casualties reported by the several railway companies in the United Kingdom to the Board of Trade during the past year show the total number of personal accidents on the lines and on the premises of the companies to be—of deaths 1163, and injuries 8968. In 1881 these casualties were respectively 1096 killed and 4571 injured. Accidents to trains, rolling stock, permanent way, etc., caused the deaths of forty persons, and injury to 967. Sixty-two persons committed suicide on railways. Of persons in the employ of the companies, 532 were killed and 2423 were injured. This list is an appalling one.

Archæologist, Tenby.—As Physician-Extraordinary to Edward VI., Dr. Robert Huicke received an annual stipend of £50. He was Physician to Henry VIII. and Queen Katharine Parr. His successor, Dr. T. Bille, received double that amount. The Serjeant-Surgeon to the King had all the fine linen soiled by the Royal blood, since commuted for an annual sum of two hundred pounds or guineas.

The Borough Lunatic Asylums, Birmingham.—The Lunatic Asylums Committee of Visitors, in their annual report for 1882, state that the total cost of the new buildings at Rubery Hill has been £133,495 5s. 8d., and the cost of land £6576 8s. 5d. The total income of the asylums for the year was £24,417, and the expenditure £24,915 11s. 7d. The net average weekly cost for the year was 9s. 6¼d. The Medical Superintendent at Windsor Green remarks that among the causes of insanity in those admitted it is satisfactory to note a large decrease in the number from intemperance, the percentage being for the year 7·7, as compared with 18 and 21 per cent. in 1891 and 1890 respectively. The proportion of recoveries to admissions was, in the males 27·7 per cent., in the females 36, and in the total 33·3 per cent. This is below the average, and is due to the large number of chronic and unfavourable cases admitted.

Cecil N.—The hospital (the only European one) in Cairo has, by the exertions of Lady Strangford and some friends in England and Egypt, been placed on a permanent footing, and continues to relieve English and Egyptians alike.

Dr. Harris.—Yes; both Messrs. Hewett and Birkett have been Presidents of the College of Surgeons—the former in 1876, succeeded by Mr. Birkett the following year. The retiring Councillor, who offers himself for re-election, is the Senior Vice-President of the College.

Superannuation of Workhouse Officials.—At the annual meeting of the Atcham Board of Guardians, an application was received from the late master of the workhouse for a superannuation. It may be remembered that the Local Government Board, after a recent inquiry at the Atcham Workhouse, called on both the master and the medical officer to resign their appointments at the workhouse (noticed in these columns at the time), and the application now made was based on a service of upwards of forty-one years. Mr. Whitwell, the medical officer, had also sent in a claim, but the circumstances of his case were somewhat different, as, although called upon to resign the medical officership, he was permitted to retain a public appointment. After some consideration, it was proposed that the Local Government Board be asked to sanction a pension of £50 per annum to the workhouse master, he having discharged his duties previous to the late inquiry without cause for complaint. His salary was £150 per annum, and the maximum amount to which he was entitled was £100. To this proposal an amendment was made, that an annual allowance of £25 be recommended, which was unanimously agreed to, the original proposition being withdrawn. A suggestion that a similar sum be recommended in the medical officer's case was opposed, on the ground that he still retained an appointment under the Union, and was rejected by a considerable majority.

Decreasing Death-rates.—It will be seen by the Registrar-General's report that in 1851 the death-rate in England and Wales, per 1000, was 22; in 1881 it was only 18·9. To appreciate the improvement it may be stated that in 1851 the number of persons to the square mile was but 308, while in 1881 it had increased to 447. In the metropolis the rate, which for the weeks ending the 2nd and 9th inst. had been equal to 18·5 per 1000, declined in the week ending the 16th inst. to 16·9.

Tettenhall.—This suburb of Wolverhampton is about to be formed into a local board district. Twelve members will constitute the board.

Hospital Sunday and Saturday Funds, Liverpool.—The Sunday collections for the present year amount to £7672, and the Saturday collections to £3579. In 1882 the amount of the former was £7364, and the latter £2547. Adding the balance left in hand last year, namely, £135, to the sum contributed this year, the total amount available for distribution is £10,887.

A Prosperous Coffee Tavern Company.—The Lytham Coffee Tavern Company has declared a dividend of 10 per cent. per annum for the year ending the 31st ult.

Rearranging the Medical Districts.—Dr. Brown, Tipton, has addressed the Dudley Board of Guardians, inquiring why the decision of the Board to alter the medical districts had not been carried out, and expressing a hope that the injustice which had been unanimously admitted by the Board might soon be remedied. The matter is under investigation by the Local Government Board.

Health Society, Walsall.—At the annual meeting of this Society, the report presented warmly acknowledged the aid rendered by various ladies and gentlemen, and on a motion for the adoption of the report a hope was expressed that as soon as possible the Corporation would establish public baths in the town. Eleven prizes and twenty-one certificates were awarded by the Society, and distributed by the President, the Mayor. One of the Railway Ambulance Corps attended the meeting, and gave illustrations of ambulance work.

Small-pox, Wednesbury.—Dr. Yarman, the Medical Officer of Health, reports that the health of the town is now in a satisfactory condition. Small-pox had during the past month ceased to exist as an epidemic. Only one convalescent remained in the hospital, and no cases outside had come to his knowledge, with the exception of a woman from Fallings Heath, who had been discharged cured and free from infection a few days previously. The disease now prevalent is whooping-cough among children, which has caused several deaths.

Population of Scotland.—By a Parliamentary return relating to Scotland, just published, the population of the kingdom in 1831 was 3,735,573, being an increase of 1,115,369 since 1841.

Manchester Water.—A Hulme correspondent writes:—"At present and for the last three weeks the water supplied in this district is disgusting. The stench from it is dreadful, especially when boiled. The complaint is general. All my neighbours are in like plight, and some of them have complained at the Town Hall, but with no satisfactory result."

Sympathiser.—The Shop-Hours Labour League has made considerable progress in its work during the last six months, but it is not generously supported, financially, by the class in whose interest the League was organised. It is stated that the number of shop assistants in the United Kingdom had been estimated at 3,500,000, of whom 300,000 were living in London, and two-thirds of these were either apprentices or improvers under twenty years of age.

Vegetable Diet in Workhouses and Prisons.—Mrs. (Doctor) Hoggan stated, at the annual meeting of the Vegetarian Society, held lately at Manchester, that "it was an undoubted fact that animal flesh is one of the most expensive and wasteful of foods, and there is abundant authority for the assertion that persons catered for in numbers, as is the case in workhouses, prisons, and large institutions, may be as well and substantially fed in this country, and with sufficient variety, without meat, at less than half the present expenditure. The use of flesh in workhouses and prisons was to be objected to on the same ground as a medical contemporary objects to the use of alcohol in workhouses—namely, on account of its wastefulness and extravagance." The chairman, although he agreed with Mrs. (Dr.) Hoggan, was doubtful as to the immediate success of the proposed experiment. His experience as a guardian led him to the belief that the prejudice of the English pauper class would be a grave hindrance in the way of such an experiment, even where boards of guardians were willing to try it.

Elementary Hygiene and Local Parochial School Children.—Dr. G. H. Fosbroke, junior Medical Officer of Health, in his recent annual report on the rural districts of the Stratford-on-Avon Combination, which includes those of Stratford, Evesham, and Alcester, incidentally asks how far the study of elementary hygiene could be promoted in local parochial schools. Children in agricultural districts were now taught many subjects which were of no great service to them in after life. Would it not then be possible to substitute for part of the curriculum such a one as hygiene of a most elementary character, which would be of lasting benefit? To teach children why unwashed skins, polluted drinking-water, refuse accumulations, improper clothing and modes of life were injurious would surely be of national as well as individual benefit.

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A Prescribing Herbalist.—A boot and shoe maker at Leicester has died from an overdose of opium. The deceased suffered from a chest complaint, and consulted a herbalist, who prescribed for him. Subsequently, the deceased applied to the herbalist for something to induce sleep, who gave him a pill containing two grains and a half of opium, which he took. He afterwards became unconscious, and died in the evening. At the inquest held on the body, the verdict returned was that death had resulted from bronchitis, and an overdose of opium indiscreetly administered by the herbalist, who was censured by the coroner.

Infected Dispatches.—A daily contemporary says:—"The official at the Ministry for Foreign Affairs, Paris, has just been stricken down by a violent attack of yellow fever. It has been discovered that the disease was contracted by opening dispatches from Brazil, where the fever is now raging."

The late Sister Dora, Walsall.—It is proposed to raise a fund for the erection of a statue to the memory of this lady in the town of Walsall. Immediately after her death a memorial window was placed in the parish church by the inhabitants of the town, and a small endowment formed for the Convalescent Home. But by the subsequent publication of Sister Dora's life, correspondents from various parts of England and the colonies have expressed their admiration of her life and labours, and made known their desire to contribute to a memorial of her. Contributions may be forwarded to the Secretary of the Walsall Cottage Hospital.

A Fair Return.—From the second annual report of the National Model Dwellings Company (Limited), after payment of all expenses, a sufficient amount remained in hand to pay a dividend of 5 per cent. per annum, and to carry some surplus to bonus and sinking fund.

Unexpected Indirect Criticism.—Lord Wolseley has been the subject of so much—albeit justifiable—criticism lately that we venture to notice the following incident, though it be not strictly medical, which occurred at his expense:—When plain Sir Garnet, he once asked a private soldier under his command—"Now, my man," said he to the private, "if you were told to lighten your kit by half a pound, what should you throw away?" "'The Soldier's Pocket Book,' sir," replied the man, saluting. Sir Garnet walked away somewhat surprised.

Urban and Rural Sanitary Improvements.—The town of Tobermory, N.B., has just been supplied with water at a cost of about £6000.——A new sanatorium has been opened in connexion with the Orphan Homes at Headingley. The building provides accommodation for twenty children besides the matron.——An inquiry has been held at Rusholme, near Manchester, by a Local Government Board inspector, respecting an application for sanction to borrow £6000 for the purpose of erecting public abattoirs, a mortuary, etc., for the local board of the district.——A similar inquiry has been held at Lowestoft into an application from the Improvement Commissioners for sanction to borrow £7000 for street improvements and £4000 for the sewer outlet works on the beach.——The Epsom Rural Sanitary Authority are about to carry out a scheme of sewerage and disposal for the special drainage district of Leatherhead.——The Wakefield Corporation are now engaged in the construction of the necessary works to provide a wholesome supply of water from an extensive tract of moorland at Blackstone Edge, about twenty miles westward of Wakefield. The moor has an average annual rainfall of about forty-five inches. The gathering ground covers 3200 acres.——The Wandsworth and Clapham Board of Guardians have adopted plans for the erection of a new workhouse on land in All-Farthing-lane, Wandsworth. The building will accommodate 621 persons, at an estimated cost of £43,000, and ultimately enlarged so as to house 1200 inmates.——The Hackney District Board of Works has decided that a mortuary be erected in Hackney-churchyard, provided a faculty can be obtained.——According to the report of the Metropolitan Board of Works for 1882, the open spaces for the use of the public comprise an area in possession of the Board, and designed for the recreation of the people, of 1769½ acres. These open spaces constitute a free gift made to the people of London.——The Commissioners of Public Baths and Washhouses for St. George's, Hanover-square, have applied to the Metropolitan Board of Works to lend them £5000 for the purpose of enlarging the swimming-baths in Davies-street.——The grounds attached to All Saints' Church, Spicer-street, Bethnal Green, have just been laid out as a garden and recreation ground for the inhabitants of the crowded districts of Bethnal Green and Spitalfields.——The protracted dispute between the Hove Commissioners and the Brighton Sewers Board has ended by an award of the County Court Judge, who sat as arbitrator. The main point at issue was as to who was responsible for the construction and maintenance of storm-water outfalls in the Hove district. The judge has decided in favour of the Commissioners, and directed the Brighton Sewers Board to pay the Commissioners' costs, amounting to between £600 and £700.

Pleading Guilty under Conditions.—James A. O'Flanagan, physician and surgeon, Houghton-le-Spring, on a prosecution by the public prosecutor has been committed to the Durham Assizes, substantial bail being accepted for his appearance, charged with wilful perjury in a case at the county court, in which he was the plaintiff. The prisoner said he would plead guilty to conspiracy to defraud, on condition that the solicitor and others were indicted along with him.

An American Sanitarium for Sick Children.—The annual report of the Sanitarium Association for Sick Children, established in Philadelphia at "Point Airy" (a promising name), is worthy of notice. By its agency sick children and their mothers are, it appears, carried during the hot season by a steamer owned by the Association "to a cool and delightful island, where, amidst shades, they are provided with a proper diet, attended by trained nurses, bathed, and re-clothed when necessary, and kept in wards until restored." The steamer, it is added, makes half-hourly trips to and from the city.

Epicure.—It is reported that the taste for frogs' legs is spreading so rapidly in the United States that one of the largest dealers in the country estimates that the demand this summer will be double that of last year, and that an experiment in breeding bull frogs in England was about to be made, for which purpose a considerable supply of spawn would be sent over.

COMMUNICATIONS have been received from—

Mr. J. Dixon, Dorking; Dr. R. W. Amidon, New York; The Dean of the Medical School of the Dental Hospital of London; Dr. Hope, Liverpool; Mr. J. O'Reilly, Dublin; Mrs. Meredith, London; The Secretary of the Sanitary Institute of Great Britain, London; The Secretary of the Local Government Board, London; Mr. J. Chatto, London; The Registrar of the Apothecaries' Hall, London; The Honorary Secretary of the Medical Society of London; Professor Humphry, Cambridge; The Registrar-General for Scotland, Edinburgh; Mr. Shirley F. Murphy, London; Mr. E. Nettleship, London; The Secretary of the Royal Institution, London; Mr. R. H. Semple, London; Dr. J. W. Moore, Dublin; Dr. B. G. Morison, London; The Honorary Secretary of the Parkes Museum, London.

BOOKS, ETC., RECEIVED—

Handbuch der Gesammten Arzneimittellehre, von Dr. Med. Theodor Husemann—Zur Entstehung und Behandlung der Scrophulose, von Dr. O. Paulsen—Athetosis, by W. Amalie Hollis, M.D.—The Mineral Waters of Aix-les-Bains and Marlioz, by Léon Blanc, M.D. (Paris)—Practice of Medicine, by M. Charteris, M.D.—Braithwaite's Retrospect of Medicine, January to June, 1883—The Scottish Universities and the Medical Act Amendment Bill—Report of the Lunatic Asylum for the City and County of Bristol for 1882—Guy's Hospital Reports, vol. xxvi.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Revista de Medicina—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medicinische Wochenschrift—Revue Médicale—Gazette Hebdomadaire—Nature—Boston Medical and Surgical Journal—Louisville Medical News—Centralblatt für Gynäkologie—Le Concours Médical—Centralblatt für die Medicinischen Wissenschaften—Centralblatt für Klinische Medicin—Philadelphia Medical News—Ciencias Médicas—Le Progrès Médical—Alienist and Neurologist—Times of India, May 31 and June 2—Scienze Mediche—Weekblad—Girl's Own Paper—Leisure Hour—Sunday at Home—Friendly Greetings—Revue d'Hygiène—Boy's Own Paper—New York Medical Journal—Journal de Saxon—Birkenhead News—National Compulsory Vaccination Reporter.

SPECTACLES FOR CHILDREN.—In a paper read at the meeting of the South Carolina Medical Association (*Philadelphia Medical News*, May 12), Prof. Chisolm answers the objections which have often been raised against allowing children to wear spectacles. Experience shows us, he observes, that the eye often varies much from the perfect type, where vision can be comfortably enjoyed at any distance, the muscles of accommodation adapting the lens so as to keep the focus always on the retina. What is called accommodation, or ability to change the focus, is a muscular act, which, by taking off pressure from the front of the lens, permits its inherent elasticity to give its surfaces greater convexity, and therefore greater focussing power. When these muscles are temporarily enfeebled by diseased conditions of the system at large, they do not lift off sufficiently the flattening pressure of the suspensory ligament, or they are too weak to keep up their continued action. Hence it is that sick persons, with weakened muscles, cannot read so long, nor with the same comfort, as when well and strong. Magnifying spectacles for temporary use will thus enable persons to read while tonics are being administered. We often find children recently recovered from scarlet fever, measles, diphtheria, whooping-cough, or any of the depressing diseases of childhood, unable to study as they did before. In a little time the eyes seem as strong as ever, but a very few minutes will cause letters to run together, and the print becomes blurred. This is not a failure of the retina or of the nerve, but of the muscles acting on the lens. Weak magnifying spectacles, by helping the muscles to do their work, will enable weak children to continue their studies until their strength is restored. If children, either by inheritance or acquisition, have myopic or hypermetropic eyes, where can be the propriety of allowing them to go through life as if in a constant fog, when properly selected glasses clear up the mist and enable them to see as others do?

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END OF VOLUME I. 1883.

LONDON: PRINTED BY PARDON AND SONS, LOVELL'S COURT, PATERNOSTER ROW.

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